Transition of primary healthcare services in Yarrabah to community control

Project Report for Gurriny Yealamucka Health Service and Queensland Health

Sandra Campbell, Crystal Jongen, Irina Kinchin, Chris Doran, Janya McCalman

Centre for Indigenous Health Equity Research, Central Queensland University
Cairns, Queensland, Australia
June, 2019

Suggested Citation

Campbell, S., Jongen, C., Kinchin, I., Doran, C., McCalman, J. (June 2019). Transition of primary healthcare services in Yarrabah to community control. Project Report for Gurriny Yealamucka Health Service. Centre for Indigenous Health Equity Research, Central Queensland University, Cairns.

This report is licenced under a Creative Commons Attribution 3.0 Australia licence. You are free to copy, communicate and adapt this work, so long as you attribute Central Queensland University [The Centre for Indigenous Health Equity Research] and the authors.

Disclaimer

The purpose of this report is to inform Queensland Health in its support of transitions of Queensland primary healthcare services to community control, and to assist Gurriny to further grow its capacity and performance for providing community controlled primary healthcare services in Yarrabah. We have relied upon information provided to us by Gurriny management, have evaluated the information and believe that it is reliable. The statements and opinions included in this draft report are given in good faith and in the belief that such statements and opinions are not false or misleading.

Acknowledgements

We thank the participants for their willingness and time to be interviewed for the process evaluation.

We offer particular thanks to Gurriny staff members Ruth Fagan, Jason Agostino and Jason King for their time in sourcing documents and other data, assisting with the interpretation of data and providing guidance on the evaluation.

Thanks to the Reference Committee for guiding this project. Members included: Venessa Curnow (Director, Aboriginal and Torres Strait Islander Health Unit, CHHHS, Queensland Health), Vanda Simpson (A/Manager, Aboriginal and Torres Strait Islander Health Branch, Strategy, Policy and Planning Division, Queensland Health, Gregory Richards (Aboriginal and Torres Strait Islander Health Branch, Queensland Health), Sue Andrews (CEO Gurriny), Ruth Fagan (Business Manager Gurriny), Karen Dennien (Director of Operations Gurriny), Kingsley Pearson (Senior Medical Officer, Gurriny), Chris Doran (Health Economist, CQU), Sandra Campbell (Research Project Coordinator, CQU), Janya McCalman (Senior Research Fellow, CQU)

We also wish to thank investigator Roxanne Bainbridge who guided the early development of the evaluation, Rosamond Calder for editing this report and Georgia Spanner for formatting and referencing.

Cover photographs

L-R: Gurriny Senior Health Worker administering a young person's health check; Gurriny primary health care clinic; Gurriny staff members at Transition Day celebrations; Gurriny resources; Gurriny Chief Executive Officer, Sue Andrews, foundation CEO Leslie Baird, Yarrabah Aboriginal Shire Mayor Errol Neal, Prof Gracelyn Smallwood, and Chair of the Board Sandra Houghton at Transition Day celebrations.

Photographs from Gurriny Yealamucka annual report, newsletter and website.

Abbreviations

ACCHO – Aboriginal Community-Controlled Health Organisation
ACCHS – Aboriginal Community-Controlled Health Service
ACR – Albumin to Creatinine Ratio
AGM – Annual General Meeting
AGPAL – Australian General Practitioner Accreditation Limited
AHW – Aboriginal Health Worker
AIHW – Australian Institute of Health and Welfare
AMS – Aboriginal Medical Service
Apunipima – Apunipima Cape York Health Council
ASIC – Australian Securities and Investments Commission
ATSIC – Aboriginal and Torres Strait Islander Commission
BMI – Body Mass Index
CEO – Chief Executive Officer
CHHHS – Cairns and Hinterland Hospital and Health Service
COAG – Council of Australian Governments
Congress – Central Australian Aboriginal Congress health service
CV – Curriculum Vitae
CVD – Cardiovascular Disease
CQU – Central Queensland University
DAA – Department of Aboriginal Affairs
DALY – Disability Adjusted Life Years
DG – Director General
DoHA – Department of Health and Aging
DON – Director of Nursing
ED – Emergency Department
eGFR – Estimated Glomerular Filtration Rate
FRAC – Finance, Risk, Audit and Compliance
FWB – Family Wellbeing Program
GP – General Practitioner
GPMP – General Practitioner Management Plan
Gurriny – Gurriny Yealamucka Health Service
HbA1c – Glycosylated Haemoglobin
HHS – Hospital and Health Service
HR – Human Resources
ICT – Information Communication Technology
IM – Information Management
IR – Industrial Resources
ISO – International Organisation for Standardisation
IT – Information Technology
IUIH – Institute of Urban Indigenous Health
KPA – Key Priority Area
MBS – Medicare Benefits Schedule
MBS/PBS – Medical Benefits Scheme/Pharmaceutical Benefits Scheme
MOU – Memorandum of Understanding
NACCHO – National Aboriginal Community Controlled Health Organisation
NATSIHA – National Aboriginal and Torres Strait Islander Health Alliance
nKPI – National Key Performance Indicator
NUM – Nurse Unit Manager
OATSIH – Office of Aboriginal and Torres Strait Islander Health
ORIC – Office of the Registrar of Indigenous Corporations
OSR – Online Service Reporting
PenCAT – Pen Clinical Audit Tool
Alcohol Use Disorders Identification Test – Consumption
PHC – Primary health care
PPH – Potentially Preventable Hospitalisations
QAIHC – Queensland Aboriginal and Islander Health Council
QH – Queensland Health
RACGP – Royal Australian College of General Practitioners
RN – Registered Nurse

SEWB – Social and Emotional Wellbeing
SMT – Senior Management Team
SROI – Social Return on Investment
SSNC – Social Service Network Committee
TCA – Team Care Arrangement
UQ – Queensland University
YASC – Yarrabah Aboriginal Shire Council

Contents

1. Executive summary 5
2. Introduction and methods 17
2.1 Introduction 17
2.2 The setting 18
2.3 Program logic 19
2.4 Ethics approvals 21
2.5 Methods 21
2.6 Strengths and limitations of the evaluation 22
2.7 Dissemination of study results 23
2.8 Structure of this report 23
3. Literature review 24
3.1 Introduction 24
3.2 Methods 24
3.3 Results 25
3.4 Discussion 31
4. Process evaluation 32
4.1 Introduction 32
4.2 Methods 32
4.3 The Core Process 36
4.4 Stage 1: Establishing and Developing a Community-Controlled Health Organisation 39
4.5 Stage 2: Preparing for Transition 43
4.6 Stage 3: Post Transition and Beyond 67
5. Outcome evaluation 76
5.1 Introduction 76
5.2 Methods 76
5.3 Results 78
6. Economic evaluation 102
6.1 Introduction 102
6.2 Methods 102
6.3 Results of the economic evaluation 103
7. References 111
8. Appendices 116
8.1 Appendix 1: Characteristics of included studies 119
8.2 Appendix 2: Interview guide 127
8.3 Appendix 3: Process evaluation document overview 128
8.4 Appendix 4: Economic sensitivity analyses of PPH by age and admission type 132
8.5 Appendix 5: Summary by age group (under 15, 15-35 and over 35) and gender 135

1. EXECUTIVE SUMMARY

Australian Aboriginal community-controlled health services (ACCHSs) are “primary health care (PHC) service[s] initiated and operated by a local Aboriginal community to deliver holistic, comprehensive, and culturally appropriate PHC” (NACCHO, 2018a). Although diverse in the services provided, their size and funding, and workforce and infrastructure, all ACCHSs are grounded in the culture and values of their respective communities and provide services that reflect the unique needs and aspirations of each local community. A governance structure of locally elected boards of management promotes accountability to local communities, and orientation to local culture, context and needs (Campbell M, Hunt J, Scrimgeour D, Davey M, & Jones V, 2018) Such community participation within comprehensive and responsive PHC is supported by international evidence as the most effective strategy for improving health and addressing inequities (Campbell M et al., 2018).

As a fundamental expression of self-determination, more than 150 ACCHSs provide health care to urban, rural and remote Aboriginal communities across Australia (Campbell M et al., 2018). In 2018, with about 6,000 employees, ACCHSs provided an estimated three million episodes of care for approximately 350,000 people (59% of the 590,772 Aboriginal population) (ABS, 2016; NACCHO, 2018a). The establishment and development of the Australian ACCHS sector in response to the marginalisation and exclusion of Aboriginal people from mainstream health services, and limitations in the ability of mainstream services to meet unique health needs has at times been challenging (Harfield S et al., 2018). Many factors in health care, government policy, legislative and social environments have both supported growth and created challenges for the development of the sector. After nearly half a century, these same environments continue to present challenges to the sector in achieving “the social, emotional and cultural wellbeing of the whole community” that defines Aboriginal health (NACCHO, 2018b).

Aim

Yarrabah was the first Queensland Aboriginal community to transition PHC services from Queensland Health operation to Aboriginal community control - through Gurriny Yealamucka Health Service (hereafter Gurriny). Five years post-handover on 1 July, 2014, this review answers three questions: 1) What were the drivers, strategies, and enablers that supported the transition of the delivery of PHC services to Aboriginal community control in Yarrabah, and what were the barriers to the transition? 2) Has transition to Aboriginal community control over the planning, prioritisation and management of the delivery of PHC services achieved better healthcare and health outcomes for the Yarrabah community? 3) What are the economic costs and benefits arising from Aboriginal community control of PHC in Yarrabah from a healthcare system perspective?

We expect the results of this evaluation to inform further development of community-controlled services and systems in Yarrabah to meet their increasingly complex and dynamic social, economic, political and health environments; as well as improved design and delivery of other such Queensland Health transitions of health services to Aboriginal and Torres Strait Islander community control.

The commitment to transition

At the time of committing to community control in Yarrabah, the stated goal of the Deed of Commitment between Commonwealth, Queensland and local government partners (2005) was to achieve better health outcomes for Yarrabah through: commitment to implementing Aboriginal community control over the planning, prioritisation and management of the delivery of PHC services to the community of Yarrabah; and affirming that the three essential requirements of Aboriginal community control are: 1) that the residents of the community identify their needs, aspirations and priorities for improving their own health conditions and outcomes; 2) that these needs, aspirations and priorities are articulated through a representative community-controlled Aboriginal health organisation that has good

governance and best practice as key principles; and 3) that the community-controlled health organisation develops a forward looking Health Strategic Plan that forms the baseline document for resource allocation for themselves and to PHC providers.

Scope of the evaluation

Transition to community control in Yarrabah could be considered a phased approach that has been driven by both the capacity of Gurriny and community preferences – with potential for further developments in community-controlled health service delivery still to come. The achievement of transition has been a continuous incremental process that had its beginnings in the late 1980s. In 1989, the newly formed Yarrabah Aboriginal Council created a Health Committee, which was incorporated in 1991. Subsequent milestones have included the formation of Gurriny as a Social and Emotional Wellbeing Centre of Excellence in the early 2000's, signing of the Deed of Commitment in 2005, and the final transfer, marked by the handing over of the management and accountability of PHC services in Yarrabah on 1 July 2014. At the time of publishing this review, Gurriny had a mandate for providing health promotion, prevention, treatment and management of acute and chronic conditions. Queensland Health retained control of delivery of after hour's emergency care, renal care and some mental healthcare.

The timeframes for this review of the process, outcomes and economic costs and benefits of the transition to community control of PHC in Yarrabah has largely been determined by the availability of data. For the process evaluation, documents and interview data were available for the period from 1986 to 2018. For the outcome evaluation, most online service reporting and national key performance indicator data were available only from 2013-14 to 2016-2017. For the economic evaluation, hospitalisation, workforce and service costing data were available from 2008-2017. The majority of funding of the cost of PHC service provision in Yarrabah at the time of transition to community control was provided primarily by the Commonwealth government and generated Medicare income, with Queensland Health funding just less than a quarter (24.7%). However, this review is focussed on the transition of 100% of the management and accountability of PHC services from government providers to community control via Gurriny.

Ethics Approval

Applications for ethics approval for the project were submitted to the Far North Queensland Human Research Ethics Committee of the Cairns and Hinterland Hospital and Health Service (CHHHS) for: 1) the process and outcome evaluation (HREC Reference Number: HREC/18/QCH/95 – 1265 Project Id: 41295: submitted June 6, 2018 – approved August 28, 2018), and 2) the economic evaluation (HREC Reference Number: HREC/2018/QCH/46255 – 1293 Project Id: 43709: submitted July 23, 2018 – approved October 19, 2018). A Research Collaboration Agreement between Central Queensland University (CQU) and CHHHS was established and Queensland Health research governance approvals were granted for allocation of resources required for the evaluations (Queensland Health staff time) for the process and outcome evaluation on November 24, 2018, and for the economic evaluation on November 26, 2018. Data for the economic analysis were provided by the Queensland Health case mix team (January 7, 2019). To allow time for rigorous data analysis and reporting, the project timeline was extended from the original completion date of December 31, 2018, to June 30, 2019.

Methods

The review methods comprised four key components:

- A systematic scoping review of the literature focussed on the conditions and strategies that constituted the development and implementation of ACCHSs in Australia, and their outcomes;
- A process evaluation to assess the process and experience of transitioning to community control of PHC services, the strategies implemented, enablers and barriers to the process, and its outcomes;
- An outcome evaluation to assess the impacts of transition to community control on Yarrabah clients with respect to prevention, detection and successful management of acute and chronic conditions and reduction of the risk factors for disease sequelae; and

- An economic evaluation of whether the economic benefits of the transition outweigh its costs.

Results

1. *The Australian Evidence*

The systematic literature review included eighteen studies. They documented conditions that supported the establishment and development of ACCHSs in Australia generally as: 1) the Australian political climate of the 1960s and 1970s; 2) the poor health status of Aboriginal people and communities; 3) the need for advocacy services to support Aboriginal people and communities; 4) the perceived failure of existing mainstream health services to provide accessible or adequate health care; and 5) government policy and funding for ACCHSs. The studies documented the two key strategies employed to develop and implement ACCHSs as self-governance and community participation, and strengthening and respecting Aboriginal culture in the context of comprehensive PHC. Three principle outcomes of the implementation of the sector were identified: 1) the development of a strong Aboriginal health workforce; 2) achieving an Aboriginal model of comprehensive PHC; and 3) achieving better healthcare outcomes. The evidence suggested that the roles and functions of ACCHSs are far-reaching, with direct contributions to Aboriginal communities and a ripple effect to the broader Australian health sector and society. The comprehensive PHC delivered by ACCHSs is a unique model that can stand as a best practice example to inform PHC in the mainstream health sector.

2. *The process of transition to community control in Yarrabah*

There were two key factors which drove the process of transition to community control in Yarrabah, and which continue to drive service improvement and community development efforts today. Based on the aspirations of Yarrabah community members for community health and wellbeing, and concern over significant health challenges being faced, community leaders saw a need for comprehensive, culturally appropriate health care that was responsive to community health needs. This early need was identified from 1986, within a context of Yarrabah community dissatisfaction with the fragmentation, reactivity and cultural inappropriateness of healthcare services at that time, and the consequent inadequacy of services to meet critical community health needs, such as social and emotional wellbeing. The other factor driving the transition has been an ongoing process of increasing local self-determination and autonomy in Yarrabah. Since becoming a self-governing community in 1986, Yarrabah has implemented iterative strategies to increase the control of the community over local services and resources. Through an early Feasibility Study, community members expressed a strong desire for control over PHC service management and delivery, and this was a key driving force behind the transition process. This community desire for self-determination continues to drive efforts towards building community control over other key resources and services in Yarrabah today.

Underlying the entire transition journey was a core process of building capacity in the Yarrabah community, and particularly within Gurriny, to manage and deliver local PHC. Capacity was built through an ongoing and incremental process, starting small with humble beginnings, and slowly building and developing the organisation and local capacity over a period of decades. This was a strategic capacity building process aimed initially at filling service gaps around social and emotional wellbeing (SEWB) care, then slowly incorporating clinical services into Gurriny's service portfolio. As the organisation grew in size and complexity, Gurriny needed to increase management capacity for several core pillars of organisational development including: stakeholder engagement; governance; service and workforce development; quality; and finances. A cyclical process of planning, acting, monitoring and reporting was undertaken to communicate and demonstrate Gurriny's capacity and development to key stakeholders, such as state and federal governments.

The entire process of achieving community control of PHC in Yarrabah has extended across more than three decades to date. However, there were several distinct stages on the journey to community control (Table 1). The first stage, which started in 1986 and lasted until 2005, was concerned with the Yarrabah community's establishment and development of a community-controlled health organisation. Starting with a few discrete programs delivered through the Yarrabah Health Council in the 90s, by the early 2000s Yarrabah

had an established community-owned and controlled health organisation that was delivering SEWB services to fill an identified healthcare gap. The intention had always been to achieve full community control of Yarrabah's PHC services. However, it was not until a Deed of Commitment was signed that a formal agreement was undertaken to transition state government-run PHC services to community control.

The signing of the Deed of Commitment in 2005 marked the beginning of the second stage of the journey towards community control. This stage was focussed on preparing for the transition, and ended with the formal handover of funding and service management from CHHHS on the 30th of June 2014. This was the most intensive stage of the transition in terms of the work and activity involved. It was also the stage that required the most collaboration between Gurriny and CHHHS, and in which the most significant challenges were experienced.
The third and final stage of the journey to community control for Gurriny and the wider Yarrabah community has been the process post-transition. This stage includes the process following the official handover in mid-2014 to 2018 when this evaluation was undertaken. While Gurriny officially took control of the entire suite of PHC programs and services in Yarrabah on the 1st of July 2014, the journey of achieving community control did not end there. The first year following the official handover presented several significant challenges for both Gurriny and CHHHS in adjusting to the new service delivery arrangement. Furthermore, over the years since transitioning control of PHC to Gurriny, the Yarrabah community has focussed on strengthening whole of community leadership with the aim of increasing community control and autonomy to address the social determinants of health impacting the community.

Various strategies were utilised in the different stages to further the process of achieving community control of PHC in Yarrabah. Additionally, a number of enabling factors played important roles in supporting the transition, and various barriers were encountered across the three stages. These strategies, enablers and barriers are summarised in Table 1. Finally, a range of positive outcomes in healthcare service delivery, organisational growth and development, and Yarrabah wide community empowerment and development was noted.

Table 1: Summary of the strategies, enablers and barriers to transitioning PHC services to community control in Yarrabah

	STAGE 1: 1986 – 2004: Establishing and Developing a Community-Controlled Health Organisation	**STAGE 2: 2005 - 30th June 2014: Preparing for Transition**	**STAGE 3: July 1st 2014 – Present: Post Transition and Beyond**
STRATEGIES	Conduct a Feasibility Study to identify community health care needs and desires Apply for funding to support early efforts Utilise research collaborations to build capacity and develop programs and services Establish and develop a Social Emotional Wellbeing (SEWB) Centre of Excellence Expansion of the SEWB programs Local workforce capacity building	Address core strategy areas including: Communicating and engaging with stakeholders Ensuring strong governance Planning and developing the services and workforce Assuring quality Financial planning, management and modelling	Continued organisational growth, development, improvement and expansion Improving Gurriny's organisational culture Strengthening the local workforce Engaging the Yarrabah community Improving relations with QH Strengthening whole of community leadership Influencing the broader ACCHS sector
ENABLERS	Funding to establish the Yarrabah Health Committee was received from ATSIC Funding support for Feasibility Study and initial positions	Tracking and recording progress to demonstrate and communicate capacity Partnerships and alliances with ACCHS sector and consultancy services	Strong leadership Research partnerships

	Strong local leadership from the Yarrabah council, Elders, and others Research and community collaborations Funding support from government and non-government groups Collaborations with other ACCHSs Government support for the transition	Strong, stable leadership with perseverance and determination Negotiation and collaboration with partners Creating certainty and clarity Government support, commitment and funding Clear frameworks and guidelines Research partnerships	Gurriny growth, improvement and success Ongoing negotiation and collaboration between Gurriny and CHHHS/QH
BARRIERS	Resistance and lack of support from CHHHS staff Fear from locals/community about losing services/the hospital Limited funding Funding uncertainty/instability Lack of community confidence in Gurriny's capacity to be in control of Yarrabah's health care	Insufficient funding support Separate client information systems Limited service coordination and cohesiveness CHHHS staff resistance to transition Power imbalances and lack of trust Limited dedicated leadership and resourcing from CHHHS/QH Lack of clarity about the transition process Limited experience and capacity within Gurriny Challenges transitioning CHHHS/QH staff Service interruptions Delayed decision about official transition date, and funding and services to be transitioned	Funding being paid late and in arrears Ongoing issues with client information sharing Divisions between the services Risk averse and paternalistic Operating Deed and Lease Agreement Fundamental power imbalances between Gurriny and CHHHS/QH Some workforce and funding instability

3. *The outcomes of transition to community control in Yarrabah*

There were outcomes of transition to community control in Yarrabah in relation to improvements in: a) service funding and costs of service provision; b) service outputs; c) healthcare performance and intermediate health outcomes; and d) secondary and tertiary healthcare utilisation. In Table 2, the green highlighting indicates that Gurriny's performance against indicators of these outcomes has improved over time (2013-14 to 16-7) and is higher than the national average in 2016-17. The orange highlighting denotes that Gurriny's performance has EITHER improved over time OR is higher than the national average (the arrows identify which of these options is the case). The red highlighting indicates that Gurriny's performance against these indicators has NEITHER improved over time (2013-17) NOR is higher than the national average. The white highlighting shows that lack of data availability and/or data quality issues meant that time series analyses were not possible.

a) Service funding and costs of service provision

One of the objectives of transition to community control was to increase the total amount of health funding flowing into Yarrabah while reducing reliance on government grants (Queensland Health, 2013). The expected increase in ***Medicare funding*** was achieved with the contribution of the Medicare rebate having risen steadily from about 13% of Gurriny's total revenue in 2011-12 to 20% of revenue in 2017-18. This level of Medicare funding is starting to contribute

substantially towards Gurriny's organisational operating costs. Gurriny's service ***Operating costs*** also increased. Compared to $3.83 million in the pre-transition period of 2011-12, the operating expenses of Gurriny in 2017-18, were $8.15 million. These operating expenses have been proportional to the number of staff employed.

b) Service outputs

Gurriny PHC services are ***Accessed*** by a growing client population. From a base of 3,284 clients in 2013-14, following transition in 2014, Gurriny experienced an 11.6% increase in client numbers with 3,675 individuals seen in 2015-16 (This was approximately 1,000 more people than reported in Census data for Yarrabah). Subsequent data are not comparable due to a change in the national data generation/ extraction system. Consistently, more than 93% of Gurriny's clients identified as being Indigenous each year from 2013-14 to 2016-17, but there has been a consistent increase in the proportion of male clients from 45.7% in 2013-14 to 48.5% in 2017-18. The 38,705 ***Episodes of care*** provided by Gurriny in 2013-14 also increased during the transition period by 12.9% to 43,690 episodes of care in 2015-16. Again subsequent data are not comparable.

Since transition, the ***Workforce numbers*** and mix of workforce skills required to maintain service delivery under Gurriny's model of care have grown considerably. Overall, staff numbers increased by 71% from 44.5 FTE in 2013-14 to 76.0 FTE in 2017-18[1]. This compares favourably with national employment rates in the Indigenous PHC sector that were stable 2013-16 and declined by 2% in 2016-17 (AIHW, 2018b). The proportion of the local **Indigenous workforce** at Gurriny has been maintained at high levels, with 58/76 (76%) positions filled by Indigenous people in 2017-18. This compares favourably with the national average for Indigenous PHC organisations of 53% in 2015-16 and 2016-17 (AIHW, 2018b).

c) Healthcare performance, and intermediate health outcomes

Gurriny's healthcare performance must be measured against the backdrop of a high burden of disease present in the Yarrabah population to fully understand how well the organisation has performed.

Maternal and child health indicators: Analysis of Gurriny's performance data throughout the transition to community control indicate there have been significant improvements in processes of care for maternal and child health from 2013-14 to 2016-17. For each of the indicators: ***Early first antenatal visits, Birthweight recorded*** and ***Child immunisation,*** Gurriny has both improved its performance and performed consistently above the national rates (2017-18). For the other healthcare process indicator, ***MBS (Medical Benefits Schedule) health assessment (item 715) for children aged 0–4,*** Gurriny has performed at above the national average rate, but there has been no improvement in performance since 2015. Data for the maternal and child health risk indicator of ***Smoking status of females who gave birth within the previous 12 months*** are available only for 2017. At that time Gurriny did not match national levels. Gurriny is aware of the need to reduce low ***Birthweight result*** and current performance does not match national levels. Nationally, birthweight results are obfuscated by increasing rates of maternal obesity and diabetes. The greatest improvements to low and high birthweight will be achieved through addressing determinants which are often outside the remit of the health service.

Preventive health indicators: Similarly, Gurriny's performance data indicate there have been substantial improvements in processes of care for preventive health from 2013-14 to 2016-17. Performance against the indicators of ***Smoking status recorded, Alcohol consumption recorded, MBS health assessment (item 715) for adults aged 25 and over,*** and ***Immunised against influenza—Indigenous regular clients aged 50 and over*** showed consistent improvement of results from 2013-14 – 2016-17 and consistent results above the national average. The upward trends in National Key Performance Indicator (nKPI) data for recording of smoking and alcohol consumption indicate an improved capacity of Gurriny's data management systems since transition. The data are unreliable for ***Cervical screening, AUDIT-C result,*** and for ***Risk factors assessed to enable***

[1] The Gurriny Online Service Report for 2016-17 was not available.

cardiovascular disease (CVD) risk assessment were available for only 2017 (when Gurriny's rate of assessment was higher than the national rate). Gurriny's performance against the preventive health risk factor indicators of ***Smoking status result,*** and ***Body mass index classified as overweight or obese*** demonstrate a need for further efforts in health promotion/prevention. The rate of Gurriny regular clients who were current smokers has remained stable since 2013-14 at around 57% (higher than the national rate of 51% in December 2017). The proportion of clients who were overweight or obese increased slightly to 64% in July 2017 and June 2018 (but was better than the national average of 71%). And of the 212 clients aged 35-74 years who had an absolute ***Cardiovascular disease risk assessment result*** within the previous 2 years through Gurriny, as at December 2017, 36% (44% of men and 29% of women) were at high risk, having a greater than 15% probability of CVD in the next 5 years (compared to 31% nationally). However, improving these indicators requires not only PHC provision of supports to clients through brief interventions and other health promotion programs, but also impacting the numerous personal and social determinants that affect clients' decisions to change behaviours.

Chronic disease management indicators: Gurriny has demonstrated very strong performance in chronic disease management since its transition to community control with considerable improvements in both processes of care and, importantly, in intermediate health outcomes from 2013-14 to 2016-17. Performance improved, and at higher than national rates, against ALL chronic disease management indicators (***General Practitioner Management Plan—clients with type 2 diabetes; Team Care Arrangement—clients with type 2 diabetes; Blood pressure result recorded—clients with type 2 diabetes; HbA1c result recorded—clients with type 2 diabetes; Kidney function test recorded—clients with type 2 diabetes; Kidney function test recorded—clients with cardiovascular disease; Immunised against influenza—clients with type 2 diabetes;*** and ***Immunised against influenza—clients with chronic obstructive pulmonary disease***). Additionally, Gurriny demonstrated improved performance and at higher than national rates against three intermediate health indicators (***Blood pressure result—clients with type 2 diabetes; Kidney function test result—clients with type 2 diabetes—ACR*****;** and ***Kidney function test result—clients with cardiovascular disease—eGFR***). Time series data are not available for the indicator for **Kidney function test result—clients with type 2 diabetes—eGFR** (associated with increased risks of adverse renal, cardiovascular and other clinical outcomes) but in December 2017, Gurriny's rate of 86% of clients having an eGFR recorded in the previous 12 months of 60 mL/min/1.73 m² or over; was higher than the national rate of 81%. For the final indicators of intermediate health outcomes, Gurriny's results for ***HbA1c result—clients with type 2 diabetes*** showed a steady improvement over time, with 33% in December 2017 and in June 2018, but these rates were lower than the national average which was recorded at 37% as at December 2017. This nKPI is especially influenced by "a range of social determinants and lifestyle factors" (Australian Institute of Health and Welfare, 2014b).

d) Secondary and tertiary healthcare utilisation (2002-18)

There has been an upward rising trend in ***Potentially preventable hospitalisations (PPH)*** of Indigenous people residing in Yarrabah over time, with the most notable increase at and in the year after transition to community control. Between July 2013 and June 2015, there were around 179 such hospitalisations (excluding dialysis); based on Census data, this equates to a crude rate of 38.2 per 1000 population. However, this rate is considerably lower than the rate of 49.3 per 1000 Indigenous population in Australia.

Emergency presentations for Indigenous residents of Yarrabah increased steadily from 2002-18. Gurriny has invested through the involvement of health workers and provision of transport in supporting Yarrabah residents to access hospital care when needed. This is appropriate given the high burden of disease in the community. The results of this investment are evident in the increasing presentations for emergency care at all triage ratings over the post-transition period compared to pre-transition. Whilst presentations for all triage ratings were higher over the post-transition than pre-transition periods, a decrease occurred from 2017 for those ***Emergency presentations triage 4 and 5*** (that is, for patients who were not in immediate

danger or severe stress or for patients who presented with a non-emergency health concern). It is too soon to say whether this is a trend effect.

In summary, the data show improvements in indicators for funding and costs, many aspects of PHC access, healthcare performance, some intermediate health outcomes and initial improvements in the appropriate use of secondary and tertiary healthcare services. However, indicators such as the proportion of smokers, people with overweight/obesity and the proportion of low birth weight are strongly influenced by the social determinants of health, such as education, employment, overcrowded housing and household income, together with behavioural risk factors. The Australian Institute of Health and Welfare (AIHW) found that these determinants and behaviours explained up to 57% of the gap in health outcomes between Aboriginal and Torres Strait Islander and other Australians (AIHW, 2014). It is unrealistic to consider that improved PHC services alone will improve health outcomes; whole of community changes such as those outlined in the six pillars of the strategic plan of the Yarrabah Leaders' Forum are also necessary.

Table 2: Summary table: funding/costs, outputs, healthcare and health outcomes

Category	Indicator	Trend 2013-17	> national rate, 2017	Notes
Funding and costs				
Funding	Medicare funding	↑	n/a	
Costs	Operating costs	↑	n/a	
Outputs (Online Service Reporting)				
	Access – client numbers	↑	~	Time series not comparable after 2015-16.
	Episodes of care	↑	↑	Time series not comparable after 2015-16.
	Workforce numbers	↑	↑	
	Indigenous workforce	↑	↑	
Healthcare performance and intermediate health outcome indicators (National Key Performance Indicators)				
Maternal and child health	First antenatal visit	↑	↑	
	Birthweight recorded	↑	↑	
	MBS health assessment (item 715) for children aged 0–4	~	↑	
	Child immunisation	↑	↑	

	Birthweight result	~	~	
	Smoking status of females who gave birth in previous 12 months	~	↓	Data available only for June and December 2017.
Preventive health	Smoking status recorded	↑	↑	
	Alcohol consumption recorded	↑	↑	
	MBS health assessment (item 715) for adults aged 25 and over	↑	↑	
	Risk factors assessed to enable cardiovascular disease risk assessment	↑	↑	Data available only for June and December 2017.
	Cervical screening	↓	~	Data unreliable.
	Immunised against influenza—Indigenous regular clients aged 50+	↑	↑	
	Smoking status result	~	↓	
	Body mass index overweight or obese	~	↑	
	AUDIT-C result	~	~	Gurriny data not reportable.
	Cardiovascular disease risk assessment result		↓	Data available only for 2017.
Chronic disease management	GP Management Plan—clients with type 2 diabetes	↑	↑	
	Team Care Arrangement—clients with type 2 diabetes	↑	↑	
	Blood pressure result recorded—clients with type 2 diabetes	↑	↓	
	HbA1c result recorded—clients with type 2 diabetes	↑	↑	
	Kidney function test recorded—clients with type 2 diabetes	↑	↑	
	Kidney function test recorded—clients with cardiovascular disease	↑	↑	

	Immunised against influenza—clients with type 2 diabetes	↑	↑	
	Immunised against influenza—clients with chronic obstructive pulmonary disease	↑	↑	
	Blood pressure result—clients with type 2 diabetes	↑	↑	
	HbA1c result—clients with type 2 diabetes	↑	↓	
	Kidney function test result—clients with type 2 diabetes—eGFR	↓	↑	Data available only for 2017.
	Kidney function test result—clients with type 2 diabetes—ACR	↑	↑	Data available only for 2017.
	Kidney function test result—clients with cardiovascular disease—eGFR	~	↑	Data available only for 2017.
Secondary and tertiary healthcare utilisation				
	Potentially preventable hospitalisations	↑	↓	2002-18
	Emergency presentations	↑	n/a	2002-18
	Emergency presentations triage 4 and 5		n/a	2002-18

4. *The economic benefits and costs of transition to community control in Yarrabah*

As summarised in Table 3, from 2012-13 to 2016-17, the operating cost of Gurriny increased (from $4.4 million to $7.1 million). Quantifiable benefits of transition to community control were measured using funding receipts, the multiplier effect of employment, value of potentially preventable hospitalisations (60% attribution), and value of potential Disability Adjusted Life Years averted (15% attribution). The value of these benefits increased from 2012-13 to 2016-17 from an estimated $7.4 miliion to $13.0 million. The ratio of benefits to costs suggests that for every $1 invested in Gurriny, the social and economic return increased from 2012-13 to 2016-17 from $1.68 to $1.82. Sensitivity analyses suggest that in 2012-13, these estimated ranged from $1.52-1.84 and 2016-17 from $1.63-2.02. It should be noted that the Social Return on Investment (SROI) did not produce a market -based, or actual valuation; rather it used monetisation of value to create consistency between the benefits and costs of the service and enable assessment of changes over time. The SROI framework does not include the intangible benefits of healthcare and social values that are not possible to quantify without engagement with community stakeholders, and the SROI ratio is not comparable to other services.

Table 3: Economic indicators

Indicator	Trend 2002-18	Notes
Economic evaluation		
Operating costs	↑	2012-13 to 2016-17
Funding receipts	↑	2012-13 to 2016-17
Multiplier effect of employment	↑	2012-13 to 2016-17
Cost/Value of PPH in comparison to previous period	~	2012-13 to 2016-17
Potential DALYs averted	↑	2012-13 to 2016-17
Benefit to cost ratio	↑	2012-13 to 2016-17
Benefit to cost ($)	↑	2012-13 to 2016-17

Future directions/ recommendations

1. Recommendations for Queensland Health and Area Hospital and Health Services (HHS's) to improve the process of transitioning PHC from government to community control are that:
   a. Transitions be treated as a formal procurement process to ensure adequate resourcing and leadership from the HHS;
   b. Dedicated leadership be provided within the HHS to oversee the transition process, and appropriate resourcing to support transitions;
   c. A clear transition date be agreed upon and committed to early in the process;
   d. Transitions be planned with a clear decision regarding the funding amount made, with services planned based on this, or a clear decision regarding the services to be delivered with funding to support. Such a decision should be made early in the negotiation processes;
   e. Decisions regarding funding amounts consider planned service delivery models and the health care needs and demands of the relevant community;
   f. Further education be provided to all involved Queensland Health (QH) and HHS staff and representatives to help build understanding of the community control sector and its importance to Aboriginal health, wellbeing, self-determination and development;
   g. QH and HHS reflect on and work to shift power dynamics that exist with ACCHSs and implement appropriate change management processes to support this;
   h. Bureaucratic systems and processes that inhibit successful collaboration and progression of transition processes be revised with the aim of finding innovative and creative solutions;
   i. Policies are created to support and enable smooth transition processes.

2. Recommendations for ACCHSs who are planning on embarking on a process of taking over the management and delivery of previously state-run health organisation PHC services are that:
   a. ACCHSs prepare to undertake significant and ongoing capacity building efforts to build organisational readiness across the core pillars of organisational development;
   b. Strong and stable leadership across senior management and boards is needed to support organisational development efforts and continuity. Getting the right

kind of leaders is critical to transition success;
   c. ACCHSs have patience and determination to embark on what may be a long process of organisational development for transition, and to prepare leaders and staff for this;
   d. ACCHSs recognise the positive work that is and has been done by local area HHSs and the challenges involved in that work. The focus should be on building understanding of the importance of community control for community empowerment and self-determination, collaborative efforts and the appropriateness of care.

3. Recommendations for strategies and processes to facilitate transition from local area HHSs to ACCHSs are that:
   a. An external third party oversee and manage the transition process. This could help to balance power differentials between HHSs and ACCHSs;
   b. Clear and effective strategies and processes be implemented to improve communication and build cooperation between transitioning services. This could include structured conflict resolution processes and guided workshops to build understanding;
   c. Clear communication and transparent information be provided about issues and sources of tension, for example, through building understanding of the barriers and limitations brought about by organisational and political change.
   d. Future transitions be evaluated from the start. Ongoing evaluation processes should be built into daily activities involved in the transition and should be used to reflect on and improve processes. Such evaluation needs to include the experience and perspective of both organisations, and to be prioritised and resourced adequately.

4. Analyses of the national key performance indicators and hospitalisation data point to an overall marked improvement in healthcare performance since transition to community control in Yarrabah, and some clear priorities for further improvements. As outlined in the summary Table 2, these priorities lie in improving: MBS health assessment (item 715) for children aged 0–4; Birthweight result; Decreasing smoking rates, particularly in pregnancy; Cervical screening; Improving nutrition and physical activity throughout the life course; Alcohol use; Cardiovascular disease risk; Recording of blood pressure for clients with type 2 diabetes; and access to secondary and tertiary care when needed. Without whole of community change, however, it is unrealistic to consider that improved healthcare services can influence indicators such as the proportion of smokers, people with overweight/obesity and the proportion of low birth weight. To improve health outcomes, a focus on improving clinical care must be balanced with a potentially even more important focus on improving the social determinants of health.

5. The outputs, healthcare performance and intermediate health outcome indicators be evaluated on an annual basis, and secondary and tertiary healthcare utilisation of Gurriny clients evaluated five-yearly to determine the longer-term benefits of transition to community-controlled PHC. Considering the high burden of disease of Yarrabah residents, the four year timeframe of this evaluation since the transition of PHC services to community control in Yarrabah is an insufficient amount of time to demonstrate change in health outcomes.

6. Much of the data needed for a robust economic analysis of transition to community control was unavailable. Inclusion of more holistic impacts will require an increased level of stakeholder-engagement to value clients' experiences of outcomes, the consequences to close family members and the community, including changes such as improved lifestyle, healthier and stronger relationships and other measures of wellbeing. Monitoring of the value of the following indicators will allow a comprehensive evaluation of the economic benefits of transition to community control in the longer term: avoided time in hospital; improved quality of life; avoidable death; community gain; student placements; networking / partnerships and building the evidence base.

2. INTRODUCTION AND METHODS

2.1 Introduction

Australian Aboriginal community-controlled health services (ACCHSs) are "primary health care service[s] initiated and operated by a local Aboriginal community to deliver holistic, comprehensive, and culturally appropriate primary health care (PHC)" (NACCHO, 2018a). Aboriginal community control of health care is a fundamental expression of self-determination - an essential element in the process of addressing the injustices of colonisation through facilitating increased control of Indigenous lives by Indigenous people (King M, Smith A, & Gracey M, 2009). Legacies of the injustices of colonialisation include significant inequalities in physical, social, emotional and mental health and wellbeing between Aboriginal and non-Aboriginal Australians (Gracey M & King M, 2009).The establishment and development of the Australian ACCHS sector are inextricably linked to the ongoing marginalisation and exclusion of Aboriginal people from mainstream health services, and limitations in the ability of mainstream services to meet their unique health needs (Harfield S et al., 2018). ACCHSs aspire to take a broader, more holistic view of health, which goes beyond traditional biomedical approaches to include Indigenous models of health as well as an understanding of the social determinants of health (Panaretto K, Wenitong M, Button S, & Ring I, 2014). ACCHSs are grounded in the culture and values of their respective communities. The services provided are reflective of the unique needs and aspirations of each local community. A governance structure of locally elected boards of management promotes accountability to local communities, and orientation to local culture, context and needs (Campbell M et al., 2018).

In the 1970s the Australian ACCHS sector, together with overseas organisations such as the Indian Health Service in the United States, constituted a social empowerment movement that eventually gained international recognition through the World Health Organization's 1978 *Alma Ata Declaration of Primary Health Care* (Lyon P, 2016; World Health Organization, 1978). The Australian sector has contributed to and been strengthened by the international movement for Indigenous peoples' rights to self-determination (United Nations General Assembly, 2008); the principles of equity, social justice, and health for all; and the international promotion of greater community participation in health care services and structures (Lawn J; Oakley P & Kahssay H, 1999). Indigenous peoples of other colonised countries including Canada, New Zealand and the United States have also invested significant effort in achieving self-determination through community control of health care. Between these countries there are parallels and distinctions in the evolution of Indigenous community-controlled health services, and in the barriers faced as well as the factors that facilitated success (Alford K, 2005; J & J, 2016a; Jackson Pulver L et al., 2010; Lavoie J, 2003; Lavoie J, Kornelsen D, Wylie L, & Mignone J, 2016b)

There is diversity within the ACCHS sector in Australia, reflected in the various governance structures and means of community representation. The health services are each independent, local organisations designed to respond to the needs of heterogeneous Aboriginal communities. However, there are common organisational characteristics that distinguish ACCHSs from mainstream PHC services. For example, they are characteristically participative and often occupy an important place in the community, as a result of having been built through community mechanisms (Taylor J, Dollard J, Weetra C, & D, 2001; Wakerman J, Matthews S, Hill P, & Gibson O, 2000). ACCHSs originated within a strong social movement orientation and many remain overtly political organisations characterised by political leadership and advocacy at community and government levels (Anderson I & Saunders W, 1996; Taylor J et al., 2001). International evidence supports comprehensive and responsive PHC that has a high level of community participation as the most effective strategy for improving health and addressing inequities (Campbell M et al., 2018).

From modest beginnings in the early to mid-1970s, a small number of community-developed health services, initially with minimal or no government support, (Taylor J et al., 2001) has grown to more than 150 ACCHSs providing health care to urban, rural and remote Aboriginal communities across Australia (Campbell 2018 (Campbell M et al., 2018). In 2018, with about 6,000 employees, ACCHSs will provide three million episodes of care for approximately 350,000 people (59% of the 590,772 Aboriginal population) (ABS, 2016; NACCHO, 2018a). The journey of building up the ACCHS sector to its current integral place in the Australian health care system has at times been onerous. Many factors in the health care, government policy, legislative and social environments have both supported growth and created challenges for the development of the ACCHS sector. After nearly half a century, these same environments continue to present challenges to the sector achieving "the social, emotional and cultural wellbeing of the whole Community" that defines Aboriginal health (NACCHO, 2018b).

Aim

This review of the transition of primary healthcare services to community control in Yarrabah is designed to answer three research questions: 1) What were the drivers, strategies, and enablers that supported the transition of the delivery of PHC services to Aboriginal community control in Yarrabah in 2014, and what were the barriers to the

transition? 2) Has transition to Aboriginal community control over the planning, prioritisation and management of the delivery of PHC services achieved better healthcare and health outcomes for the Yarrabah community? 3) What are the economic costs and benefits arising from introducing Indigenous community control of primary healthcare in Yarrabah from the healthcare system's perspective?

This review is based on rigorous, systematic and objective processes to assess the appropriateness and effectiveness of the transition and to provide evidence for further development of primary healthcare by Gurriny Yealamucka Health Service Aboriginal Corporation (Gurriny). Potentially, the results could inform further development of community-controlled services in Yarrabah, or improved design and delivery of other such transitions from Queensland Health to community control.

2.2 The setting

Yarrabah is a discrete Aboriginal community in far north Queensland, 60 kilometres south east of Cairns (Figure 1). The traditional custodians of the area are the Gunggandji people. The community was founded as an Anglican Mission in 1892. Subsequent state governments forcibly relocated Aboriginal and some South Sea Islander peoples to Yarrabah. The first Aboriginal Council was established in the mid-1960s, principally as an advisory body. The community received a Deed of Grant in Trust (DOGIT) land tenure status in 1986 and is now self-governing.

Yarrabah is now the largest Aboriginal community in Australia. According to the 2016 census, the community is home to 2494 Indigenous residents; however local estimates place the population at around 4000 (Australian Bureau of Statistics, 2018). Yarrabah was also ranked in the first percentile of disadvantage in the Socio-Economic Indexes for Areas (SEIFA) index in 2016, meaning that approximately only 1% of Australia's local government areas are more disadvantaged than Yarrabah. SEIFA is a measure of people's access to material and social resources, and their ability to participate in society (Australian Bureau of Statistics, 2014).

There is a high burden of disease present in the Yarrabah population. For example, diabetes is significant problem in Yarrabah, with 5.9% of those aged 25-34 years; 13% of those aged 35-44 years; 26.3% of those aged 45-54 years and 46% of those aged 55+ having the condition. This high prevalence contributes to increased rates of the complications of diabetes including ischemic heart disease and end stage renal failure (Hahr & Molitch, 2015). The approach of Gurriny to foster long-term generational change through family-centred programs is critically important for improving both maternal and child health and chronic disease outcomes and mitigating their risk factors.

Figure 1. Yarrabah

Source: (Bentleys, 2014)

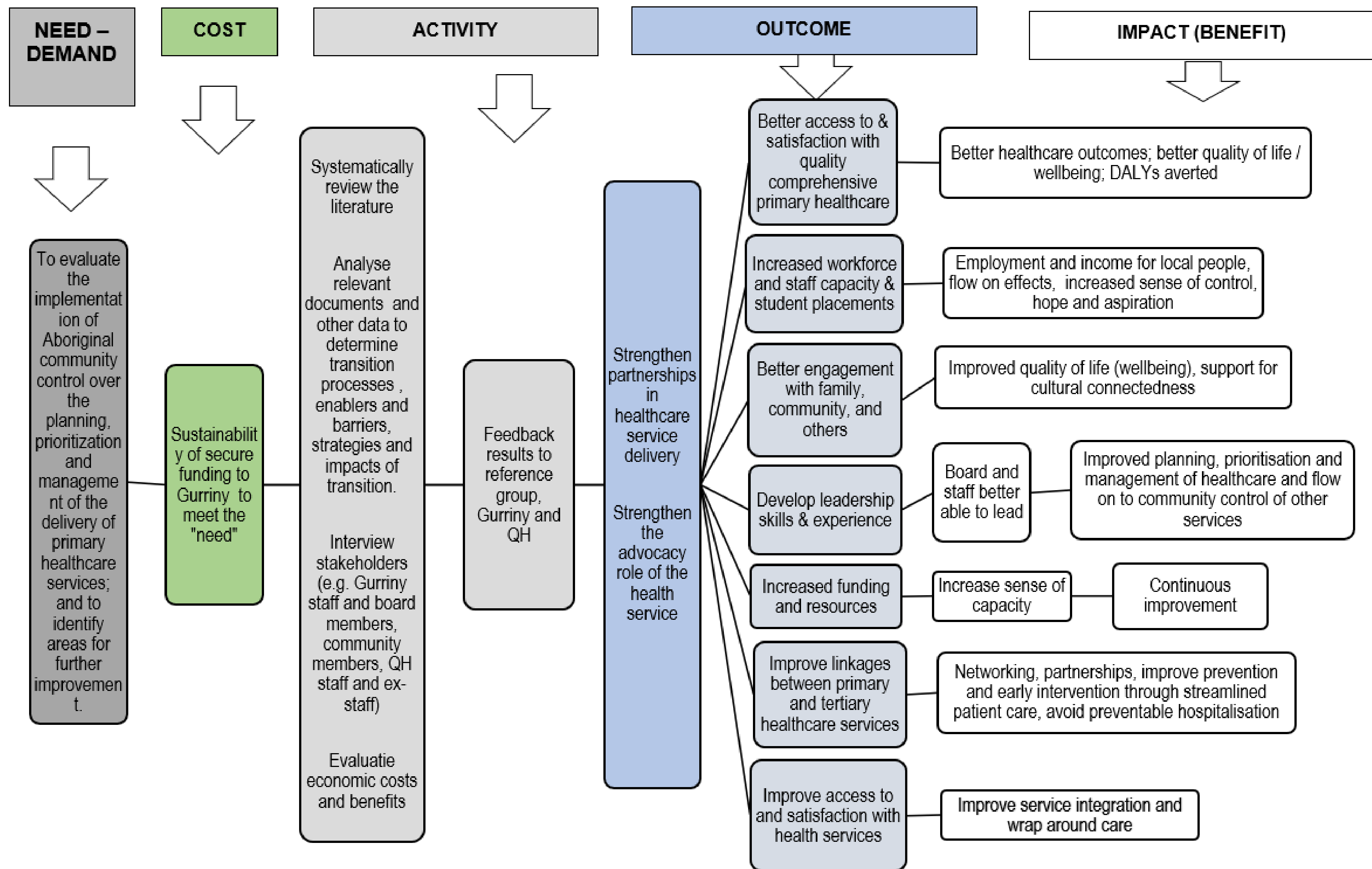
Yarrabah was the first Queensland Aboriginal community to transition PHC services from Queensland Health operation to Aboriginal community control. At the time of committing to community control in Yarrabah, the stated goal of the Deed of Commitment (2005) was to achieve better health outcomes for Yarrabah through an agreement between Commonwealth, Queensland and local government partners to:

- Commit to implementing Aboriginal community control over the planning, prioritization and management of the delivery of PHC services to the community of Yarrabah; and
- Affirm that three essential requirements of Aboriginal community control are: 1) that the residents of the Community identify their needs, aspirations and priorities for improving their own health conditions and outcomes; 2) that these needs, aspirations and priorities are articulated through a representative community-controlled Aboriginal health organization that has good governance and best practice as key principles; and 3) that the community-controlled health organization develops a forward looking Health Strategic Plan that forms the baseline document for resource allocation for themselves and to PHC providers.

2.3 Program logic

The evaluation is intended to assist Gurriny to meet the demands of the increasingly complex and dynamic social, economic, political and health environments of Yarrabah and the region; and Queensland Health, to identify processes for further enabling the transitions of PHC services in other locations to community control. Expected outcomes include the identification of: strategies, enablers and barriers of the transition of government PHC to a community-controlled service model of care and healthcare service outcomes; and recommendations for further improvements. A program logic framework for the evaluation of transition to community control of PHC services in Yarrabah is provided at Figure 2.

Figure 2: Program logic for the evaluation of transition to community control of primary healthcare services in Yarrabah



The scope of the evaluation

At the time of transition to community control (1 July 2014), less than a quarter (24.7%) of the cost of PHC services in Yarrabah were funded by Queensland Health. The remaining costs were primarily funded by the Commonwealth government and Medicare generated income. However, this review is focussed on the transition of 100% of the management and accountability of PHC services from government providers to community control via Gurriny.

The achievement of transition has been a continuous incremental process that had its beginnings in the late 1980s. In 1989, the newly formed Yarrabah Aboriginal Council created a Health Committee, which was incorporated in 1991. Subsequent milestones have included the formation of Gurriny as a Social and Emotional Wellbeing (SEWB) Centre of Excellence in the early 2000s, the signing of a Deed of Commitment between the Commonwealth and Queensland Governments with Yarrabah Aboriginal Shire Council and Gurriny in 2005, and the final transfer, marked by the handing over of the management and accountability of primary healthcare services in Yarrabah, on 1 July, 2014. Thus, transition to community control in Yarrabah could be considered a phased approach that has been driven by both the capacity of Gurriny and community preferences, with potential for further developments in community-controlled health service delivery still to come. At the time of publishing this review, Gurriny had a mandate for providing health promotion, prevention, treatment and management of acute and chronic conditions. Queensland Health retained control of delivery of after hours emergency care, renal care and some mental healthcare.

The timeframe for this review of transition to community control in Yarrabah has largely been determined by the availability of data. For the process evaluation, documents and interview data pertain to the period from 1986 to 2018. For the outcome evaluation, most online service reporting and national key performance indicator data were available only from 2012-13 to 2016-2017. For the economic evaluation, hospitalisation, workforce and service costing data were available from 2008-2017.

2.4 Ethics approvals

Two separate applications for ethics approval were submitted to the Far North Queensland Human Research Ethics Committee of the Cairns and Hinterland and Torres and Cape Hospital and Health Services. These pertained to 1) the process and outcome evaluation (HREC Reference Number: HREC/18/QCH/95 – 1265 Project Id: 41295: submitted June 6, 2018 – approved August 28, 2018), and 2) the economic evaluation (HREC Reference Number: HREC/2018/QCH/46255 – 1293 Project Id: 43709: submitted July 23, 2018 – approved October 19, 2018). A Research Collaboration Agreement between CQU and the Cairns and Hinterland Hospital and Health Service (CHHHS) was established and Queensland Health research governance approvals were granted for allocation of resources required (Queensland Health staff time) for the process and outcome evaluation on November 24, 2018, and for the economic evaluation on November 26, 2018. We subsequently requested cost data from the Queensland Health (QH) case mix team, but because of complexities due to issues with missing data and competing priorities, the team were not able to provide the data until after the January 7, 2019. To allow time for rigorous data analysis and reporting, the project timeline was extended from the original completion date of December 31, 2018, to June 30, 2019.

2.5 Methods

This review comprised four key components:

- A systematic scoping review of literature focussed on the conditions and strategies that constituted the development and implementation of ACCHSs in Australia, and their outcomes.
- A process evaluation to assess the process and experience of transitioning to community control of PHC, the strategies implemented, enablers and barriers to the process, and its outcomes;
- An outcome evaluation using Online Service Reporting (OSR) and National Key Performance Indicator (nKPI) data to assess the outcomes of transition to community control on Yarrabah clients with respect to prevention, detection and successful management of acute and chronic conditions and reduction of the risk factors for disease sequelae.

- An economic evaluation of whether the economic benefits of the transition outweigh its costs.

2.6 Strengths and limitations of the evaluation

A strength of our evaluation is the use of multiple sources of data and methods to triangulate findings. The historical documents and interviews provide rich and comprehensive sources of data about the Gurriny processes that unfolded to achieve the transition to community control, and people's retrospective perceptions of the process. The use of the published literature, OSR and nKPI data provide measurable and nationally comparable data for changes in healthcare and health outcomes over the transition period. The economic data for trends in hospitalisations of Yarrabah residents over the transition period are also assessed.

A major limitation of this review was our limited engagement with Queensland Health participants. While we discussed the evaluation with the relevant QH stakeholders and invited interviews with key staff, many were unable or unwilling to contribute to the evaluation. Others chose not to participate because they believed they would not be rich informants due to the peripheral nature of their role/involvement in the transition. A further limitation was that we did not obtain approval to analyse QH documents. While this option was explored, it was beyond the scope of this project due to time constraints. Several key documents, including the 2005 Deed of Commitment and Sublease Agreement, included clauses which stipulated that they could not be discussed in publications, reports or other media. The report authors were able to read these documents, and the analysis has been informed by them. However, we were not able to include an explicit analysis of these critical documents in this report. Regardless, the Deed of Commitment in particular is discussed throughout the process evaluation section of this report. This is due to many participants discussing this key document in the context of its significant impact on the transition process. To honour the data received by participants and to ensure the quality and integrity of the analysis, discussion on the Deed of Commitment has been included. These limitations meant that the focus of the process evaluation was very much driven by Gurriny and may have overlooked areas of importance to Queensland Health.

In the process evaluation, we acknowledge that there is no objective reality, and that "the world consists of multiple individual socially constructed realities influenced by context" (Mills, Bonner, & Francis, 2006). Considering that the transition process was experienced subjectively by all involved, depending on their context and position in the process, what was perceived as truth for one person involved in the transition to community control, might not be the same for another. While the grounded theory analysis approach brings together these different perspectives, identifying the relationships between concepts, and comparing their similarities and differences, the lack of perspectives expressing QH's truth of the experience means that the process evaluation inescapably is swayed towards the Gurriny experience. We also acknowledge that as researchers we author reconstructions of experience and meaning from people's stories (Mills et al., 2006). Drawing from the voices of program implementers and receivers, we aimed to explain what was really happening in the transition processes, and why and how it occurred (Charmaz, 2014; Glaser & Strauss, 1967). We focussed on generating explanations of how and why the transition process worked as a whole and incorporated the perspectives of the different people involved in its implementation.

Another limitation of the review is that there have been a number of concerns about the validity of routinely extracted health indicators, such as those reported to the Commonwealth Government (Liaw, Taggart, Yu, & de Lusignan, 2013). These data are drawn from the electronic Patient Information and Recall System, but flaws arise in the secondary use of data extracted from PHC software in a system where there is no oversight - from data entry through to data extraction protocols. For example, activities may be performed but not recorded in an extractable format, and there is variation in the data extraction tools used, so the activity entered may not be appropriately extracted. Rather than rating the quality of care provided, indicators may thus be simply rating the quality of the medical record. It was beyond the scope of this review to collect first hand evidence on the validity and reliability of the OSR and nKPI data.

Changes in Gurriny's patient records systems and national data extraction software have also occurred at various times during the transition period; these affected time series trends for particular

indicators. For example, at transition, Gurriny had two separate patient record databases—paper and electronic. In 2014-15, Gurriny introduced a range of clinical and management software to provide full control over their IT system for patient records (Bentleys, 2014). On the 31st of October 2015, Gurriny migrated its medical records from Medical Director (MD) to Communicare, raising concerns about whether the data extracted reflected clinical activity. Analysis of extracts taken from Medical Director prior to migration and from Communicare afterwards, showed that the change of medical records software impacted 9 of 22 nKPIs (Agostino J, 2016), with a lasting effect on Pap smear results (which we consider to be invalid). There were also discrepancies in data provided through Gurriny's in-house PEN Clinical Audit Tool (PEN CAT) and those reported nationally through the OSR. Differences may be due to data cleaning issues (missing or duplicated data or data collected at different timeframes than the OSR data). In this evaluation, we preference reporting of OSR data in because it is comparable with state and national figures. However, where there are gaps, we refer to Pen CAT data. At all times, we make the sources of data explicit. However, we remain unclear on the extent that data entry and extraction problems may have led to undercounting of Gurriny clinical activity (Agostino J, 2016).

Changes also occurred in national data extraction methods over time; anomalies meant that time series analyses for some OSR and nKPI indicators are not appropriate. For example, consistency of reporting across time is affected by changes in the number of organisations contributing to the OSR from year to year and developments and changes to the collection; revisions to the online form in 2012–13; manual versus direct extraction from an organisation's clinical information systems using the Pen CAT tool and transmission directly to the Australian Institute of Health and Welfare's (AIHW's) OCHREStreams portal; a change in 2014–15 collection reporting period; reliance on organisations own data extraction processes and manual entry in 2015-16; and changes made to the 2016–17 data collection in how some data were generated and extracted. The changes in 2016-17 affected primary health episodes of care counts in particular, and these counts are not considered to be comparable with previous collections and represent a break in series (nKPI report AIHW, 2018a). Furthermore, since the introduction of the nKPIs monitoring system in 2012, there has been a gradual increase from 11 to 24 indicators collected.

2.7 Dissemination of study results

Research translation was not a separate activity of this evaluation but embedded in the research design. For example, all project participants were offered the option of receiving copies of project results and their response recorded on the Participant Consent form. Additionally, a community-based research translation plan was developed in collaboration between CQU and Gurriny with the project results presented at a Gurriny Senior Management Team meeting and Gurriny staff meeting (20 June, 2019). The research translation plan included a range of dissemination activities, for example publications in peer reviewed journals and conference presentations, and engagement with partner organisations through media such as "Yarrie News", twitter and email correspondence.

2.8 Structure of this report

The following **Parts 3-6** of this report are presented to reflect the four key components of the study.

- Part 1: Executive Summary
- Part 2: Introduction
- Part 3: Literature review
- Part 4: Process evaluation
- Part 5: Outcome evaluation
- Part 6: Economic evaluation

3. LITERATURE REVIEW

3.1 Introduction

A systematic review of the literature was conducted to identify the evidence for the implementation and outcomes of primary healthcare service transitions to community control. The research question for the review was: what were the conditions and strategies that constituted the development and implementation of ACCHSs in Australia, and their outcomes?

3.2 Methods

Peer reviewed literature: Consultation with a librarian identified 12 relevant electronic databases. We searched: AIATSIS, ATSIHealth, APAIS-ATSIS, EMB Reviews/Cochrane, PsycINFO, Medline, Embase, CINAHL, Global Health, PAIS, PubMed Clinical Queries and Scopus from January 1, 1980 up to October 31, 2017. The search terms included both thesaurus (MeSH) and keyword synonyms for 'Indigenous' AND 'Canada' OR 'Australia' OR 'New Zealand' OR 'USA' AND 'healthcare' AND 'community control AND 'transition' (See Footnote). We checked reference lists from excluded reviews and included articles.

Grey literature: The grey literature search strategy included the following websites: Google Scholar, Google; Australia – Indigenous HealthInfoNet, Closing the Gap Clearinghouse; Canada – The National Collaborating Centre for Aboriginal Health, Health Council of Canada: Aboriginal Health; New Zealand – Maori Health, Whakauae: Research for Maori Health and Development, MAI: A New Zealand Journal for Maori Health & Development; United States – American Indian Health; National Indian Health Board; Centres for American and Alaska Native Health. The search terms were tailored for each facility and broadly included both thesaurus and keyword synonyms for 'Indigenous' AND 'community control' AND 'health care'.

Search terms

The search terms included 'Indigenous' OR 'First Nation*' OR 'Inuit' OR 'Metis' OR 'Aborigin*' OR 'Torres Strait Island*' OR 'Maori' OR 'Iwi' OR 'Tangata Whenua' OR 'Native American*' OR 'Native Alaskan*' OR 'Native Hawaiian*' OR 'Indian' OR 'tribal' AND 'Canada' OR 'Australia' OR 'New Zealand' OR 'USA' AND 'healthcare' OR ' health care' OR 'primary health care' OR 'health' AND 'service' OR 'provider' OR 'program' OR 'clinic' OR 'center' OR 'centre' OR 'system' AND 'community control*' OR 'led' OR 'gover* OR 'run' AND 'transition*' OR 'develop*' OR 'transfer*' OR 'transform*' OR 'implement*'.

The search strategy included studies from Australian, Canada, New Zealand and the United States. A decision was taken that synthesis of this literature was impractical due to enormous diversity in terms of historical, political, legal, social and cultural factors in relation to Indigenous community-led PHC. This review focusses on the Australian experience of ACCHSs.

Studies were included if they were:

- Conducted in Australia;
- Published in English and electronically available;
- Published over a 20 year period between January 1997 and October 2017 (the start date was consistent with the establishment of the National Aboriginal Community Controlled Health Organisation's (NACCHO's) National Secretariat which greatly increased the capacity of Aboriginal peoples involved in ACCHSs to participate in national health policy);
- Concerned Aboriginal Australians;
- Focussed on Aboriginal community-controlled health services; and
- Aimed to describe or evaluate the establishment and/or development of Aboriginal community-controlled services or the sector.
- Studies were excluded if they were:
- Opinion pieces or perspectives;
- Research theses;

- Policy documents;
- Literature reviews.

Our search of the databases as listed above from January 1980 up to October, 2017 yielded 1229 peer reviewed publications, 56 grey literature publications and 203 references from 3 reviews (1488 references). Screening of titles and abstracts resulted in exclusion of 1409, with 79 publications considered to meet eligibility criteria. Detailed inclusion/exclusion criteria was applied to these publications and a further 25 were excluded with reasons. Of the 54 remaining publications, 36 were removed because the studies were set in Canada, New Zealand and the United States.

3.3 Results

There were 18 Australian studies included in the review, see Appendix 1.

Conditions for the development and implementation of ACCHSs

The circumstances that propelled or challenged the establishment and development of the Australian ACCHS sector occurred at five levels: 1) the Australian political climate of the 1960s and 1970s, 2) the poor health status of Aboriginal people and communities; 3) the need for advocacy services to support Aboriginal people and communities; 4) the perceived failure of existing mainstream health services; and 5) government policy and funding for ACCHSs.

The Australian political climate

In Australia, the legal doctrine of terra nullius or 'uninhabited land', and the absence of treaties and Commonwealth constitutional recognition meant that until 1967 responsibility for Aboriginal affairs fell to state jurisdictions (Dwyer J, Boulton A, Lavoie J, Tenbensel T, & Cumming J, 2014; Lavoie J, 2004). By the 1960s, a shift in Australian attitudes led to legislative changes to end some entrenched discriminatory practices. For example, in 1962 the right to vote was extended to Aboriginal people (Lavoie J, 2004). The 1967 Referendum gave the Australian Commonwealth constitutional rights to legislate on behalf of Aboriginal people - the Commonwealth could provide resources to meet their needs (Hill P, Wakerman J, Matthews S, & Gibson O, 2001; Ward R, 2014). In the wake of the Referendum, Aboriginal activism focussed on health issues. In 1971, the Aboriginal community in Sydney formed the first ACCHS - the Redfern Aboriginal Medical Service (AMS) - in an inner-city suburb (Bartlett B & Boffa J, 2005; Scrimgeour D, 1997). In 1972, the newly elected Whitlam government espoused Aboriginal self-determination and land rights as official policy and emphasised Aboriginal participation in decision making and resource management (Hill P et al., 2001). The ACCHS movement occurred in conjunction with the land rights movement, both of which were expressions of a broader agenda of achieving Aboriginal self-determination (Bartlett B & Boffa J, 2005; Hill P et al., 2001; Rosewarne C et al., 2007; Ward R, 2014). In this context, there was increased recognition of the need for Aboriginal participation and management of health services (Hill P et al., 2001; Lavoie J, 2004; Scrimgeour D, 1997).

Aboriginal communities established the early ACCHSs from the ground up, as independent bodies (Bartlett B & Boffa J, 2001; Fredericks B & D., 2011; Rosewarne C et al., 2007; Scrimgeour D, 1997). The Redfern AMS initially survived mainly on donations, with doctors working according to a roster as volunteers (Scrimgeour D, 1997). Despite the rhetoric of the Whitlam era, the early services faced significant government opposition (Bartlett B & Boffa J, 2005; Fredericks B & D., 2011; Rosewarne C et al., 2007). The combined ACCHS roles of health service provision and political activism heightened sensitivity in their relationships with government (Dwyer, 2013). Despite the challenges, the ACCHS sector rapidly expanded, with established services playing a key role in supporting the development of new ACCHSs (Bartlett B & Boffa J, 2001; Rosewarne C et al., 2007; Scrimgeour D, 1997).

Early in the sector's development, informal alliances between services were formalised with the 1976 establishment of a national peak body- the National Aboriginal and Islander Health Organisation- now known as NACCHO (National Aboriginal Community Controlled Health Organisation) (Rosewarne C et al., 2007). NACCHO and state and territory based peak bodies have since provided leadership and coordination for the sector (Hill P et al., 2001; Lavoie J, 2004) and pursued the development of an ACCHS model of comprehensive PHC (Bartlett B & Boffa J, 2001).

Poor health in Aboriginal communities

Compared to other colonial nations, Australia has been slow to achieve Aboriginal health equity (Anonymous, 2001; Burns C, Clough A, Currie B, Thomsen P, & Wuridjal R, 1998; Freeman T et al., 2016). Aboriginal peoples live shorter lives and carry a higher burden of ill-health (Dwyer J et al., 2014); life expectancy is 10.6 and 9.5 years lower (males and females respectively) than that of non-Indigenous Australians (Freeman T et al., 2016). At the outset of the ACCHS movement, Aboriginal people were sick. Infant mortality was high. Many of the illnesses affecting adults, such as common infections, sexually transmitted infections, diabetes and heart disease, were consequent to colonisation processes (Bartlett B & Boffa J, 2001). Social determinants, marginalisation and racism have continued as ongoing drivers of ill health for Aboriginal communities (Fredericks B & D., 2011; Freeman T et al., 2016). Panaretto et al (2014) reported that in Queensland, 49% of Aboriginal adults were tobacco users, 70% were overweight, 25% had hypertension and 18% had type 2 diabetes. General medical practices have remained largely ill-equipped to deal with the complexities and challenges of Aboriginal health (Panaretto K et al., 2014).

ACCHSs as advocacy bodies

A lack of both comprehensive PHC models within the mainstream and national PHC policy meant ACCHSs led the way in developing a model able to address social issues and determinants of health in addition to their provision of high quality medical care (Bartlett B & Boffa J, 2001). From the start ACCHSs played important advocacy roles, in health specifically, and more generally, in Aboriginal politics (Dwyer J et al., 2014; Scrimgeour D, 1997). For example, in 1973 the Alice Springs-based Central Australian Aboriginal Congress health service (Congress) was established as an advocacy body (Bartlett B & Boffa J, 2005; Freeman T et al., 2016; Rosewarne C et al., 2007). One concern was the lack of shelter for Aboriginal people residing around the town (Bartlett B & Boffa J, 2001; Rosewarne C et al., 2007). One of the first Congress programs after the wet season of 1975 arranged tent, water, firewood and food drop-offs for people living in shanties, car bodies and under old galvanised iron sheeting. The Congress agenda was broad; it included addressing issues ranging from dishonest used car salesmen through to police and welfare departments and voting rights. (Rosewarne C et al., 2007). While there are limitations on the role of the health system in responding to social and economic determinants of health (Shannon C & Longbottom H, 2004), the advocacy role of ACCHSs has been essential in bringing issues such as education, employment and social development in communities to the attention of governments. Improvements in the social determinants of health are fundamental to reducing health disadvantage in Aboriginal communities (Fredericks B & D., 2011; Robinson G, d'Abbs P, Bailie R, & Togni S, 2003).

Mainstream health services ineffective

A perceived failure of mainstream health services to provide adequate and appropriate care for Aboriginal people in part triggered the emergence of the Australian ACCHS sector (Bartlett B & Boffa J, 2001; Brigg M & Curth-Bibb J, 2017; Burns C et al., 1998; Dwyer J et al., 2014; Fredericks, 2007; Freeman T et al., 2016; Hill P et al., 2001; Howard D, 2006; McCalman J et al., 2014; Panaretto K et al., 2014; Rosewarne C et al., 2007; Scrimgeour D, 1997; Shannon C & Longbottom H, 2004). In Alice Springs, for example, prior to the establishment of the Central Australian Aboriginal Congress, the only health service available was the local hospital, and that had a history of discriminatory practice (Bartlett B & Boffa J, 2001). Barriers to the establishment of effective treatment relationships between health care providers and Aboriginal people included cross-cultural misunderstandings, alienating hospital atmospheres and time constraints on consultations (Rosewarne C et al., 2007). The experience of Aboriginal people with hospital services was characterised as 'traumatic', and dealing with racism was a core function of Congress from its inception (Rosewarne C et al., 2007). In north Queensland, one driver of community-controlled PHC establishment at Yarrabah was that government medical services were readily available, yet residents' health needs were not being met (McCalman J et al., 2014). People were reluctant to visit the doctor, and antenatal clinic attendance was poor. Australian mainstream services have often been unable to respond to Aboriginal community needs (Shannon C & Longbottom H, 2004) or have failed to recognise the health impacts of colonialism and enduring social disadvantage, and the significance of Aboriginal culture and identity (Dwyer J et al., 2014).

Government policy and funding of ACCHSs

A fiscal relationship between ACCHSs and the Australian government began about a year after the Redfern AMS was established. In 1972, the Commonwealth Department of Aboriginal Affairs (DAA) provided some funding which augmented donations to the AMS; DAA became generally supportive of the development of ACCHSs (Lavoie J, 2004; Scrimgeour D, 1997). All national and jurisdictional governments have since formally accepted the ACCHS sector as a significant part of the Australian health system that now provides PHC services to about half the Aboriginal population (Dwyer J et al., 2014). There has been wide-ranging government commitment to a policy framework that endorses community ownership and control of the services. However, government action and debate have not always been consistent with policy (Dwyer J et al., 2014). The ACCHS sector has interpreted some bureaucratic ineffectiveness, such as funding uncertainty and lengthy funding delays, as failure to acknowledge the validity of community control (Rosewarne C et al., 2007). ACCHSs have been subject to government funding arrangements characterised by short-to-medium-term contracts, prescriptive stipulations, complex and often-ambiguous agreements, and burdensome reporting requirements (Brigg M & Curth-Bibb J, 2017; Burns C et al., 1998; Dwyer J et al., 2014; Fredericks, 2007; Hill P et al., 2001). According to Brigg (2017) "…excessive attention given to corporate governance in the ACCHSs sector reflects settler-colonial dominance", and this carries the risk of producing "controlled communities". If ACCHSs are transformed into quasi government-controlled health services, the prospects for Aboriginal informed models of health care and self-determination are limited (Brigg M & Curth-Bibb J, 2017; Hill P et al., 2001).

A highly bureaucratic approach to acquittal of government funds has caused tension between government and ACCHSs from the outset. The sector wanted the rights of Aboriginal people to self-determination and compensation recognised through a more flexible approach (Scrimgeour D, 1997). Accountability is important and reporting can be a useful activity for performance monitoring (Dwyer J et al., 2014). However, ACCHSs are accountable to their boards and communities as well as their funders (Howard D, 2006). Pressures from government arising from provision of funding and understandings that drive government programs frequently clash with expectations and understandings in Aboriginal communities (Bartlett B & Boffa J, 2001).

Uncertain funding and complex contractual environments create efficiency problems and potentially work against the mandate of ACCHSs to deliver comprehensive PHC. Short-term funding arrangements have disrupted goals of long-term treatment relationships and continuity of care (Brigg M & Curth-Bibb J, 2017; Dwyer J et al., 2014). ACCHSs have pieced together multiple precisely funded programs in their attempts to provide services responsive to community needs (Dwyer J et al., 2014; Hill P et al., 2001; Shannon C & Longbottom H, 2004). Assumptions that funders can determine the best approach to services and best use of resources can undermine service provision and retention of skilled and committed staff, and threaten service sustainability (Davis, Lewis, Bainbridge, Brodie, & Shannon 2008; Dwyer J et al., 2014). Government approaches to funding ACCHSs have been shifting. There have been moves towards "block" funding with contracts of longer duration (Brigg M & Curth-Bibb J, 2017). Introduction of Medicare Benefits Schedule items for Aboriginal health have created additional actual and potential revenue sources for ACCHSs (Brigg M & Curth-Bibb J, 2017; Gajjar D, Zwi A, Hill P, & Shannon C, 2014).

Strategies of ACCHS operation for improving Aboriginal health

ACCHSs have been agents for community action and development (Bartlett B & Boffa J, 2005). They were established in response to and notwithstanding the political conditions, and the day-to-day life experiences of Aboriginal people as a minority group within a dominant Western society (Fredericks B & D., 2011). The sector has developed in the context of resistance. Aboriginal people have had to struggle for the right to determine their political status and freely pursue economic, social and cultural development (Bartlett B & Boffa J, 2001; Fredericks B & D., 2011). As an expression of Aboriginal self-determination, the establishment of ACCHSs has been closely linked to the concept of health as a human right (Freeman T et al., 2016); as well as political aspirations and renegotiating relationships between Aboriginal people and governments (Lavoie J, 2004). ACCHSs have played an important role in: Aboriginal people maintaining a clear identity (Bartlett B & Boffa J, 2001); ensuring respect for and maintenance of Aboriginal culture (Brigg M & Curth-Bibb J, 2017); recognition of cultural protocols in health care (Anonymous, 2001); setting goals of better health and health care (Dwyer J et al., 2014); and the pursuit of health care that goes beyond the biomedical model (Lavoie J, 2004).

Two interrelated ACCHS sector strategies for improving Aboriginal health at both the individual and community level were identified: ACCHS self-governance and community participation, and strengthening and respecting Aboriginal culture in the context of comprehensive PHC.

Self-governance and community participation

The principle of self-governance underpins ACCHSs. Accountability to communities is usually through a locally elected board or committee of management. The overall direction, policy and decision-making processes of the services are managed through consensus (Fredericks, 2007; Freeman T et al., 2016; Hill P et al., 2001; Howard D, 2006). The same management mechanisms do not necessarily apply to the day-to-day running of a health service, which may be seen as the domain of health service staff (Bartlett 2001; Burn 1998). Alternative governance structures exist, and exemplify how strategic flexibility can ensure that the governance structure of each service is suited to the conditions and community it serves. Urapuntja Health Service at Utopia in the Northdern Territory has a board of directors with membership based on clan structures rather than elections to ensure that each clan is fairly represented (Fredericks, 2007). Some ACCHSs have a governance structure designed to serve a discrete community, such as Gurriny Yealamucka in Yarrabah, Queensland (McCalman J et al., 2014). Alice Springs-based Congress represents a wide geographical range of communities representing different language and tribal groups in Central Australia. Governance practices, including representation at annual general meetings, reflect this diversity (Bartlett B & Boffa J, 2001; Rosewarne C et al., 2007).

In some situations, services have formed partnerships and amalgamated into regional bodies (Gajjar D et al., 2014) to take advantage of economies of scale. For example, the Aboriginal Coordinated Care Trials of the 1990s set in place regional Aboriginal Health Boards at Katherine West and on the Tiwi Islands. The strategy increased Aboriginal participation in decision-making about health generally and improved clinical service provision (Anonymous, 2001). With flexibility and greater purchasing power, the Boards developed a structure to place equal emphasis on clinical services and preventive and environmental health (Anonymous, 2001; Robinson G et al., 2003). In another example, the Institute of Urban Indigenous Health (IUIH) is an overarching regional community-controlled body leading planning, development and coordination of Aboriginal health services in southeast Queensland through a regional vision and shared systems and processes (Brigg M & Curth-Bibb J, 2017; Gajjar D et al., 2014). With ACCHSs growing to be complex operations with large budgets, the IUIH emphasised skills-based board appointments, including non-Indigenous appointments, to ensure good corporate governance. Tiwi Island leaders took a similar approach in 1997. The Tiwi Health Board consisted of twenty members with expertise in health, education and community government; five members were elected Aboriginal health workers (Anonymous, 2001).

Community-controlled governance of ACCHSs is not without complication. From time to time problems of poor governance have received public attention, and served to undermine the trust of funding bodies and overshadow positive achievements of the sector as a whole (Dwyer J et al., 2014). Scrimgeour (1997) points out that the notion of community control raises the question of determining who represents the community. The whole community does not participate; if only certain individuals and groups do, their representativeness may be an issue (Bartlett B & Boffa J, 2001). However, even the concept of community is problematic. The 2003 Queensland Government Green Paper on community governance points out that contemporary Aboriginal communities are a legacy of government policies that forcibly displaced widely dispersed groups of people onto reserves and missions (Shannon C & Longbottom H, 2004). Undue control of an ACCHS by a small number of individuals or single families is a potential risk in some communities; IUIH has adopted measures in its constitution and membership charter to minimise such risks (Brigg M & Curth-Bibb J, 2017). For example, no more than one member from any family can sit on a board, and having members of the same family on a board and in a senior management role is not allowed. Former employees of the organisation cannot nominate to be board members for a minimum of three years after resigning from their employment (Brigg M & Curth-Bibb J, 2017). In mainstream Australian services, direct community participation in policy-making is impractical, whereas in ACCHSs, community involvement is possible and does happen (Freeman T et al., 2016; Rosewarne C et al., 2007).

Scrimgeour (1997) suggests that community participation is arguably the hardest strategy of comprehensive PHC to put into effect. Nevertheless, it is a common theme in Aboriginal community-controlled organisations and is described as fundamental to their success (Fredericks B & D., 2011). ACCHSs provide an opportunity for Aboriginal community people to join the health service membership and to nominate for election by their community for a board position (Bartlett B & Boffa J, 2001). One of the early innovations of Congress in 1975 was the employment of Aboriginal health workers (AHWs) to work in partnership with doctors (Rosewarne C et al., 2007). AHWs are a critical link between ACCHSs and the communities they serve (Fredericks B & D., 2011). Other reported examples of ACCHS strategies to welcome community participation included consulting community members about new programs, having cultural advisory committees, employing traditional healers, and inviting community members to external health forums (Freeman T et al., 2016). However, ensuring equitable opportunities to express views and balancing community desires with program requirements and resources can be challenging. At IUIH in southeast Queensland, the pursuit of improved corporate governance was closely linked to the development of better communication and engagement between ACCHSs and their communities. A governance group used social media and community events to work towards increasing ACCHSs membership and community participation, and firmly asserted that an ACCHS is not a site for the playing out of community politics, but for responding to health needs and values determined by the community (Brigg M & Curth-Bibb J, 2017).

Strengthening and respecting culture

Community participation and control has been an important component of the 'bottom up' approach of ACCHSs (Bartlett B & Boffa J, 2001). The ACCHS cultural framework is associated with collective responsibility and the model tackles a wide range of health issues identified as affecting a community's wellbeing, as understood by the community (Bartlett B & Boffa J, 2001; Howard D, 2006). A wide gulf can exist between the worldviews of Aboriginal people and those of non-Aboriginal health practitioners or managers (Hill P et al., 2001; Howard D, 2006; Robinson G et al., 2003). While operating in a complex cross-cultural environment, ACCHSs have redesigned western health care to fit Aboriginal cultural needs and social arrangements (Lavoie J, 2004). One of the first actions of the Tiwi Health Board when it was established in 1997 was to separate its health services into men's and women's clinics. This initiative was to promote patient privacy, but was also in recognition of important Tiwi Island cultural protocols (Anonymous, 2001).

Freeman (2016) and Rosewarne (2007) described a range of strategies adopted by Congress aimed at culturally respectful service delivery for Central Australian communities, including: continuity of care, provision of free transport, outreach home visitation, a hybrid appointment system that allowed for walk-ins, provision of all services and medicines free of charge, welcoming spaces, employment of local Aboriginal staff, availability of traditional healers, attention to cultural protocols, and interaction with local communities. ACCHS family-centred models that extend care to include families or households are particularly important for addressing maternal and child health (Panaretto K et al., 2014; Shannon C & Longbottom H, 2004). Fredericks (2011) has described ACCHSs as organisations that can affirm Aboriginal worldviews; where people can receive health care without adjusting their cultural identities.

Outcomes associated with the implementation of ACCHSs

The literature focussed on three principle achievements of the ACCHS sector: 1) development of a strong Aboriginal health workforce; 2) achieving an Aboriginal model of comprehensive PHC; and 3) and seeing better health outcomes.

Developing a strong Aboriginal workforce

ACCHSs are significant employers of Aboriginal people. The proportion of Aboriginal doctors and nurses is low (5 and 10% respectively); however, data has identified that 55-70% of the ACCHSs workforce is Aboriginal, including 95% of health workers, 85% of drivers and 32% of allied health professionals (Fredericks B & D., 2011; Panaretto K et al., 2014). Employment of Aboriginal staff has directly improved health literacy, income and other social determinants in communities (Freeman T et al., 2016; Panaretto K et al., 2014; Shannon C & Longbottom H, 2004). AHWs are a core component of the health workforce (Burns C et al., 1998; Fredericks B & D., 2011) and ACCHSs have played a major role in AHW on-the-job training. In 1995, twenty years after first employing AHWs to work alongside doctors, Congress's informal AHW training became an accredited training program

(Rosewarne C et al., 2007). Locally recruited AHWs add workforce stability in environments with high turnover of comparatively highly trained non-Aboriginal staff (Robinson G et al., 2003). The introduction of national AHW registration has standardised the content and quality of training for this critical profession in the health workforce (Panaretto K et al., 2014). Particularly important in the context of the increasing burden of chronic disease faced by Aboriginal communities, the improved education of AHWs is linked to an expansion in their contribution to client care planning and case management (Robinson G et al., 2003).

Achieving an Aboriginal model of comprehensive primary health care

From the outset, the ACCHS movement aimed to provide community-controlled PHC services that would be comprehensive, not selective, with both preventive and curative precepts (Bartlett B & Boffa J, 2001; Freeman T et al., 2016; Lavoie J, 2004; McCalman J et al., 2014; Rosewarne C et al., 2007). Bartlett (2001) contrasts the ACCHS's bottom-up approach and intertwined opportunities for community empowerment to address underlying determinants of health, with the top-down arrangements that often characterise selective mainstream PHC where health problems are identified by experts outside a community. In north Queensland, Gurriny's transition from state government to community control required striking the balance between a biomedical focus and the promotion of social and emotional wellbeing in the Yarrabah community (McCalman J et al., 2014). Australian government policy has recently supported a shift in mainstream PHC to more community-driven models of care (Panaretto K et al., 2014). The mainstream patient-centred medical home model, now regarded by many as best practice for Australian general practice, is similar to the model used by ACCHSs since the 1970s (Panaretto K et al., 2014).

ACCHSs have ensured that a range of PHC services are available in one place (Shannon C & Longbottom H, 2004) and have risen to the task of delivering a high standard of best-practice care. High quality clinical and health promotion services, cultural safety and community engagement are essential components of ACCHS PHC models, all underpinned by research, evaluation and planning (Panaretto K et al., 2014). Recently available evidence suggested prevention and management of chronic diseases by ACCHSs appeared to be of equal if not better quality than mainstream general practice care. ACCHSs often manage complex patient presentations with multiple discrete health problems in single consultations (Panaretto K et al., 2014). Freeman (2016) found the breadth of health disciplines represented by the Congress comprehensive model of care was greater than comparable mainstream Australian services. The service engaged in a holistic response to community wellbeing with prevention and health promotion, as well as curative and rehabilitative activities. In keeping with its original vision, Congress expanded services to include "much-needed welfare, housing, alcohol rehabilitation, childcare, health worker training, family support and town camp programs" (Rosewarne C et al., 2007). ACCHSs have, furthermore, established effective collaborative relationships with mainstream health service providers to offer visiting specialist services and referrals to fill gaps in service provision (Fredericks, 2007; Shannon C & Longbottom H, 2004).

Seeing better health outcomes

On the Tiwi Islands off the Northern Territory coast, leaders had been advocating for community-controlled health care for many years prior to the establishment of the Tiwi Health Board in 1997 (Anonymous, 2001). Innovative health service delivery became focussed on prevention and social wellbeing in addition to existing health programs. Subsequent health improvements were credited to the notion of empowerment – community people made health decisions armed with education and practical resources. Within 3 years, death rates from all causes dropped by 30% and incident dialysis cases decreased by 60%. Child immunisation rates rose. There were significant reductions in self-harm and hospitalisations (Anonymous, 2001). In southeast Queensland, IUIH has focussed on demonstrable health outcomes. Their services almost doubled the number of health assessments and chronic disease care plans completed over two years. In a 12-month period, data from a small cohort of people with diabetes showed clinically significant reductions in risk factors including blood glucose levels and obesity (Gajjar D et al., 2014). Building on internal data, IUIH commissioned independent evaluators to measure service outcomes, including the cost-benefit of hospitalisations averted with better chronic disease management. There is sound evidence from a broad range of primary health data that shows superior performance of ACCHSs when compared to mainstream general practice (Panaretto K et al., 2014). However, it is important not to overstate the role of PHC in improving health. Scrimgeour (1997) cautions that "it is unwise to use morbidity and mortality rates as evidence for the success or failure of health services, when there are obviously many other factors operating."

3.4 Discussion

This review has examined the literature to determine the conditions, strategies and outcomes of the establishment and implementation of the Australian ACCHS sector. Aboriginal communities have developed community-controlled services in response to the persistent failure of mainstream health services to adequately address the health needs of Aboriginal people. Underlying social determinants of poor health highlighted the need for advocacy services to assist communities. Decades of Aboriginal activism culminated in the 1967 constitutional referendum in which Australians voted overwhelmingly to give federal parliament the power to make laws in relation to Aboriginal people (Behrendt L). In the wake of the referendum, the Commonwealth government adopted a policy of Aboriginal self-determination. Interrelated strategies for redressing effects of colonialism and achieving Aboriginal health via ACCHSs included self-governance and community participation, and strengthening and respecting Aboriginal culture in the context of PHC.

The ACCHS model has exemplified an approach to health care that can provide useful insights to the broader PHC sector in Australia (Hurley C, Baum F, Johns J, & Labonte R, 2010). A holistic understanding of health means that ACCHSs offer integrated services capable of addressing a range of health issues, including social determinants which play such a significant role in wellbeing (Campbell M et al., 2018; Taylor J et al., 2001). Harfield et al (2018) found that culture was the characteristic that underpinned all aspects of Indigenous PHC service delivery models. Since the first ACCHS was established, the aim has been to provide PHC that is patient-centred, accessible, comprehensive and co-ordinated. Interestingly, these are also key elements of the patient-centred medical home model launched in the United States more than 35 years later (Jackson C, 2012), and more recently, in Australian mainstream general practice. The ACCHS sector also provides beneficial insights to mainstream services about achieving community participation in PHC by soliciting feedback on service effectiveness and satisfaction (Campbell M et al., 2018; Hurley C et al., 2010).

The context in which ACCHSs exist has changed substantially since the 1970s. Increased access to government funding has meant that the services now operate in a contractual environment characterised by immense legislative and policy complexity (Lavoie J, 2003). There are considerable requirements in addressing the contracting, performance and accountability expectations of funders. The administrative cost of a system of fragmented programs and short-term funding is carried by ACCHSs as the service provider, but also by government as the purchaser of services, with few benefits (Lavoie J, 2004). The burden created by multiple funding contracts, separate performance indicators and restrictions on transfers across funding streams is a sizeable distraction from the core business of caring for the community (Fredericks B & D., 2011). It is important that funders and policy makers consider the full range of ACCHS contributions to quality health care when making resourcing decisions. Unfortunately, recent shifts toward competitive funding models may increase the risk that such contributions are overlooked (Campbell M et al., 2018).

There were limitations associated with this scoping review. The body of literature comprises descriptive studies of Aboriginal community-controlled health programs, health services and the health sector. Case studies are not highly rated in a scientific hierarchy of study quality; however, the nature of the subject lends itself to description, not intervention. The literature has provided a rich story of historical and contemporary developments in Aboriginal community-controlled health services. However, it does not tell the development stories of all ACCHSs in Australia; only a small selection of services are documented in this literature. There is a possibility that this review did not locate all relevant studies despite the use of a rigorous search strategy. Existing publications might not be available in key international databases (Allonso M, 2011). It is also possible that relevant literature may have been misclassified; however, there was high level of agreement between blinded coders, and disagreements were resolved by discussion and consensus.

ACCHSs are leaders in the provision of comprehensive PHC in Australia. The roles and functions of ACCHSs are far-reaching and the pathways by which they contribute to advancing Aboriginal health are many. Since 1971, ACCHSs have made significant contributions not only to Aboriginal communities, but also to the broader Australian health sector and society. ACCHSs improve health, and the social determinants of health, through clinical and practical service provision and health promotion; they are employers and trainers of Aboriginal and non-Aboriginal professionals, and they contribute knowledge and expertise in partnerships and collaborations.

4. PROCESS EVALUATION

4.1 Introduction

Process evaluation was used to examine the drivers, strategies, and enablers that supported the transition of the delivery of PHC services to Aboriginal community control at Gurriny, as well as the barriers to the transition. We used constructivist grounded theory methods (Charmaz, 2014) to analyse the evaluation data. Identifying the key elements involved, particularly the causal and intervening conditions inherent in the transition processes and explaining how these worked, are critical to supporting service improvement processes (Clarke, 2005). A framework was generated from which the conditions of implementation, the strategies that worked and those that impeded, were extracted to guide how Gurriny and QH could do things better to enhance future implementation processes. Primary importance was assigned to diversity; the assumption being that acknowledging and identifying diverse socio-cultural parameters and social interactions would be critical in adequately examining the transition. We accounted for diversity in participants' culture and ethnicity, roles and experiences of implementation.

4.2 Methods

Participant recruitment and sampling

Face-to-face or telephone interviews with Gurriny staff, Board members and Yarrabah community members, and QH staff were undertaken. All potential participants were provided with a participant information sheet and all participants were informed of their right to not participate or to withdraw from the project without prejudice. Participants were invited to provide a mailing or email address if they would like their interview transcript returned to them so they could review, approve or correct it prior to processing, and/or copies of project results. Interviews were conducted at a place of the participant's choice.

A purposeful sampling technique was used to identify and select information-rich participants. To start the process, senior management at Gurriny identified individuals who they believed would be appropriate potential participants. Participants were included if they had been identified and were willing to participate or if they self-identified as a potential participant, for example, they heard about the project by word of mouth or project promotion. The interviews focussed on their experiences of the transition to community-controlled PHC at Yarrabah; including enablers, barriers, strategies and impacts, and recommendations for further health service quality improvement and further routine collection of indicators to enable prioritisation of work to progress health outcomes. A broad interview schedule (provided at Appendix 2) guided the interviews.

As data collection progressed, the focus of interviews moved to explore emerging issues from the initial data. Participants were selected based on their roles in the transition and/or unique perspectives, with theoretical sampling processes being used to identify potential participants based on a diversity of perspective and their potential to provide information about the emergent theoretical issues. It should be noted that efforts to interview QH staff were met with limited success. Table 4 provides a summary of requests to interview, and participation. All interviews were audio-recorded (with consent) and transcribed, with transcripts provided back to those participants who requested them for checking.

Table 4: Requests and participation in interviews

Participant	Requested for interview	Interviewed	Interviewed (% Indigenous)	Interviewed (% male)
Previous Gurriny staff member	3	2		
Current Gurriny staff member	9	6		
Other Yarrabah community member	3	2		
Previous Queensland Health staff member	6	2		
Current Queensland Health staff member	6	1		
Other	1	1		
TOTAL	29	14	7/14 - 50%	5/14 – 36%

Historical documents data

We also undertook a systematic qualitative analysis of informative historical organisational documents (provided by Gurriny) to give voice and meaning to the period leading up to, during and following the transition. The inclusion of this data was intended as a means of 'triangulation'. It augmented the data arising from face-to-face stakeholder interviews, and healthcare and health outcomes data. Documents pertained to planning and implementation issues related to transition and originated in the periods pre, during and post-transition (Appendix 3 presents a tabulated summary of included documents). Similar documents from QH could not be assessed for this project due to limitations of the project's ethical approval. Acquiring additional ethical approval for access to QH documents was beyond the time limits of the project.

Data analysis

Data from the interviews and documents were analysed using grounded theory methods. The practical application of grounded theory methods follows an ongoing process of theoretical sampling, data collection and analysis using open, axial and selective coding. Using the constant comparison methods of grounded theory, the interview data and documents were imported into NVIVO qualitative software and coded. Open-coding commenced upon receipt of the first transcripts. Content analysis of the transcripts and documents occurred segment-by-segment to ensure that we captured the critical elements involved in the transition (Charmaz, 2014). Open-codes or concepts were generated by asking three questions: 1) What is really going on here relative to implementation of transition to community control? What concept is involved? and What is the basic problem faced by the participants? (Glaser, 1978). In axial coding, building the theory of implementation involved constantly comparing new data to existing concepts for similarities and differences; identifying any new concepts from subsequent transcripts; identifying the relationships between concepts; uncovering the dimensions of the concepts to explain how it is operationalised and demonstrate commonalities and variances; and continually verifying commensurate and dissenting interpretations of these concepts in additional data. Concepts that identified events, incidents, actions and interactions that were related in meaning were grouped under higher order concepts termed categories (Strauss & Corbin, 1998). Selective coding involved integrating and refining the categories and their sub-categories into a theory that explained the transition process. The theory confirmed the relationships between the categories. The theory itself became a set of relational statements about the categories concerning what was going on in the implementation process (Strauss & Corbin, 1998).

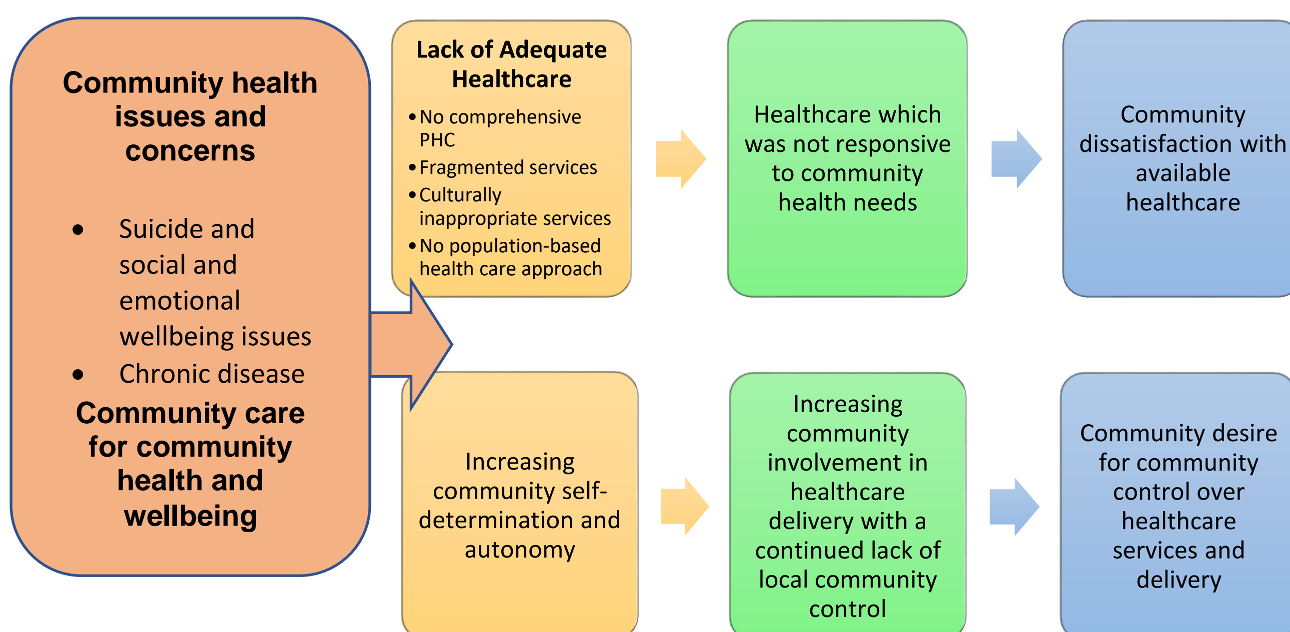
The Drivers of the Transition to Community Control

Several key factors drove the transition process from its inception through to completion. While these drivers were particularly evident in the early stages of the transition process, they were present throughout the whole transition from the late 1980s until the official handover of funding and services in 2014. Indeed, some continue to motivate efforts towards service and whole of community growth to this day.

The fundamental driver for the transition process was, and continues to be, community health issues and concerns (Figure 3). The major health concerns that initially drove the desire for community control in the Yarrabah community back in the 1980s and 1990s were suicide and associated SEWB issues, and chronic disease. Today, there is more focus on the (related) social determinants of health for Yarrabah community members; however, concern over health issues and care for community health and wellbeing remains a core factor underlying the actions and strategies of Yarrabah community leaders, including the transition to community control of Yarrabah's PHC service.

Stemming from this fundamental community concern regarding health issues were two principle branches of drivers of the transition process. These were a lack of adequate, responsive healthcare and subsequent community dissatisfaction, and increasing community self-determination and desire for community control.

Figure 3: The drivers of transition to community control



Need for Adequate, Comprehensive Healthcare, Responsive to Community Health Needs

From very early on in the transition process, the need for quality, comprehensive health care responsive to the needs of the community was one of the most fundamental drivers for transition. Soon after Yarrabah became a self-governing community in 1986, a proposed health care plan (1988) found that "state and local government health organisations were fragmented". "Community people were reluctant to use the doctor, attendance at the clinic was poor, and PHC principles were not being employed" (in McCalman, (2010), citing Hunter, (2001). This led to the formation of the Yarrabah Health Committee in 1989 and its incorporation in 1991, which was the first step in establishing a community-controlled health service.

Need for Comprehensive PHC

Throughout the 90s, Yarrabah had a hospital and a General Practitioner (GP)-type service, but this service was primarily reactive. The Cairns and Hinterland Hospital and Health Service (CHHS) - the regional QH organisation - delivered some PHC programs in Yarrabah such as a child health program, a women's health program, and some chronic disease care such as diabetes education, but PHC services were limited and CHHHS principally functioned as an Emergency Department (ED). There was also limited engagement, coordination and reach to the community. The care provided was primarily of a clinical nature and lacked adherence to the Aboriginal understanding of health requiring

a holistic approach towards addressing the whole wellbeing of the person and community, including social, physical, emotional, and mental health (NAHS, 1989). For Yarrabah residents and leaders, this kind of health care was not culturally appropriate and did not meet community health needs. There was not a proactive, population-based, preventive healthcare approach based on a clear understanding of the health issues being faced by the community, with programs and services designed in response. Instead, healthcare was reactive, with no ongoing relationship or follow up and no real community-wide engagement or health promotion.

> *"I remember working over there with a couple of other doctors… and it was essentially just seeing G.P. type cases as they came through the door on the day. There were no systems in place – well minimal systems. And then if you had an emergency, you'd just take over dealing with that and so it was just responding to whatever came at you like an Emergency Department would"* (Ex QH staff, current Gurriny staff)

Need for Service Cohesion, Coordination

Service fragmentation contributed to the absence of comprehensive PHC responsive to community health needs. This was an issue that existed from the early days when Yarrabah first started establishing community-controlled health care programs, right up to and beyond the transition, and is still an issue to some extent in Yarrabah today. For example, when Gurriny started delivering clinical and PHC services and programs beyond SEWB in 2009, patient care was compromised because people were using both CHHHS and Gurriny services, and separate client information systems were used. Even when Gurriny and CHHHS were co-located for the years from 2011 to 2014, there was limited integration of services and the client databases of each service were not integrated, limiting effective chronic disease management.

Need for Responsiveness to Community Health Needs

The service fragmentation and lack of a systematic population-based health care approach meant that the services were not directing care to the areas where it was most needed. This lack of responsiveness to community health needs manifested in the poor health outcomes experienced by the community, which remained perhaps the most significant underlying driver of the transition throughout the process.

Community Dissatisfaction with Health services

All of this resulted in community dissatisfaction with health services. Community members were dissatisfied with the lack of: sufficient services, holistic culturally appropriate services, community control of and input into services, and community health outcomes. These reasons for dissatisfaction converged, resulting in a strong and increasing desire from community members to run their own health care services.

> *"yes they were delivering service, but they weren't delivering good health outcomes for this community. They were just delivering a service… 'cause our people continued to be sick at alarming rates, or die at alarming rates for avoidable medical issues. So yes they delivered a service. I think that's all our community saw. But didn't see that there's no real health outcomes for our community." (Gurriny Staff)*

Community Desire for Community Control

The desire of the Yarrabah community to have control of their own health service was a critical driver from the very first stages of the process, and was fundamental to the establishment and development of Gurriny. This community desire became apparent in the context of the increasing community self-determination that occurred when Yarrabah became a self-governing community in 1986. Elders and Traditional Owners wanted Yarrabah to have its own health care centre so as to be able to exercise their self-determination and provide a community voice for health care delivery. To this end, the local community council started taking steps to establish and develop their own community-controlled health service. The Yarrabah Health Committee was established in 1989 by the Yarrabah Community Council and incorporated in 1991. The Yarrabah Council started becoming involved in the delivery of health care to the Yarrabah community in the early 1990s. Throughout the 90s the Yarrabah Health

Committee conducted preventive health care programs for rheumatic fever, hearing health, diabetes and suicide prevention.

However, despite this increased involvement in health care, there was still a lack of community control, and the Feasibility Study that was initiated by the Yarrabah Community Council demonstrated that the community were not satisfied with the available health care. Through a series of community consultations in 1997 & 1998, the Yarrabah community decided they wanted a community-controlled health organisation to decide on strategic direction, choose priorities for action, review resources and manage service delivery, and take the lead in setting a vision for improving community health and wellbeing. It was agreed that Gurriny would be the lead health organisation in the community.

"The community, the Council, everybody said community control service is what we want to have." (Research partner)

4.3 The Core Process

Building Yarrabah Capacity

The core process underlying the transition journey was one of building Yarrabah's capacity to manage and deliver PHC through building Gurriny's capacity as the community-controlled health organisation. This process was apparent from the first community discussions and planning for community control to the present day through Gurriny's ongoing organisational growth and improvement, and the wider movement towards community control of other services in Yarrabah.

Starting Small and Slowly Building

This process of building capacity in Gurriny and Yarrabah was achieved through an incremental process of starting small and slowly building. The growth process that Yarrabah and Gurriny went through to reach the point of transitioning CHHHS services to community control stretches back 30 years. The beginnings in that first decade following the formation of the Yarrabah Health Council were humble. Using the resources available, Yarrabah leaders started to progress the vision of community control through the local council, providing an organised voice for community health concerns and delivering some discreet health programs.

A major development occurred with the undertaking of the Feasibility Study. It provided a formalised opportunity to voice the concerns of Yarrabah community members regarding their health, and helped to strengthen and articulate the community vision for community control of health care. The Feasibility Study also played a crucial role in developing and articulating the strategy to build Gurriny's capacity to be able to take control of PHC in Yarrabah. Due to the overwhelming concern with SEWB issues expressed in the Feasibility Study, as well as the lack of SEWB services in Yarrabah, the strategic decision was made to initiate Gurriny as a service focussed on SEWB.

The process of slowly building Gurriny's capacity continued over the following years as Gurriny established itself as a Centre of Excellence in SEWB. Following the signing of the Deed of Commitment by transition partners in 2005, Gurriny slowly started expanding its services to incorporate clinical health services. It increased its program and service reach, delivering health promotion programs, and later preventive health programs such as child health checks. During this developmental stage, Gurriny slowly built its services, workforce and organisational capacity. This included building staff capacity, and Gurriny leadership capacity through the Board and senior management team (SMT).

***"**Gurriny had to start small and work their way up." (Ex Gurriny staff member)*

Building Capacity for Increasing Complexity

The process of transition involved increasing complexity over time as the organisation grew, and as Gurriny got closer to the official handover. Therefore, Gurriny's capacity building needed to match this increasing complexity. Not only did its organisational operations increase in complexity as the services expanded, government expectations and requirements of Gurriny increased as they neared the transition date. The transitioning of government PHC services to community control brought

significant responsibility, and Gurriny had to invest substantially in the capacity development of its board and senior management team to be able to manage this increasing complexity.

There were several pillars of organisational capacity that Gurriny systematically worked to develop throughout the second stage of the transition. These included: communicating and engaging with stakeholders; ensuring strong governance; planning and developing the services and workforce; assuring quality; and financial planning, management and modelling.

Demonstrating Capacity

Gurriny needed to demonstrate its capacity to both state and federal governments, both of which had financial and political investment in Gurriny and the transition. This was achieved through a cyclical process of planning, acting, monitoring and reporting, which also served to ensure the coordination of activities between transition partners. This process was continuously undertaken within the organisation following the signing of the Deed of Commitment. However, it became more formalised and activity increased in early 2013 when Gurriny started using a readiness assessment framework, and again in January 2014 when the Commonwealth government engaged an external consultancy company to undertake an independent capacity review of Gurriny.

Throughout the transition process, plans were made that outlined steps to address the core priority areas identified as key to transition; action was taken to implement what was outlined in the plans; actions were continuously monitored through the use of performance, status and readiness assessment reports; and the reported actions and development were then used to inform further planning as the cycle continued.

The Transition Process

In this analysis, the process of transitioning to community control has been split into three distinct stages. The first stage is concerned with the initiation and early development of a community-controlled health organisation, and covers the period of 1986 to 2004. The second stage starts in 2005 with the signing of the Deed of Commitment and goes to the official handover of CHHHS funding and service control on June 30, 2014. This stage was the most significant and involved substantial organisational growth and development within Gurriny, and ongoing negotiations and collaboration between QH/CHHHS and Gurriny. The third stage is concerned with the process immediately following the official handover in 2014, up until the present day. Stage three deals with Gurriny's organisational evolution, as well as further Yarrabah-wide development motivated and supported by the transition of PHC.

Figure 4: Community desire for community control

4.4 Stage 1: Establishing and Developing a Community-Controlled Health Organisation

To take full control of PHC service delivery in Yarrabah, the community first needed a community owned and controlled organisation as a vehicle to do so. Starting with some health programs initiated by the newly established Yarrabah Council in the late 80s, by the early 2000s, Yarrabah had established a community owned and controlled health organisation that was delivering needed SEWB services to the community - Gurriny. This section outlines the process of developing Gurriny as an organisation prior to the signing of the Deed of Commitment in 2005 that formalised the intent to transition QH/CHHHS services to Aboriginal community control.

Strategies

Addressing the SEWB Needs of the Community

As previously discussed, community concern over health issues in Yarrabah, particularly in the context of the suicide epidemic that occurred during the 80s and 90s, was one of the key driving forces behind community desire to gain control over PHC services. This suicide epidemic highlighted the absence of services to respond to community SEWB needs. Therefore, a core strategy was to address SEWB issues in the community.

The Feasibility Study
A Feasibility Study was conducted in 1998. Completed as a partnership between Yarrabah and the University of Queensland (UQ), the study set out to ascertain the feasibility of a new, community-controlled, multi-purpose health care service, which was the vision of traditional owners and community leaders. A process of extensive community consultation involving surveys and focus groups with Yarrabah community members was conducted over the course of a year (Baird, Mick-Ramsamy, & Percy, 1998). Several key themes came out of the resulting Feasibility Study.

In relation to the SEWB and mental health issues being experienced in the community, the study identified that the SEWB issues were a result of intergenerational trauma related to the stolen generations and loss of land, culture, and spirit associated with colonisation. The ongoing impacts of these historical experiences were reflected in the social determinants of health and SEWB related issues, including alcohol and drug misuse, mental illness, domestic violence, suicide, and child abuse. The Feasibility Study identified a lack of understanding regarding mental illness in the community, and a lack of services and resources to respond to these issues; a community desire for holistic health care which integrated SEWB care with bio-medical health care; and a strong community desire for control of health care. It recommended the setting up of a community-controlled health service focussed on addressing SEWB issues, to become a Centre of Excellence in SEWB. It was decided that rather than competing with bio-medical/clinical services provided by CHHHS, Gurriny would address the service gap of SEWB services, and use that as an opportunity to build its capacity and establish credibility.

"the most important thing was that in the Yarrabah Feasibility Study… was that the community said, 'we need our own Medical Centre. We need to deliver our own Health Service but we're not going to make a difference in our health unless we also address the issues that come from being a population of the stolen generation.' So they made it really clear, 'we want doctors, but don't do it without addressing the social emotional wellbeing component 'cause it's just not going to work.' And that came through really, really strongly in that Feasibility Study." (Gurriny Staff)

Table 5: Stage 1 Establishing and Developing a Community-Controlled Health Organisation

1986 - 2004
KEY EVENTS • **Yarrabah became a self-governing community in 1986** • **Proposed Health Plan in 1988 found fragmented, underutilised services with no local control** • **The Yarrabah Health Committee was founded by the Yarrabah Community Council in 1989 and was incorporated in 1991** • **Three tragic waves of suicides in the community between 1983 and 1996 sparked community action to address SEWB issues** • **A Feasibility Study was completed in 1998 which highlighted the community desire for community control and recommended a focus on SEWB services** • **Yarrabah Health Committee name was Changed to Gurriny Yealamucka in 2001** • **Researchers engaged to deliver and develop the Family Wellbeing Program (FWB) in Yarrabah** • **Funding received to support positions through collaboration with the University of Queensland** • **SEWB services are developed and evaluated** • **By 2005 the Commonwealth Government started funding four full time service delivery positions in Gurriny**
CONDITIONS • **Community concerns about community health and wellbeing** • **Community dissatisfaction with State Government run Health Services** • **Lack of community voice regarding health care** • **Strong community desire for community control of health care** • **A lack of SEWB services to meet community SEWB needs** • **Lack of comprehensive PHC services**
STRATEGIES • **Initiate a Feasibility Study to identify the needs and desires of the community in relation to health care** • **Initial plan to transition PHC in Yarrabah to community control started** • **Apply for funding to support early efforts** • **Utilise research collaborations to build capacity** • **Establish and develop a Social Emotional Wellbeing Centre of Excellence** • **Expansion of the SEWB programs** • **Utilisation of research funds to develop programs and hire staff** • **Local workforce capacity building**
ENABLERS • **Funding to establish the Yarrabah Health Committee was received from the Aboriginal and Torres Strait Islander Commission (ATSIC)** • **Funding support for Feasibility Study and initial positions** • **Strong local leadership from the Yarrabah council, Elders, and others** • **Research and community collaborations** • **Funding support from government and non-government groups** • **Collaborations with other ACCHSs** • **Government support for the transition**
BARRIERS • **Resistance and lack of support from QH/CHHHS** • **Fear from locals/community about losing services/the hospital** • **Lack of funding** • **Funding uncertainty/instability** • **Lack of community confidence in Gurriny's capacity to be in control of Yarrabah's health care**
OUTCOMES • **Decreased suicide rates** • **Community engagement with the Feasibility Study** • **Establishment of a community-controlled health organisation (Gurriny)** • **Community engagement with Gurriny programs** • **FWB participants experienced personal and professional development.** • **Establishment and growth of program** • **Achieving funding stability** • **Recognition as leader in SEWB field** • **Increased community capacity (workforce and leadership capacity)** • **Strengthened partnerships**

Community and Research Collaboration
Soon after the completion of the Feasibility Study, a UQ) researcher, Komla Tsey, introduced the Family Wellbeing (FWB) program, an Aboriginal developed SEWB program, to the Yarrabah Men's Group. Following this, community leaders approached him to propose a community research collaboration to develop the Centre of Excellence in SEWB. Funding was received to introduce the FWB program to the Men's Group. The FWB program was used to build local capacity in the Gurriny workforce and broader Yarrabah community and became a foundation of the SEWB services Gurriny delivered. Research evidence of the impacts of FWB helped to demonstrate Gurriny's capacity as a health service and secure further funding to employ staff and grow Gurriny's workforce.

"So between Apunipima and Gurriny (and University of Queensland), we started working together, looking for resources… we got our first NHMRC grant, a three year NHMRC grant to implement family wellbeing in Hopevale, Yarrabah, as well as Cairns. Out of the people we trained, we employed five… people… The very first call of Gurriny staff were actually research employed." (Research partner)

Strategically Building Services, Organisational Capacity and Stakeholder Trust

In the early stages of the transition process, there were limited resources to progress the community's vision of achieving community control of PHC. There was also a lack of confidence from community and government stakeholders in the capacity of Yarrabah to successfully run such a service. Therefore, Yarrabah leaders took a strategic approach to growing the organisation, its services and capacity, and building the trust of relevant stakeholders.

The decision to focus on the service gap of SEWB to complement existing services was a strategic one, as was the decision to partner with researchers and universities to develop the SEWB services. The FWB program drove Gurriny's organisational and workforce capacity building strategy, helping to strengthen local leadership and develop the initial SEWB services provided by Gurriny. The FWB program resulted in significant benefits for participants, helping to develop confidence with several participants engaging in further education and professional development. This positive impact helped to build community confidence in Yarrabah's capacity. Through the research partnership, a series of papers evaluating the outcomes of FWB were published, positioning Gurriny as a leader in the SEWB field. This helped Gurriny to secure further Commonwealth government funding which was used to employ staff and grow Gurriny's programs. Research provided the evidence needed to demonstrate growing organisational capacity to external stakeholders and help secure resources to further Gurriny's organisational development.

"(Gurriny leader) was confident that if they could demonstrate capacity in the Social and Emotional Wellbeing area, then the community would have more confidence in Gurriny's ability to take on other services." (Research partner)

Getting Government Commitment

The strategies to build organisational capacity and stakeholder trust were aimed at encouraging government stakeholders to commit to transitioning PHC services to community control. Gurriny requested that government sign a document committing themselves to transition.

Enablers

There were several factors that played an important enabling role in this first stage of the transition journey.

Community and Research Collaboration

While *community and research collaboration* was a clear strategy to further the transition process, it was also a very important enabler. As previously discussed, research partnerships helped to secure funding to develop workforce and leadership capacity, and to demonstrate that capacity to community and government stakeholders, building confidence and trust.

Funding Support

The receipt of funding support was a fundamental enabler during the first stage of the transition process, allowing Gurriny to improve organisational growth and capacity development. Funding was received through various means throughout different parts of this first stage. In the early 90s, funding was granted from ATSIC to establish the Health Committee in the Yarrabah Council. Other funding was secured from: a pharmaceutical company, not-for-profit organisations such as the Fred Hollows Foundation, research grants, Commonwealth government and QH resources. This funding allowed for the employment of staff and development of programs and services. By 2005 the Commonwealth Office of Aboriginal Health provided funding for four permanent positions as well as the first Transition Officer position.

Funding support from Government, particularly the Commonwealth Government, was crucial in making the transition possible and sustainable. Previously significant effort went into trying to secure funding sources, and the funding instability was a barrier to Gurriny's organisational development. The receipt of ongoing government funding was a real turning point in Gurriny's journey of becoming a fully functioning, more stable and sustainable service.

"by 2005, the Commonwealth Office of Aboriginal Health actually came to the party and offered the first four permanent positions for Gurriny." (Research partner)

Other Government Support

Commonwealth and Queensland government support of the transition, and the development of Gurriny was necessary for the transition to occur. Beyond funding support was the general support of transition to community control in Yarrabah demonstrated by government. While firmer commitment was not secured until the signing of the Deed of Commitment in 2005, leading up to this point, government stakeholders indicated general support.

Barriers

The most significant barrier experienced was the limited resources available to progress the organisation in those early days following the Feasibility Study. Uncertain funding hindered Gurriny's workforce and organisational growth. There were also fears amongst local community members about losing services, and a lack of confidence in Gurriny's capacity to be in control of Yarrabah's health care. While much more apparent in the later stages, there was some resistance, negative reaction and lack of support from some QH/CHHHS staff right from the beginning.

"originally when we finished the Feasibility Study report and we gave a copy to the State Government, there was quite a lot of people in Yarrabah and the State Government services was upset because of the plan… we had these great big ideas to develop community control, because people weren't happy with the current services that was going on there. So all the nursing staff was really upset and they sort of rebelled. The Government itself didn't accept the Feasibility Study report" (ex-Gurriny staff)

Outcomes

Decreased suicide rates was one clear outcome that became apparent towards the end of the first stage. Following the suicide epidemic of the 80s and 90s, suicide rates dropped in Yarrabah to rates comparable with the broader Indigenous Australian population.

Another outcome was community engagement in programs, particularly participant engagement with the Men's group and positive pro-social activities.

Other outcomes included: the establishment and growth of programs; the achievement of funding stability; recognition as a leader in the SEWB field; increased community capacity, as well as workforce and leadership capacity; strong partnerships; and positive personal and professional development outcomes for many FWB participants including completion of University and TAFE studies. The research partnerships outcomes included the publication of several research papers.

4.5 Stage 2: Preparing for Transition

The second stage of the transition process started in 2005 with the signing of the Deed of Commitment by key stakeholders, and ended when the formal handover occurred on the 30th of June, 2014. This almost 10-year period was the part of the transition process that involved the most preparation, particularly in the two years leading up to the handover of services and funding (Table 6). Core strategy areas focussed on developing the organisation and progressing the transition. This period also entailed the greatest barriers and challenges, in particular between Gurriny and QH/CHHHS, in the process of navigating and negotiating the transition as well as jointly delivering services in Yarrabah. There were many enablers that supported this stage of the transition and several outcomes.

Strategies

Partnership and Collaboration between Gurriny and CHHHS

One implicit strategy essential to a successful transition was collaboration and the creating of partnership between Gurriny and CHHHS. Such collaboration and partnership began early, following the signing of the Deed of Commitment in 2005. A local transition committee was established at the end of 2008 to facilitate joint planning and development between Gurriny and CHHHS, and met fortnightly. This local transition committee was responsible for providing advice on strategic initiatives, workforce, funding, infrastructure and governance, dissemination of information, and progressing action on relevant plans. Various sub-committees and/or working groups were also established to progress specific Key Priority Areas for transition, for example around workforce and service development. The committee was responsible for the creation of various plans relevant to the transition, such as a transition plan and a communication plan in 2008.

The need for collaboration was particularly imperative in the context of many of the challenges. One joint strategic operational plan created in 2010 detailed efforts towards collaborative change management strategies to help support Gurriny and CHHHS staff and build cohesiveness between the services. These strategies included access to counselling to support staff, access to expertise (unions, human resources, industrial relations), and workshops and training to support communication and the creation of a positive work culture through exploring conduct, values and beliefs.

Service Integration

A service integration strategy aimed to enhance collaboration between the two services. This strategy was particularly evident in the co-location of Gurriny and CHHHS from 2010 to 2014. Service co-location was intended to improve the coordination of service delivery as well as: achieve a shared understanding of the Yarrabah health profile; identify 'best practice' health systems; enable economies of scale; and achieve greater community engagement and ownership of the Yarrabah health system. The focus was on trying to integrate Gurriny and CHHHS so as to avoid separation of services and to support the continued delivery of care.

Co-location and service integration strategies arose as part of a three-phased approach to transition which was designed to help manage the change process and support confidence and capacity in both organisations. This was thought necessary to assist CHHHS staff in the change to a different model of care due to the different focusses of the services, with CHHHS's clinically focussed medical model, and Gurriny's PHC model driven by community values, priorities and governance structures.

Phase one was focussed on co-location and was planned to occur from March-June 2010. During this phase, CHHHS would continue delivering PHC while Gurriny services shifted to more comprehensive PHC. There were also plans for the movement of some administrative functions to Gurriny, as well as shared planning and delivery of Maternal and Child and Women's Health programs. Phase two was concentrated on service integration and was planned for July 2010 – Dec 2011. During this phase, Gurriny would shift to more comprehensive PHC through integrated planning and delivery of chronic disease and integrated coordination of visiting services. However, during phases one and two CHHHS would continue to be the funds holder. Phase three was when full integration under community control was planned. In this phase, funds, infrastructure and PHC staff were to be transferred to Gurriny to be

managed under full community control. While this was a jointly agreed strategy, data suggests that Gurriny was apprehensive, as discussed in the Barriers section.

"the other thing that kept happening was we kept getting pushed towards a model where we all just worked together. So that it wasn't about us being in control, it was all just have like a collaborative partnership between the Queensland Health team and the Gurriny team." (Gurriny staff)

Addressing Core Strategy Areas

Through the second stage of the transition journey there were five core strategies which demonstrate the principal areas of organisational development that Gurriny addressed, each with several sub-strategies. The process of addressing these organisational development strategies began as early as 2007 and remained the central focus within Gurriny until the official handover. The core strategy areas include: communicating and engaging with stakeholders; ensuring strong governance; planning and developing the services and workforce; assuring quality; and financial planning and modelling. While distinct in many ways, there is also significant overlap across many core and sub-strategies, with work completed in one area often essential for, or impacting on work in other areas.

Communicating & Engaging with Stakeholders

The primary stakeholders involved in the transition process were CHHHS and Gurriny staff, service users in the Yarrabah community, and Yarrabah's formal organisations, groups and services. However, stakeholder engagement and communication also targeted government, ACCHSs and sector peak bodies, as well as unions and staff associations at regional and state levels.

Comprehensive, inclusive and sustained community engagement

Community support for community control was a core requirement for the transition to occur. This community support was something that Gurriny needed to continuously build through a process of comprehensive, inclusive and sustained engagement with the Yarrabah community.

To engage with Yarrabah's stakeholder groups and organisations, Gurriny representatives attended ongoing meetings with the Local Managers Forum, Yarrabah Health Partnership, Yarrabah Aboriginal Shire Council (YASC), Traditional Owner Group and the Social Service Network Committee (SSNC) to report on transition progress throughout all of stage two of the transition journey. Gurriny communicated and engaged with the general Yarrabah community regarding the transition through various avenues including: public meetings and community information sessions; organisational and community reports; the Gurriny website; the Yarrabah notice board Facebook page; face-to-face encounters in the community by the health promotion team; promoting Gurriny membership; and through Gurriny Board and staff members attending community sporting and cultural events.

Table 6: Stage 2 Preparing for Transition

2005 - 30th June 2014
KEY EVENTS • **In 2005, Commonwealth funding was secured for five permanent positions** • **Deed of commitment is signed by key partners in 2005** • **Funding for a Transition Manager obtained in 2007** • **In 2009 Gurriny started delivering clinical services** • **New building completed in 2010** • **Co-location with Queensland Health started in 2010-2011** • **New Gurriny Chief Executive Officer (CEO) started** • **QH executive lead for transition process started** • **Bentley's engaged to undertake organisation capacity review in January 2014** • **Feb 2014 QH pulled Nurses out of Yarrabah** • **Gurriny positions were temporarily filled prior to transition** • **Official handover of funding and services occurred on 30th June 2014**
CONDITIONS • **Lack of comprehensive PHC services** • **Lack of service coordination and integration** • **Date set for official transition to occur**
STRATEGIES • **Collaboration between key partners** • **Address core strategy areas including:** - **Communicating and engaging with stakeholders** - **Ensuring strong governance** - **Planning and developing the services and workforce** - **Assuring quality** - **Financial planning, management and modelling**
ENABLERS • **Tracking and recording progress to demonstrate and communicate capacity** • **Partnerships and alliances with ACCHS sector and consultancy services** • **Strong, stable leadership with perseverance and determination** • **Negotiation and collaboration with partners and creating certainty and clarity** • **Government support, commitment and funding** • **Clear frameworks and guidelines**
BARRIERS • **Insufficient funding support** • **Separate client information systems between Gurriny and QH;** • **Lack of an official date for the transition** • **Lack of coordination and cohesiveness between services** • **QH resistance to transition** • **Power imbalances and lack of trust between services** • **Reluctance to let go of control** • **Risk averse and paternalistic Operating Deed and Lease Agreement** • **Lack of dedicated leadership and resourcing from QH** • **Lack of clarity about the transition process** • **Lack of experience and capacity within Gurriny** • **Issues with transitioning QH staff** • **Service interruptions** • **Lack of clarity about funding or services to be transitioned**
OUTCOMES • **Organisational growth and development** • **Compromised patient care from lack of service coordination and cohesion** • **Wasted resources due to delays in the transition** • **Successful transition of PHC services** • **Conflicts, stress and burn out** • **Career disruptions for QH staff**

Gurriny's aim in engaging the Yarrabah community was to raise awareness of the transition and inform the community about transition progress. Gurriny aimed to include the Yarrabah community as decision makers in the process. To achieve this, focus groups were facilitated to support community input into service delivery decisions. Gurriny also wanted to know the community opinion regarding the transition. They wanted to know if people really wanted the transition to happen. To this end, Gurriny sought informal feedback through staff talking to friends and family, as well as through many of the more formal community engagement methods previously mentioned.

Another strategy to support this community input involved ensuring accessible complaints and feedback mechanisms. This was achieved through having a physical complaints and compliments box on the site, client feedback surveys, a complaints and feedback option on the website, and through telephone and email contact. The strategy also involved communicating with CHHHS staff about the transition process, how it might impact them, and the choices they had available.

"The main role I think that they had was one of us creating opportunities for them to say 'no', and being open to that. As opposed to us going back to them all the time and giving them information, it was more about making sure there was opportunity for them if they disagreed. And so over that period of time there were things like where we would put up Newsletters to talk about transition or put it into reports or at A.G.M.'s…We had the Council's approval and we had the backing of the other community orgs, and the other community orgs had all mandated Boards – elected Boards. So we used that as well. I think what we tried to do was just harness the staff that we already had to use them as a way of talking amongst their friends and families in an informal way. So it was more about making sure that if somebody didn't agree, we could hear about it." (Gurriny staff)

Clear communication about transition and services

To support efforts towards stakeholder communication and engagement, a 'Communication and Consultation Strategy' was jointly developed by Gurriny and CHHHS in 2009. The communication objectives outlined in this strategy included: to increase awareness about the transition, its benefits and what it means to stakeholders; to foster a sense of acceptance and ownership among stakeholders; and to achieve active participation from stakeholders. Principles of targeted, honest, two-way, proactive, consistent, clear, timely and accurate communication were identified to guide stakeholder engagement efforts. The strategy also identified potential stakeholder engagement risks, such as negative public perceptions of the transition, lack of understanding from service users and their families about how, when and where services will be delivered now and in the future, and resisting staff generating negative media coverage. Strategies to respond to these potential risks and achieve the communication and consultation objectives included: weekly staff face-to-face briefings; monthly project update reports to staff; articles in regional health communication and media outlets; bi-monthly fact sheets for staff and community members; communication with QH corporate senior leaders and unions; and working groups to support staff input.

One of the main goals of the strategy of communicating and engaging with stakeholders was to communicate clearly with the Yarrabah community about the transition process and what it meant, as it progressed. This included providing clear information on the services being delivered by both organisations, and the service delivery changes occurring as they happened. It also involved educating the community about PHC, its differences to emergency care, and how the transition would impact PHC services available to the Yarrabah community.

To achieve this, Gurriny used various approaches, such as providing information to the general public through its website, a monthly community communique, and the Yarrabah newsletter. Information was delivered at annual general meetings (AGMs) and post-AGM workshops, a transition to community control update flyer was distributed in 2014 to update the community on the transition process, a brochure was developed to educate the community about Gurriny's programs and their purpose, and a model of care community poster which described the programs, explained how to access Gurriny services, and introduced Gurriny staff was displayed at Gurriny at the beginning of 2014.

Goals of communicating and engaging with the community were also implemented to provide information about health data, outputs, and outcomes to the community so that they could see what was being achieved. Health and service statistics were summarised and communicated through the

newsletter, communique and community information sessions. Quarterly health snapshot summaries were developed and circulated at community events, printed in the Gurriny newsletter, displayed on the Gurriny notice board and distributed at the clinic to inform the community of health indicators, funding received, and Medicare revenue generated.

Communication and planning with government stakeholders

Gurriny also needed to engage and communicate with government stakeholders. To support this process, several communication plans and strategies were created. A Stakeholder Engagement and Communication Strategy was completed in 2007 to develop a clear understanding of the health reform process and deliverables by key partners. Later, in 2013, an organisational engagement plan was developed to assist the process of engaging with QH around transition negotiations. Communication with CHHHS was achieved through CEO, stakeholder and clinical leadership meetings, as well as communication between the Transition officer and a CHHHS representative closely involved in the transition process. These meetings were aimed at building relationships, creating shared vision and progressing the transition. This involved working through conflicts and trying to negotiate a win-win situation. It also involved negotiation processes such as setting an official transition date as well as joint planning and coordination of service delivery.

Ensuring Strong Governance

Another core set of strategies focussed on ensuring strong Gurriny governance to meet the western managerial style of governance expected by government.

Building Board and Senior Management Skills & Capacity

Building leadership capacity was an ongoing strategy implemented throughout stage two of the transition process. In the early stages there was a strong focus on governance and capacity building. With the signing of the Deed of Commitment in 2005, the partners committed to a program of capacity building which included a learning program for Board Directors and Managers to enhance governance skills and knowledge, understanding of roles and related behaviours and ethical expectations, and management and leadership capabilities. Progress reports indicate that the capacity building program for board members commenced towards the end of 2006.

As the transition progressed, Board and SMT capacity needed to be developed to deal with the increased expectations, responsibility and larger budgets. Strategies included the expansion of Board of Director membership to include independent ex-officios with marketing and law backgrounds, the hiring of external consultants and utilising partnerships, and alliances such as with the Queensland Aboriginal and Islander Health Council (QAIHC) and the National Aboriginal and Torres Strait Islander Health Alliance (NATSIHA) to gain relevant expertise. Other actions to improve board capacity and efficiency were: reducing the board size to seven members; changing the board term from two to three years to provide sufficient time to add strategic value and better retain corporate knowledge; changing the re-election from 50% to 33% annual rotation with one third of directors standing for election every year to ensure better knowledge transference; providing yearly governance training to board members; increasing board meeting frequency to monthly during transition; and including a Board induction process after each AGM.

Developing Clear Plans & Frameworks

Developing clear plans and frameworks is a governance sub-category which further explicates the planning stage of the core process. From early in the transition process, many different plans were implemented to guide the different aspects of PHC service governance. This strategy was seen very clearly early on through the Key Priority Area (KPA) of Transition Planning which included work in the key strategy areas of: developing the service model; developing the workforce; financial planning and modelling; information management; and, engaging the community. With some adaptation and variation added later, these early plans established the ways these key strategy areas were addressed throughout the transition. The review and development of the business plan also occurred at an early stage. This involved consolidating previous documents and plans addressing various aspects of the transition and service delivery process. Later documents demonstrate the further development of plans addressing health service and workforce requirements, financial projections, business continuity as well as frameworks to guide risk management, information communication technology (ICT) and reporting and monitoring.

"my role was to facilitate the establishment of various planning documents around the transition. So we worked very closely with Apunipima Cape York Health Council… about setting up some of the frameworks. I think it was more around service delivery, H.R. and finance, funds pooling, legal, how to best prepare the health service around transitioning primary health care over to a community control model." (ex-Gurriny staff)

Choosing an Appropriate Legal Structure

From early in the reviewed period, there were suggestions that Gurriny incorporate under the Australian Securities and Investments Commission (ASIC) instead of the Office of the Registrar of Indigenous Corporations (ORIC) to add rigour to Gurriny's corporate governance. However, a 2006 progress report stated that Gurriny was waiting for independent advice from QAIHC and an independent consultant regarding the pros and cons of moving from ORIC to ASIC. Later transition status reports said that legal advice was sought and Gurriny were advised to continue under an ORIC incorporations structure. This was confirmed in the 2015 Organisational Capacity Review where it was stated that the legal structure had been reviewed and ORIC was determined to be the best fit for the size and experience of Gurriny.

Risk Management Plans and Procedures

The embedding of risk management plans and procedures was another important part of governance outlined in Gurriny's assessment and progress documents. Early in the transition process a Risk Management Framework which identified, assessed and operationalised the key strategic and operational risks was developed by external consultants. A risk profile and risk register document were also developed. However, by 2013 appropriate mechanisms for the identification, assessment and management of risks such as joint risk management Frameworks and plans were still to be developed. Gurriny demonstrated a low to medium rating on the Office of Aboriginal and Torres Strait Islander Health (OATSIH) risk assessment in 2013 and reported completing a Disaster Management Plan. To ensure the ongoing management of risks, a Finance, Risk, Audit & Compliance (FRAC) sub-committee of the board reviewed and addressed risk at monthly meetings. However, a 2015 report highlighted that this sub-committee mostly discussed monthly financial issues with meeting minutes demonstrating an absence of focus on risk.

Planning and Developing the Services & Workforce

Another core strategic area that was a strong focus in historical documents was the planning and development of Gurriny's service delivery model and its associated workforce.

Developing a Health Services Plan and Delivery Model

Before being able to plan the health workforce requirements needed to operate the organisation during and following transition, Gurriny had to develop a clear health services plan and delivery model. Significant health services planning processes took place between 2006-2008. In 2007 external consultants provided reports to inform Gurriny's service model including recommendations about which services should be included, and provided recommendations on how clinical services could be integrated with previously established SEWB programs. Gurriny and QH also worked on assessing and mapping Yarrabah's health service needs and options to inform the service delivery model, and the QH Yarrabah Health Services Plan (2008) acted as a guiding document for service provision.

The Gurriny health services plan and delivery model (2011) described plans for an enhanced model of PHC with a focus on community-centred, culturally appropriate, comprehensive PHC addressing all stages of life, and including a range of healthcare programs to address holistic health outcomes. The planned model of care was informed by a population health approach and included the full range of PHC from acute care to prevention and early intervention. Implemented by a community-based service delivery team and delivered through a combination of clinical, outreach, home visits and mobile services, the model of care outlined a range of strategies including: health promotion; disease prevention; early detection; addressing risk factors; and management of diagnosed conditions. The proposed model of care reflected best practice approaches, was aligned with current policy directives such as the Council of Australian Governments (COAG) "Closing the Gap" indicators, and was based on the most appropriate available evidence.

One important aspect of developing the health services plan as the handover date neared, was the decision by CHHHS about which services and programs would be transitioned. It was decided that all PHC programs such Maternal and Child Health Programs, as well as the more clinical PHC care services would transition; this was all services except in the Emergency Department (ED).

Mapping the Health Workforce Requirements

Once the health service plan and delivery model had been established, Gurriny needed to map the staffing profile and requirements for each of the service types to be transitioned, including Doctors, Nurses and Health Workers. While this was made difficult due to the lack of clarity regarding the services and funding to be transitioned from CHHHS, documents show that workforce mapping was in progress in 2013, with plans to outline position descriptions against the organisational structure and service delivery model.

"So the big task for us was to look at and plan, how many staff we would need from doctors, R.N.'s (Registered Nurses) and Health Workers at a minimum, that's not dealing with the Social Emotional and Wellbeing side 'cause that was always done by Gurriny so that wasn't really transitioned. It was taking over the very clinical aspects of those program areas so that's what I was involved in." (ex-CHHHS, current Gurriny staff)

Navigating Staff Transition

One of the most important yet challenging strategies involved in planning and developing the required workforce was navigating the transition of CHHHS staff. The process of staff transition was complex and involved navigating industrial relations and work rights legislation. While a Human Resources (HR) and Industrial Relations (IR) guideline outlined the HR/IR processes required and the industrial frameworks that needed to be applied throughout the transition, the situation was unprecedented and lacked clarity and guidance.

While Gurriny wanted to assure that no CHHHS staff lost their job in the transition process, they had relatively little control over important decisions regarding how CHHHS staff employment would be managed. In 2009, the option of CHHHS staff keeping their entitlements and remaining CHHHS staff but reporting to management of Gurriny was discussed, as apparently this arrangement had occurred elsewhere in the state. However, in the end CHHHS staff were offered either a voluntary redundancy or the option of an 'employee requiring placement'. With the latter option, staff would be paid at their current level while searching for another position within CHHHS and if not matched with a job within four months, they would be given a redundancy payment. In March 2014, this decision was announced. Meetings were held to provide information to CHHHS staff and support was provided in curriculum vitae (CV) writing and interview skills. In April 2014 there was communication with CHHHS staff regarding vacant positions at Gurriny, with invitations to discuss and scheduled information sessions. By May 2014, CHHHS staff were aware of new positions in Gurriny and had attended an information session about the community-controlled health sector and Gurriny's model of care, though it was noted that little interaction occurred during these sessions. By late May/early June, formal written offers of voluntary redundancy were provided to CHHHS staff, who were given 14 days to decide.

Gurriny wanted to provide the opportunity for CHHHS staff to apply for positions, however the redundancy conditions meant that those who took voluntary redundancies could not apply for positions at Gurriny for three months. A decision was made to temporarily fill positions until CHHHS staff could apply for permanent positions. This was a complicated process which had significant impacts on Gurriny's service delivery during this period (see Barriers section for further discussion on the challenges associated with staff transition).

Staff Recruitment and Training

While there is evidence that Gurriny undertook some recruitment activities at earlier stages of the transition, the majority of staff recruitment occurred from April to June 2014, the period just before the formal transition, and again later in the year when CHHHS staff were able to apply. Before recruiting, Gurriny needed to review outdated and incomplete position descriptions. From July-Sept 2014, community recruitment information sessions were held, and performance reports indicate that by December 2014 recruitment had been completed, all new positions had been filled, and staff had commenced. A staff induction program for new staff which aimed to ensure awareness of Gurriny's

policies and procedures and address the potential differences in CHHHS and Gurriny frameworks was implemented. The 2015 Bentley's final report noted that Gurriny had successfully fulfilled its workforce requirements and maintained continuity of service delivery during the transition period.

Developing and Managing the Workforce

The final component of Gurriny's workforce planning and development strategy focusses on investing in staff development and managing the workforce. There were several staff development processes and initiatives undertaken by Gurriny throughout the transition process. These included: performance appraisals to assess staff progress; support for AHWs to complete certificate 4 or a diploma in PHC on site; and a half-day of staff training and development every week. Staff feedback mechanisms included: one-on-one monthly meetings between managers and staff; weekly team meetings; monthly full staff meetings; and a 6 monthly employee survey. Processes of change management to explain to staff about transition, and educate them about the new service delivery model were also achieved through a whole of staff change management workshop along with individual change management sessions and a presentation which communicated change processes.

Assuring Quality

Another core strategy area which was central to the transition process involved assuring that Gurriny had quality systems and processes in place. This was a strategy area which covered a range of diverse, focussed strategies, including quality assurance processes and accreditation, information communication technology (ICT) systems and management, monitoring and reporting outputs and outcomes, assuring cultural security, and addressing clinical risk.

Quality Assurance Processes and Accreditations

Gurriny assured quality in their services and systems through accreditation and best practice regular continuous quality assurance processes around planning, data management, accreditation, and clinical audits. In 2013, Gurriny was accredited under the Royal Australian College of General Practitioners (RACGP) and the International Organisation for Standardisation (ISO)9001; RACGP accreditation assured consistency in standards and quality of care such as through up-to-date equipment safety checks and annual clinical audits. The 2015 final Bentley's report stated that Gurriny was accredited with Australian General Practitioner Accreditation Limited (AGPAL) and ISO until 2017. Other quality assurance processes included: the completion of lead auditors' training by three staff members and internal auditors training by two staff members to increase internal capabilities; staff training and onboarding focussed on quality systems such as the LogiQC database; including quality frameworks and key performance indicators (KPIs) related to quality in staff position descriptions; and the recruitment of an SMT member with quality experience.

Information Communication Technology (ICT) Systems and Management

The need for comprehensive and effective ICT systems and information management was recognised as an important part of ensuring successful transition from early in the reviewed period. Early project status reports outline a range of ICT needs including: client information system; financial reporting and recording; HR and payroll services; and Medical Benefits Scheme/Pharmaceutical Benefits Scheme (MBS/PBS) claims and lodgements. Readiness assessment frameworks outlined information management issues related to how effective and efficient information sharing could be ensured between CHHHS and Gurriny. Issues included: ICT governance; ownership and access to ICT infrastructure and systems; and the management, maintenance, sharing, protection and storage of client data and information. These issues were addressed by conducting regular ICT inventories, analysing ICT gaps, creating ICT plans and training staff in ICT use, management and sharing. However, documents from 2014 and 2015 indicate that immediately prior to and during the actual transition period, Gurriny was still finalising its ICT requirements and systems and had not yet decided on a preferred ICT service provider.

Monitoring and Reporting Outputs and Outcomes

Monitoring and reporting performance was a quality assurance activity that related to Gurriny's accountability to both government and the Yarrabah community, addressing Gurriny's goals of process evaluation and continuous quality improvement of the health reform process. Although potential health and social indicators for evaluation were outlined in early documents, lack of funding for research and

evaluation stalled the anticipated monitoring processes. Implementation or organisational plans were also monitored through several Gurriny processes including target setting, traffic light reporting, and regular SMT, Board, staff, and program meetings. Later in the transition process there was a focus on the monitoring and reporting of service delivery and clinical performance in line with nKPIs. Progress reports document an agreement between July-Sept 2014 with QH/CHHHS and Commonwealth to evaluate against nKPIs. A reporting framework was to be included in the Service Level Agreement and reporting data to be extracted through the existing Patient Information Record software system.

Assuring Cultural Security

Although cultural alignment is at the heart of the ACCHS movement and was a key focus for Gurriny since its inception, Gurriny still needed to clearly demonstrate how it was achieved. The ways in which Gurriny assured governments, staff and community members that its PHC services were culturally appropriate included: reflection of community cultural values in the model of care; having multidisciplinary teams including AHWs provide care; completing a patient journey model and presenting to staff at a planning day; providing information about Gurriny's model of care to all staff to increase awareness of organisational culture; and through cultural awareness training with all staff.

Addressing Clinical Risk

The final sub-strategy of the Assuring Quality core strategy area was addressing clinical risk. Although there were different risk management processes that occurred through the governance strategy, addressing clinical risk focussed on a specific set of risks that existed in the clinical setting. The kinds of systems established in Gurriny to monitor and capture clinical incidents included setting a clinical governance framework and developing a clinical risk action plan. Monthly clinical incident meetings were also established and an Asset Management Register and Safety Checks were put in place for equipment.

Financial Planning, Management and Modelling

The final core strategy area was financial planning, management and modelling. Although this is an area that is crucial for Gurriny's ongoing success, the Bentley's Organisational Capacity Review final report indicated that this was an area that still required significant work. However, despite the need for further development, it was clear through the reviewed documents that Gurriny had done considerable work towards financial planning, management and modelling throughout the transition process.

Costing Service Delivery

An essential sub-strategy of financial planning was the costing of Gurriny's service delivery against its health services model. This involved mapping the workforce and service model against the available funding and setting out a budget for planning services. A tool to cost the model of care was developed with the Westpac Secondee Program, however the Bentley's final report in 2015 noted that comprehensive costing of service delivery to support community health plans was still to be developed.

CHHHS also undertook a process of costing the delivery of its PHC services in Yarrabah to determine the amount of funding to be transitioned. An external auditor was brought in by CHHHS to analyse how much money it spent, with the drive to make the transition cost neutral. The aim was to assess what level of funding should be provided to Gurriny in order to ensure the continued delivery of the current level of services, not accounting for difference in Gurriny's model of care or service delivery improvements. The funding amount identified through the assessment did not include any doctors and the final figure was only given to Gurriny within a month of the actual transition (see Barriers section for further discussion on issues with the costing approach).

Increasing Funding Base Diversity

The increasing diversity of Gurriny's funding base, particularly through MBS funding, was also a strong theme connected to financial management strategies. By embedding the Medicare billing process, Gurriny increased their monthly Medicare revenue stream by $20k, from $60k in January 2014 to $80k in January 2015. This was achieved through monthly Medicare income monitoring and inclusion of KPI's related to Medicare billing in staff performance appraisals to ensure all potential Medicare income was billed. By January 2015, 90% of Health Workers had Medicare provider numbers and were aware of the Medicare item numbers under which they could bill. Other efforts to diversify Gurriny's funding

base included: leveraging off universities and not-for-profit organisations such as The Healing Foundation; working with BT Westpac to start marketing Gurriny and to look at how to access philanthropic funds; and exploring the opportunity of using Medicare revenue to invest in capital equipment for Gurriny's future growth and expansion.

Monitoring of Financial Performance

Another key aspect of strong financial management was the monitoring of financial performance through regularly tracking financial data and efficiency metrics. This was achieved through monthly monitoring of actuals (expenditure) to budget with monthly profit and loss figures. However, the Bentley's final report highlighted that monitoring of financial performance was an area needing further work and development. There was minimal progress in reporting efficiency measures such as cost per episode/event of care. It also noted the need to ensure that funding agreements are in line with financial KPI's to help monitor financial performance and efficiency and to ensure program staff understand their funding requirements and subsequent budgets.

Financial Forecasting

Finally, the Bentley's Review final report in 2015 pointed to the need for strong financial forecasting to support Gurriny's long-term sustainability. The report noted that Gurriny was still to financially qualify its strategic plans through a forward looking 3-way (balance sheet, profit and loss, cashflow) financial forecast to highlight long-term funding requirements. Although a 3-way financial forecasting model was purchased, forecasts had still not been developed in January 2015 due to lack of understanding of the model's process, impacts and purpose.

Enablers

There were a range of internal and external enablers which supported the transition process throughout the second stage leading up to the official handover date. These enablers included: tracking and recording progress; partnerships and alliances; strong leadership; negotiating and collaborating with key partners; government support and commitment; and, frameworks and guidelines.

Tracking and Recording Progress

The process of tracking and recording progress throughout the whole transition process was an essential ingredient to the success of the transition and played a crucial role in the monitoring and reporting that was part of the core process. This progress tracking helped Gurriny assess their organisational capacity to operate a complex PHC service and was the medium through which Gurriny communicated and demonstrated their capacity to the key government partners.

The tracking and recording of progress was demonstrated through the status and progress reports which provided a detailed and comprehensive picture of how all the core strategic areas and their sub-categories were addressed, and at what points in the transition process. Although there was no one consistent framework used to track progress throughout the transition process, each progress and status report identified areas which needed development, tasks to be completed to address the identified areas and the progress of the tasks and actions towards developing capacity in the core strategic areas.

Assessing Organisational Capacity

Government stakeholders required Gurriny to assess its organisational capacity; this was achieved through recording progress. From the end of 2012/beginning of 2013, Gurriny began using a readiness assessment framework which outlined the 22 readiness assessment criteria across the core domains of: community; governance; quality; finance; and workforce. The Readiness Assessment aimed to consider the combined preparedness of Gurriny and CHHHS to work together to achieve the objectives of transition and effectively manage the risks associated with the process.

Later in the transition process, at the request of the Commonwealth government, Gurriny engaged Bentley's to undertake an external, comprehensive whole of organisation capacity review. Bentley's conducted the initial assessment in January 2014, only months prior to the official handover, and completed a follow up assessment one year later. Undertaking the Bentley's capacity review provided

Gurriny with a clear framework for measuring organisational capacity across all areas of its operation. The process also provided Gurriny with a plan and actions to be taken to address areas needing improvement.

Communicating and Demonstrating Capacity
The ongoing process of tracking and recording progress also served the important function of demonstrating Gurriny's organisational capacity to key stakeholders. This was particularly the case with the Bentley's review. Having an independent external review of Gurriny's organisational capacity was necessary to reinforce government trust and secure ongoing support for the transition.

Partnerships and Alliances

Amongst the most important enablers of Gurriny's process of transition were the partnerships and alliances made with various organisations, groups and services. These partnerships and alliances provided Gurriny with essential strategic, legal and operational guidance to progress development across the core strategy areas. Key partnerships were those with the ACCHS sector, consultancy services, and with researchers and research institutes.

Strategic, Legal and Operational Guidance from Consultancy Services
Gurriny drew heavily on the work of external consultants and researchers to assist with the planning and development across all core strategy areas. External agencies were consulted to help inform the frameworks, plans, and decisions for addressing workforce planning and development, service delivery model, information technology (IT), finance/funding modelling, legal and governance. Closer to the official handover in 2014, specialist HR-IR legal advice and counsel was sought to address the IR needs associated with the workforce transition, enabling Gurriny to meet industrial relations compliance requirements. Much of this consultancy work was provided pro-bono, and some of it was paid for by the Commonwealth government.

The work undertaken with Bentley's is a good example of the enabling role played by external consultants. During its comprehensive, 12-month organisational capacity review, Bentley's identified areas where Gurriny was already exceling, as well as areas which needed improvement. With its external perspective, Bentley's was able to identify areas requiring improvement that Gurriny had not recognised. Although there was resistance within Gurriny towards working with Bentley's at first, there was a strong consensus from relevant participants that it was a very positive thing for the organisation as a whole, and for progressing the transition.

"And Bentley's came in and done a twelve-month review on Gurriny. From the Board right down to service delivery, to I.T. and workforce, all of that… the Board were a bit hesitant about them coming in, they thought, 'who are you to tell us if we're ready'… I even felt that way as well at one stage, but I thought, 'wow this is good because this is gonna give us a helicopter view on the whole organisation... And out of that were some really good stuff because there were some things that we did lack and I thought, 'wow, I didn't realise that.' We fixed it, you know? We took it onboard and we fixed it, whatever it was." (Gurriny staff)

ACCHS Sector and Research Partnerships
Several of the principal alliances that supported Gurriny during transition were within the ACCHS sector. The most prominent of these partnerships was with QAIHC, the Queensland state ACCHS peak body, and Apunipima Cape York Health Council, commonly known as Apunipima. QAIHC was a key stakeholder and played a role in high level meetings and negotiation processes with state and commonwealth government representatives and also represented Gurriny at state partnership processes. QAIHC also provided consultancy expertise helping to develop key strategic documents

Due to their close physical proximity and strong community connections, Gurriny and Apunipima had a unique and important alliance. The two organisations held regular meetings with CEOs, managers and staff members and were able to share resources and support each other in their transition processes. For example, Gurriny and Apunipima collaborated to develop a research framework to facilitate engagement with universities. Gurriny also worked with Apunipima's community engagement team to help develop its community engagement strategy. Gurriny was able to draw on Apunipima's

organisational knowledge, experience and resources to help develop its organisation. Gurriny learned from Apunipima's organisational example and adopted various approaches or strategies employed by Apunipima. For example, Apunipima changed its board structure to allow for skill-based directors to improve organisational governance, and Gurriny followed this example. Gurriny and Apunipima also shared various pieces of consultancy work, and in this way, shared resources towards organisational development.

Gurriny also established strategic partnerships with the ACCHS sector through membership with NATSIHA and NACCHO. Regular meetings with these key partners were held to leverage knowledge and discuss methods of service delivery, including bi-monthly meetings with NATSIHA, and annual NACCHO and QAIHC members meetings.

Although a stronger enabler in stage one, research and evaluation was an ongoing enabler of the transition, contributing to the evidence-base, showing what Gurriny has achieved, and garnering extra support. Research partnerships also supported Gurriny in achieving certain strategic goals, particularly around the monitoring and reporting of outcomes and processes, but also in helping to communicate its purpose and work with wider audiences and gain access to additional resources to support the achievement of organisational goals.

"we leaned a lot on expertise that might've came our way from QAIHC and from Apunipima – just to tap into other work that they'd already done or talking to different people. And that was kinda how we got through it." (Gurriny staff)

Strong Leadership

The oversight, guidance, planning and expertise of leaders within Gurriny and CHHHS was another key enabler which supported the successful transition to community control.

Senior Management Team (SMT), Board and Transition Manager Leadership

The successful transition of Yarrabah's PHC service to community control would not have been possible without the strong leadership of the SMT staff and Board Directors within Gurriny. The CEO of Gurriny played a critical leadership role during the transition process particularly in regard to negotiation processes with government. Gurriny's Board of Directors also played an important leadership role, driving Gurriny's process of organisational capacity development. This included local Board Directors as well as skills-based directors. From 2007, Gurriny had a dedicated Transition Manager whose primary responsibility was to oversee and guide the process of transition. This person was responsible for much of the coordination and program monitoring and reporting previously outlined as key to the transition. They also developed a Transition Implementation Plan and managed processes of consultation and partner dialogues. This leadership role was a crucial enabler for the success of the transition journey.

Having Stable Leadership

One of the factors which made Gurriny's leadership so strong was its stability. Gurriny had a relatively stable Board throughout the transition, which meant that experience and knowledge was retained, and capacity was built over a longer time frame. This was also the case among the Senior Management team, including the CEO, Senior Medical Officer, as well as the Transition Manger. This stability enabled the organisational capacity building process so fundamental to the transition journey.

"the other thing that was a really important enabler was that all the way through, we had a reasonably consistent Board… I don't think we ever had a situation where we had a completely new Board… and I think that was really important having that consistent leadership at the Board level." (Gurriny staff)

Having Perseverance and Determination

The leadership qualities of perseverance and determination exhibited by Gurriny leaders were important enablers. Despite the challenges experienced along the transition journey, there was a willingness within Gurriny's leadership to do whatever was necessary to make the transition happen. The process of transition also required leaders to make difficult decisions and stay focussed on the final goal in the face of challenges. Gurriny's leaders demonstrated a determination which was critical to the success of the transition.

"all the way along, we did just keep chugging along, making the organisation better and smarter... We use the deadline like with the twenty ten on the Deed of Commitment. We will try and use those deadlines to hold people to account, but we never thought that once we got to that deadline we'd just give up" (Gurriny staff)

Organisation-Wide Leadership
Gurriny staff members also demonstrated leadership through their perseverance and determination, despite the challenges experienced. Workforce stability throughout the process also supported organisational capacity development and a successful transition. To better utilise the experience, knowledge and expertise of all Gurriny staff, several processes were put in place to facilitate organisation-wide leadership. These processes included: a clinical engagement strategy to promote clinician involvement in service planning, quality and improvement; events such as an annual 'all of staff' planning day, weekly clinical leadership team meetings, and joint Team Leaders and SMT/Board of Directors Planning Days; and the circulation of the funding agreements to all managers to assist in sharing key information, address the risk associated with SMT succession and potential knowledge loss, and assist with the pro-active management of budgets, service delivery and reporting requirements.

Having Strong Leadership Within Queensland Health
Despite the challenges in communication with CHHHS experienced by Gurriny throughout stage two of the transition journey, there were some important examples of strong leadership within CHHHS which enabled a successful transition to community control of PHC in Yarrabah. One such example was that of leadership for the transition within CHHHS. This person was responsible for coordinating the transition from CHHHS's side and was involved in high level negotiation and collaboration processes. The CEO of CHHHS at the time of transition also played an enabling role. In particular, the decision made by the CHHHS CEO to allow for client medical record sharing between the two organisations was seen as an important enabling decision. These CHHHS leaders demonstrated commitment to the transition, negotiating and collaborating with Gurriny to progress and support a smooth transition.

Negotiating and Collaborating with Key Partners

Processes of negotiation and collaboration between Gurriny and CHHHS/QH were essential for a successful transition and were therefore an important enabler.

Collaboration and Negotiation on Strategic and Operational Levels
There were many examples of situations and processes throughout stage two of the transition where collaboration and negotiation between Gurriny and CHHHS/QH occurred on issues pertaining to both strategic direction and organisational operation. Such collaboration was absolutely critical to a successful transition.

There was an extensive process of negotiation regarding the contracts and agreements for funding and infrastructure between the two services. The negotiation of these contracts and agreements was a complex legal process which required navigation of the different, often conflicting, needs and requirements of each organisation. This negotiation process provided the space for Gurriny to respond to the draft contracts and agreements provided by CHHHS/QH, express any concerns, and suggest changes. This ultimately supported a fairer and more collaborative process for establishing and finalising the legal agreements upon which the transition of funding and infrastructure was based.

Several joint plans were developed between Gurriny and CHHHS which demonstrate collaboration between the organisations. The '*Annual Performance & Accountability Strategic Operational Plan 2010'* was developed to enable joint delivery of services, particularly during co-location, and included a framework to support joint planning, delivery, monitoring and evaluation of programs. This plan accounted for both strategic direction and operational planning in the process of trying to work out how to make co-location and the transition work. For example, it included a framework for reporting lines and patient flows during co-location. Another example of collaboration was the '*Communication and Consultation Strategy 2009*'. This joint document developed by the local transition committee was designed to guide communication efforts with stakeholders, both internal and external to CHHHS/QH and Gurriny.

There was also evidence of high-level committee meetings between Gurriny and CHHHS that focussed on strategic level issues. Transition Steering Committee meetings and CEO to CEO meetings were held to support transition and service collaboration negotiations. To address more operational issues regarding service delivery collaboration, fortnightly clinical leadership meetings and weekly doctors meetings were also held. Documents indicate that these types of formal processes commenced close to the official transition handover and continued in the year following transition.

There were examples of successful and positive collaboration between the two health services in the coordination of chronic disease care and client triaging and referrals. Good relationships between Gurriny and QH clinical staff supported service collaboration, as did support from QH leaders. Enabling collaborative efforts were seen in the support given by the CHHHS CEO to share client medical records and the 2009 Memorandum of Understanding (MOU) that was put in place by CHHHS and Gurriny doctors to support medical record sharing. CHHHS doctors used Gurriny's client information system in an effort to support service collaboration. Although issues with medical record sharing between Gurriny and CHHHS continue, the various attempts made to resolve this issue over the years are examples of positive service collaboration and negotiation.

"in 2009, one of our doctors had put sort of a M.O.U. in place with their doctor at Queensland Health to say that if we wanted access to their records, as long as the client had signed the consent form, we could go up to their building, access the records" (ex-CHHHS, current Gurriny staff)

Creating Clarity and Certainty

The process of negotiation and collaboration between Gurriny and CHHHS helped to create clarity and certainty throughout the transition. For example, a protracted process of negotiation occurred between CHHHS/QH and Gurriny regarding setting a date for the official handover of services and funding. Prior to the setting of an official date, the process moved slowly and among some stakeholders, there was a high level of doubt and uncertainty regarding the transition. Setting and publicly declaring an official date for the handover created the certainty and clarity that was needed to advance the transition. This resulted in rapid progress in the transition process, increased commitment, activity, investment of resources, and accountability from government stakeholders.

The process of working with Bentley's to undertake the organisational capacity review also helped to create clarity and certainty. This process made it very clear exactly what government needed to be assured that Gurriny was ready to take control of PHC delivery in Yarrabah, enabling Gurriny to take appropriate action. Finally, establishing the amount of funding that would be transitioned from CHHHS to Gurriny (albeit late) enabled Gurriny to gain greater clarity on their service model and the staff they could employ. However, these instances of clarity and certainty occurred amongst a much more significant lack of clarity that existed through much of the transition, and which acted as a major barrier.

Government Support and Commitment

Government Commitment to Transition

Commitment from state and commonwealth governments was an essential condition and key enabler of the transition to community control. QH and the Commonwealth Department of Health and Aging (DoHA) were among the key partners who signed the Deed of Commitment with Gurriny and the YASC in 2005. All four parties committed to a transition plan to track the progress and milestones towards full community control by Gurriny and to a staged program of consolidating and expanding Gurriny's services and building capacity. Although the transition did not occur within the timeline agreed upon in the Deed of Commitment, which set out that the transition would occur no later than 30 June 2010, general government support and good will towards the transition was identified as an enabler.

The transition to community control was a political issue, driven by government policy commitment to address Indigenous inequity and disadvantage. For example, in 2003, governments endorsed the National Strategic Framework for Aboriginal and Torres Strait Islander Health, which commits to the principle of community control of PHC services. Community control of health services was recognised by governments as important to improve Aboriginal and Torres Strait Islander health outcomes. Therefore, there was strong political support, even though this did not always translate well into the actual transition process due to various factors discussed in the Barriers section.

Government Funding Support
As in the first stage of the transition process, government funding support continued to be an important enabler throughout the second stage leading up to the official handover. Commonwealth government funding support helped to fund key positions such as the Transition Officer and the workforce expansion that occurred in Gurriny. Until funding was transitioned from CHHHS in 2014, the Commonwealth provided the majority of Gurriny's funding, with Medicare billing being the second largest source of income in 2013-2014. The commonwealth government also provided funding for consultancy work, such as the Bentley's Readiness Assessment. The funding support role played by CHHHS/QH was much less clear.

Frameworks and Guidelines

Throughout the transition process, Gurriny's actions across several key areas were directed by a series of guidelines produced specifically to provide operational and legal guidance. A package of implementation policies and guidelines were prepared by the Department of Health to support the transition of PHC in Queensland to Aboriginal and Torres Strait Islander community control. Implementation policies and guidelines included: the Strategic Policy Framework for transition; the Readiness Assessment; Industrial Relations guidelines; Information Management guidelines; Joint Communication and Engagement guidelines; Evaluation guidelines; and Funding guidelines.

All of these guidelines provided valuable information and recommendations which were reflected through Gurriny's plans and strategies and the actions taken to progress transition to community control. For example: the IR guidelines provided information on award conditions and enterprise bargaining agreements relevant to transition and options for managing employment transfer; the Information Management (IM) guidelines addressed key IM issues such as privacy and disclosure of patient information, patient consent and clinical information systems; and the Evaluation guidelines suggested types of outcomes to evaluate and made recommendations for minimising evaluation costs and ensuring data quality. The Bentley's capacity review also provided a clear framework outlining what government required from Gurriny in regard to organisation readiness prior to the transition.

Barriers

Experiencing Challenges with CHHHS/QH

Throughout the transition process, particularly in the second stage, the challenges Gurriny experienced in working with CHHHS/QH dominated. This was evident from both the document analysis and the participant interviews. Various issues, barriers and conflicts with CHHHS/QH really hindered the transition process, creating significant stress and burden for Gurriny.

Lack of Support and Effective Collaboration

Gurriny experienced many distinct challenges with CHHHS through the process of navigating the transition. Many of these challenges were an expression of a lack of support and effective collaboration that existed between the two services.

Insufficient or Inappropriate Funding Support
One of the challenges experienced by Gurriny concerned insufficient or inappropriate funding support. Throughout stage two, Gurriny needed to complete various pieces of work required by CHHHS/QH and/or Government that necessitated the engagement of external consultants. Despite it being expected that Gurriny would meet such requirements, there was frequently no additional funding or resource support provided for these efforts. Participants from CHHHS who were involved with the transition acknowledged a lack of resourcing for both Gurriny and CHHHS as a factor that hindered the transition process.

Participants also identified the inappropriateness of the costing method used when determining the funding that CHHHS would transfer. To cost the funding needed for services, CHHHS commissioned an external auditor to review the funding used to deliver PHC in Yarrabah. However, it was recognised by CHHHS participants that this service costing method was problematic. One participant talked about the costing method being very conservative and mentioned the potential bias based on the CHHHS conflict of interest, with the pressure to make the transition cost neutral. The amount of funding provided to

Gurriny was based on this assessment rather than a consideration of what services Gurriny would deliver. Differences in the cost of Gurriny's model of care and possible service delivery improvements were not considered. Neither was there an assessment of the needs and demands of services in Yarrabah to inform the funding decision. CHHHS did not include any funding for doctors due to industrial negotiations which were occurring, despite recognising that doctors in CHHHS did perform general practice duties. Furthermore, the funding transferred was based on actual expenditure rather than the operational budget, and actual expenditure was less. This resulted in the funding support from CHHHS being both inappropriate and insufficient.

"that was one of my biggest gripes was when they did the costing for Yarrabah, they said there was no doctors in primary health care… We didn't get any funding for doctors to come over." (Gurriny staff)

"they said, 'this is 'x' amount of dollars…This is what you're gonna get given and this is what you've gotta do to deliver that care.' I would like them to now re-look... because we're doing more than what we're funded for… If someone could come back and say, 'well actually… you are delivering more care than was anticipated when we gave you this small amount of money.' This is actually what it costs and this is what you should be funded for to deliver that care… because Queensland Health said, 'well these are the positions. Four nurses and a number of Health Workers. You will deliver this, this and this.' But we're doing triple that amount of work on whatever that budget is." (Gurriny staff)

"an external auditor was brought in to develop an analysis of how much money the H.H.S. (hospital and health service) spent. There was a very strong drive from the H.H.S… that we weren't going to give Gurriny any more money than we actually would save by not providing that service… And I would say that at the time, that probably coloured the audit and we commissioned that audit… The auditor was appointed by the H.H.S. So I suspect that a conservative approach may have been taken in that." (ex-CHHHS staff)

Lack of Information Sharing

Problems with information sharing between Gurriny and CHHHS have been a significant barrier to successful service collaboration. Although there were many attempts to find solutions to the client information sharing issue over the years, it continues to be a significant and ongoing concern. For example, an MOU was signed between doctors in 2009 to support medical record sharing between the services; however, medical records needed to be physically retrieved which was time-consuming and hampered efficient service delivery. One solution which has been attempted is the use of a consent form to allow client information sharing; however, this has not resolved the issue.

The complexities inherent in this challenge were raised in 2010 when the decision to allow CHHHS staff to use Gurriny's client information system were being discussed. Concerns included: a lack of clarity regarding whether the software would be able to produce the information required for CHHHS reporting, therefore causing potential funding risk exposure; doubts about its ability to separate activities performed by CHHHS and Gurriny; doubts about its ability to separate Medicare billing; and a lack of clarity regarding who would own Medicare billing revenue. Despite these concerns, the CHHHS CEO made the decision to share medical records while the services were co-located. However, following this decision, the Nurses Union advised CHHHS nurses to only use paper records, so once again effective information sharing was obstructed. To this day CHHHS continues to share Gurriny's client information system, but nurses do not.

"it was constant head-butting right up til twenty thirteen when… (the) CEO of Cairns Hospital at the time said, 'enough is enough. We cannot go on with these separate records. We must have one record because we continue to compromise patient care'" (Gurriny staff)

Challenges Transitioning Staff

One of the major challenges was the transitioning of CHHHS staff. The process of determining how to transition staff across to Gurriny and what to do with staff who would not work with Gurriny was an unprecedented industrial dilemma. For much of this stage of the transition, there was no clear plan for how to proceed with CHHHS staff. Additionally, there were challenges due to the differences in organisational cultures and values and different models of care, which meant that not all CHHHS

positions would transition. The process was disturbing for staff and had a significant impact on careers. The process was complicated by the fact that there was strong resistance from CHHHS staff to the transition, as discussed elsewhere. This resistance contributed to some CHHHS staff not wanting to work for Gurriny.

In the end, CHHHS/QH decided to offer redundancies to their staff members in Yarrabah because it was considered the smoothest approach to staff transition. This was because of issues with staff entitlements and differences in award wages between the two services. However, the conditions of the redundancies stated that those who took one had to wait three months before they could apply for positions in Gurriny. In the meantime, Gurriny needed to fill their workforce requirements and therefore employed people temporarily for the 3-9 month period. This was a dilemma for Gurriny which impacted on their provision of care and achieving a smooth transition. In the end, only two former CHHHS staff decided to transition across to Gurriny. Though Gurriny did their part to facilitate the transition of CHHHS staff through engaging them and providing the opportunity for them to apply for positions after the transition, Gurriny were quite powerless in this situation. In the end it was a negotiation between CHHHS/QH, their staff, and their union representatives, irrespective of the impact that the decision had on Gurriny's capacity to provide service continuity.

"it was a real pain but we worked out if they were made redundant… they had to not work for three months… so what we could do is, we would only put on staff for three months to fill positions, to keep the wheels chugging along and then we would advertise the permanent positions and if a Queensland Health staff was interested in applying, they were welcome to apply. There was no guarantee they'd get the job but we would hold off on recruiting permanent positions until they were eligible to apply. Which is what we ended up doing." (Gurriny staff)

Service Interruptions

Only months before transition, government cuts to remote location benefits such as travel, meal and remote location allowances meant that CHHHS started having difficulty recruiting nurses. In response, they removed nurse positions from PHC programs, including child health, maternal health, sexual health and triage nurses, keeping them for the ED. Although these were programs that were set to be transitioned, the lack of nursing staff meant that there was a period where they weren't operating. In response, Gurriny contacted the QLD government Health Minister who gave the directive that CHHHS re-employ nurses. However, locum staff were recruited, and so there was very patchy, disjointed service delivery for the several months leading up to and immediately post the transition. Gurriny staff experienced these issues as disrespectful and stressful.

Resistance to the Transition

There was a sense of doubt about Gurriny's capacity and a concern that they would not be able to cope with the health issues in the community and that the quality of care would be affected. Many CHHHS staff members felt that, contrary to the perspective of many people in Yarrabah, they were delivering good services and achieving good results, and that Yarrabah didn't need community control. The open criticisms of CHHHS service delivery by Gurriny staff and the lack of recognition of the positive work CHHHS was doing may have contributed to the resistance expressed.

However, CHHHS staff were also concerned about how the transition would affect them personally. People were worried about losing their jobs, accrued benefits and leave entitlements. It was also a very personal thing for many people because the community desire for community control was tied into direct criticisms of the work that was being done by CHHHS. The message was that CHHHS wasn't delivering a good service. This resistance seemed to have spread from CHHHS staff to other people in the community through word of mouth. Although it is difficult to distinguish CHHHS staff resistance from community resistance, there was a lack of confidence from some parts of the community that Gurriny could successfully take control of PHC in Yarrabah, and a fear of losing services.

One expression of this CHHHS staff resistance to the transition was through the service integration efforts that were prioritised around 2009/2010 when co-location was being planned. At this time, Gurriny was challenged by CHHHS representatives who were working towards joint service delivery as opposed to community control, including setting strategic directions of health programs. One CHHHS

staff member employed at the time openly acknowledged that their focus was on service integration, on trying to create one collaborative agency, and that they did not fully support the transition.

"some of our local mob, they didn't want to transition… People like don't want to change, people like where they are you know. And of course they were worried about their entitlements as well. They'd been with Queensland Health many years" (Gurriny staff)

"I learn of community control because of my understanding of it. I was not happy I suppose… I could not see Gurriny work. I could not see community control working. I was like, '…but we have everything. Why are we changing?" (ex-CHHHS, current Gurriny staff)

"we worked really, really hard… we got sick of being told that Queensland Health don't do anything well in regards to health… in Indigenous communities… We were doing really, really good things" (ex-CHHHS staff)

"everything was about 'we are working together. We will no longer be… three agencies" (ex-CHHHS staff)

Experiencing Delays

Delays in the transition process were noteworthy. The Deed of Commitment was signed in 2005, and the initial date agreed upon for transition was 2008 (2010 at the latest); four to six years before the transition actually happened. It is not clear exactly why the transition was delayed for so many years since Gurriny commenced work to address core strategy areas from 2007. One explanation was that 2009 to 2011, when the co-location was happening, was such a difficult, turbulent time that it derailed the transition process, or at least distracted from it. There was also a sense that the co-location strategy derailed the transition process due to its explicit focus on service collaboration and integration, rather than a transition to community control. Around this time Gurriny was experiencing challenges with securing CHHHS/QH commitment to a plan and timeline for transition. The three-phased approach to transition previously discussed may have also contributed to these delays. This phased approach was implemented to allow time to resolve any issues and ensure a smooth transition, and in that sense was planned to go slowly.

Another explanation as to why the transition didn't occur by 2010 was that both Gurriny and CHHHS simply were not ready. As this analysis demonstrates, the transition involved significant amounts of work from all key parties involved. This in itself was likely a substantial contributor to the delays. The set timeframe for transition was June 30 2010, but there had been slow progress in actioning Key Priority Areas which meant this date would not be achieved. Several participants said that prior to setting an official handover date, the transition process was one of taking some steps forward, then some steps back, to the point that it often didn't feel like it was getting anywhere. This indicates the role that uncertainty and lack of clarity played in the delays experienced.

"every time there was a move forward, there was ten steps back" (ex-CHHHS, current Gurriny staff)

"And that's probably one of the issues, is that the transition for Yarrabah just had been coming for a very long time and it just dragged on and it dragged on and it dragged on, and it got to a point that many staff believed it would never happen." (ex-CHHHS staff)

Lack of Certainty and Clarity

Uncertainty and a lack of clarity regarding many different aspects of the transition acted as a barrier throughout the process. In particular, the absence of a clear date for transition contributed to the delays. Prior to setting a date, the progression of the transition was contingent on the completion of ever shifting deliverables, and was made doubly difficult by resource limitations and a lack of service cooperation. When the transition date was announced, that was the turning point when the transition started to progress very quickly.

There was also a lack of clarity around the process of transitioning CHHHS staff, and a lack of consistency in the messages and options that were put forward. Various options were contemplated in

the years leading up to the final decision, including the redundancy option that was eventually chosen. A lack of clear communication and clarity about what would happen persisted right to the last minute, resulting in a confusing process.

Furthermore, there was a lack of clarity about the services and funding that would be transitioned from CHHHS to Gurriny. Much of the transition process in stage two occurred without a clear decision about these vital factors. The decision regarding the amount of funding was very delayed, being made only weeks prior to the official handover. This meant that Gurriny had to undertake service planning processes without clarity about the funding available for those services. This delayed Gurriny's process of workforce recruitment because the organisation could not be sure which positions they would have funding for. This was recognised by several participants, including CHHHS representatives, as a major barrier and limitation of the transition.

Participants were adamant that the planning should have started with a clear decision about either the services to be transitioned with funding planned around that, or the funding to be provided with services planned accordingly. They thought that such a process would have helped the transition go more smoothly and could have ameliorated some of the unhealthy power dynamics that played out and the stress caused by the process.

"Gurriny didn't know how much money they were getting, they didn't know what services they could offer, so they couldn't have positions in place, ready to fill, to go into a transparent recruitment process. So people got sacked by the H.H.S. and there was this significant delay before Gurriny was in a position where they could advertise and fill positions because they'd only been told at the last minute how much money they have" (ex-CHHHS staff)

"the best way to balance that (power inequality) … is actually to agree the money up front." (ex-CHHHS staff)

Experiencing Divisions and Conflicts

A major barrier to the transition process was the conflict or sense of division experienced between Gurriny and CHHHS. This occurred in different ways at different levels, perhaps most notably in the interactions and relationships between the staff of the two services. These conflicts and divisions were particularly evident during the co-location years from 2010/2011 until the official handover in 2014 when there were very fractured relationships between Gurriny and CHHHS staff. While it seems that the decision to co-locate was aimed at service integration and collaboration, this change was not managed well and potentially escalated tensions and divisions. The data indicate that this was a very difficult and stressful time for those involved. There was a distinct separation between the services, with no strong sense of the services working together, although co-located in the same building. The previously mentioned open criticism of CHHHS service delivery may have created interpersonal tensions between the staff of the two services. The issues with client information sharing were a key source of tension during this period.

There was also a lack of transparency and trust between CHHHS and Gurriny. Participants identified that CHHHS was not always forthright with information (for example in regard to staff transition) and Gurriny followed this dynamic, also not wanting to divulge unnecessary information. This lack of transparency did not help to foster trust between the organisations and was a hindrance to effective and open collaboration.

"I think what had happened was that when we co-located back in twenty ten, there was a lot of risk. There was a real lot of clinical risk and a lot of just industrial risk… they tried to merge teams and they had two sets of Line Managers and you know, it was just really unpleasant. It was actually creating some little fires and there was lots of assumptions and toxic kind of team dynamics and things going on here all the time." (Gurriny staff)

Having Power Imbalances

There were marked power imbalances between Gurriny and CHHHS/QH. This was a significant source of tension and an underlying factor contributing to many of the barriers experienced, ultimately hindering the effective collaboration so important to a smooth transition. The power imbalance was expressed by participants with emotive language and images such as "David vs Goliath", "Big Brother Queensland Health" and "elephant and the mouse". CHHHS representatives also acknowledged this imbalance of

power and suggested that a clear early agreement regarding the amount of funding to be transitioned would have helped to minimise this.

The power imbalance that existed between Gurriny and CHHHS was a core, underlying barrier which set the tone of the relationship between the two organisations right from the beginning. This inequality was evident in relation to access to resources and decision-making power, and was apparent in the decisions regarding how to deal with CHHHS staff and the costing of the services. This power imbalance was also a product of the cultures of each organisation, as well as the broader government, social, and political contexts within which the transition occurred.

"We held the power in this relationship. There's no questioning that." (ex-CHHHS staff)

"When you're trying to move a dragon it's really hard. Like the Queensland Health Department is like a dragon and it's stuck in its ways." (ex-Gurriny staff)

Not Trusting Gurriny's Capacity to be in Control

A lack of trust by CHHHS/QH in Gurriny's capacity to be in control existed at various levels, and was expressed in multiple ways. This was a fundamental barrier underlying many other barriers, not just leading up to, but also following the transition. Concerns about Gurriny's capacity were not unfounded, considering the enormity and complexity of running such a large PHC service and the relative lack of experience within Gurriny. One CHHHS staff member, who was reticent about the transition, expressed strong concern regarding the lack of knowledge and experience within Gurriny. Yet it was unclear how truly willing some CHHHS staff were to support Gurriny in building this knowledge and capacity.

Many participants identified that CHHHS was sending an underlying message that Gurriny was going to fail and that CHHHS was going to have to step back in. This belief is supported by attitudes apparent in CHHHS, that while community control may have been a good idea, Gurriny just didn't have the necessary experience, knowledge and skills. The Deed and Lease agreements, discussed in stage three, were seen as a demonstration that CHHHS felt the need to stay in control because of an assumption that Gurriny was not going to succeed. What is clear is that there was a significant amount of scepticism within CHHHS about Gurriny's capacity. This included mistrust in their staff, governance model, and the organisation as a whole. Additionally, trust was diminished by the perception that there were assumptions made by CHHHS, particularly about the potential of building capacity in Gurriny, while simultaneously providing minimal support to build that capacity.

"I mean the hidden message underneath that was, 'we're gonna keep tentacles involved in this because they're probably gonna fall over and we'll have to step back in.'" (Gurriny staff)

"we believed we had a stronger clinical governance approach than a community-based organisation and we never actually thought to test whether that was true or not" (ex-CHHHS staff)

"you had many people playing the politics of 'this is community driven and led'. Like I agree in the principle but if you're going to give it to people that actually understand health and have some skills and knowledge I think. 'Cause there's risks behind that if you don't." (ex-CHHHS staff)

Reluctance to Let Go of Control

The power imbalances experienced and the resistance expressed by CHHHS staff indicates that there was a reluctance on the part of CHHHS to completely relinquish control over the delivery of PHC to Gurriny in Yarrabah. There was a strong perception among several participants that there was reluctance from QH to letting go of decision-making about how PHC would be delivered in Yarrabah. While it is clear that funding and responsibility for service delivery was transitioned in 2014, full control and community influence over these services was not.

This reluctance to relinquish control can be seen in the Operating Deed which sets out the legal relationship between the two services. The Operating Deed was written to protect QH from potential risk

of market failure; it was described by participants as one-sided, risk-averse, judgemental, protective, demanding, hand-holding, unilateral, paternalistic and overbearing. A major issue with the Operating Deed is that Gurriny needs to provide CHHHS with all its data and reports, being accountable to QH for every aspect of service delivery, despite QH funding only 25% of the services delivered. QH also leases the building to Gurriny and is therefore in the position of landlord, and wants to have oversight over health and safety and security issues. The level of oversight and control QH has over Gurriny still demonstrates a lack of trust in Gurriny's capacity to operate the PHC services effectively in Yarrabah.

"The Deed of Operations… was incredibly one-sided, judgemental and demanding from the Queensland Health side and absolutely when you considered they were providing less than twenty per cent of our funds, they were wanting all the data set, all of the knowledge, all of the on - asked us to jump through hoops of fire, for that, when in fact, when you look at the amount of money that was coming into Yarrabah at that time for the Health Services, Gurriny got a tiny drop in the ocean of that." (ex-QH, current Gurriny staff)

"we talked about the elephant and the mouse, whether the elephant is willing to give up that power… over to the mouse. And in all cases they will resist it, 'cause it's a shift in power... I think any organisation or institution around the state would have that same challenge around shifting the mindset of the machinery of government on power and control because they're robotic. They don't want to give it up." (ex-Gurriny staff)

"I did feel a little bit that Queensland Health were perhaps not being as helpful as possible in the transition… I do feel perhaps that they weren't that willing to let go" (ex-CHHHS, current Gurriny staff)

"I think it was just around that territorial stuff. Queensland Health always did this – we always did it this way and it was just that fear that community organisation was coming in and just letting go." (ex-CHHHS staff)

Context

It is important to identify the complicated broader context that affected the key barriers faced by Gurriny during the transition. The contextual factors are grouped into two core themes: being failed by "the system"; and lack of clarity around the transition process.

Being Failed by the System

The way that Gurriny experienced many of the barriers in relation to challenges with CHHHS was that they were almost intentional, occurring because CHHHS considered that Gurriny could not succeed, and further, that CHHHS did not want it to. However, the data indicates that the barriers and challenges between the two services were likely less intentional, and more a result of the system and its failures. This includes the organisational system that is CHHHS/QH, but also the broader political systems that heavily influence the organisational context. In this sense, Gurriny and the transition were not supported by the system in some key ways.

Lack of Support in the QH Environment

Participants revealed that there was a significant lack of support for the transition process in the CHHHS/QH environment. This manifested in a number of ways, particularly: through a lack of dedicated leadership and resourcing within CHHHS/QH; through those who were involved being consumed by other priorities; and through CHHHS prioritising CHHHS needs in the transition. All of these manifestations of the lack of support from CHHHS/QH were also heavily impacted by challenges in the broader policy and funding environment that shaped the CHHHS/QH organisational context, capacity and priorities.

Lack of dedicated leadership and resourcing
One factor which acted as a fundamental hindrance to the success of the transition process was the lack of dedicated leadership to oversee and progress the transition from within CHHHS. While Gurriny had a dedicated transition manager position, CHHHS had no equivalent. Someone was responsible for managing the transition process from within CHHHS; however, this role was in addition to their

dedicated responsibility for a very large portfolio beyond the transition, which meant they were limited in the focus they could give it.

In fact, many of the CHHHS staff involved with the transition and the organisation as a whole, had other competing priorities which took precedence over the transition, or conflicted with those of Gurriny. Gurriny and CHHHS were in very different positions in regard to their ability to prioritise the transition. It was a core focus for Gurriny, who also had a dedicated transition manager for years throughout stage two. Within the large and complex organisation of CHHHS, the transition in Yarrabah was not a priority. Under a recently elected conservative government, CHHHS/QH was also under considerable pressure to put every available resource into delivering services. This helps to explain the lack of resourcing for transition leadership. Other key personnel who may have helped the transition progress more smoothly, such as the legal team, had very limited time to give to such a project.

This lack of dedicated leadership comes back to a resourcing issue. The transition to community control was not resourced appropriately and was not prioritised by CHHHS/QH. One reason for this, as identified by a participant who was a CHHHS leader at the time, was that the transition was not treated as a proper procurement. Any procurement of this size would normally be very well resourced and would have a dedicated manager to oversee the whole process from start to finish. Considering the challenges that were experienced it is evident that the kind of leadership and resourcing enabled by an official procurement process would have helped to ensure a much smoother transition experience for all involved.

"I had carriage for a fairly broad portfolio… I had responsibility for… information, so I.C.T., strategy, planning, performance and Aboriginal and Torres Strait Islander health and I had three people in the Aboriginal Torres Strait Islander health team and I think a total staff of about ten. And I think that actually speaks to the first failing. This is a multi-million dollar procurement over a significant period of time. And in any other procurement of this size, you would actually have allocated a person to managing that... So it was one of those things that got managed when it came up. When there was a need for it to come up, it came up and the rest of the time, to be honest, it wasn't something that we had somebody who made it their full-time priority" (ex-CHHHS staff)

"These things don't happen properly without investment… look at any other change you do to clinical practice, you resource that change. You look at any significant procurement, you resource that procurement. These are big procurements. You wouldn't run any other… procurement that runs into the tens of millions without a dedicated officer doing it… And I think we need to start thinking about it that way because this is not something that somebody can do in their spare time." (ex-CHHHS staff)

Holding the Balance of Power

CHHHS was inherently biased in their role in managing the transition because the money for the transition was coming directly out of their budget. CHHHS was not in a position to truly support Gurriny and the transition process because they had competing needs and priorities. CHHHS was providing funds and responsibility, and was concerned about risk. Its priority was on protecting itself and its funding, rather than supporting Gurriny to flourish, creating equal partnerships, or achieving positive healthcare outcomes for Yarrabah community members. CHHHS was the primary decision maker, yet was highly impacted by the process. This issue was discussed by a participant from CHHHS as a highly problematic aspect of the transition.

One CHHHS leader suggested that the transition process should have been managed by an independent party, such as the Aboriginal and Torres Strait Islander Health Branch of the state government. Having an external, neutral body coordinating the whole transition process, working with both organisations towards a clear and unified goal, would have helped to create more balance of power between Gurriny and CHHHS. Such a balance of power could have had significant impacts in terms of reducing the conflict and challenges that Gurriny and CHHHS contended with.

" 'Cause we had a conflict of interest. We did. Whether we overtly disclosed it or not, we did. We had this pressure of it being cost-neutral. We had… a very aggressive approach to cost control at the time" (ex-CHHHS staff)

Being Limited by the Broader Policy and Funding Environment
The lack of dedicated leadership and resources, which was a major factor underlying several of the barriers discussed, was largely a result of the difficult funding and policy environment of the time. The transition process was occurring during a conservative government term, and due to funding cuts and a cap set on employment, CHHHS/QH was endeavouring to achieve a reduction in employee head count, and was taking an aggressive approach to cost control at the time. CHHHS was under significant budget restrictions, and the staff cuts being implemented created significant stress for the organisation. This helps to explain the removal of nurses from PHC in early 2014 due to the funding cuts that were occurring. Therefore, it is highly unlikely that a dedicated position to manage the transition would have been achievable in this environment.

"I don't actually in retrospect think that we would actually have been given approval to have somebody dedicated to work on this. It was a very difficult time to get administrative staff employed because of the philosophy of the Newman Government and the caps that it had set on employment. And the head-count reduction said it was trying to achieve." (ex-CHHHS staff)

Getting Bogged Down in Government Bureaucracy
The bureaucracy of government meant that making decisions was a slow, convoluted process. It often involved going back and forth between sub-committees and lawyers for so long that meaning was lost and people involved could no longer make sense of the process, frequently with nothing eventuating. This unresponsive bureaucratic system not only disempowered Gurriny, but also diminished the ability of CHHHS staff to be able to seek and implement creative solutions to issues being faced.

Not only did this bureaucracy severely limit the decision-making capacity of managers and leaders in CHHHS/QH, it also resulted in disconnect between the support and policy directives coming from higher up in government with implementation on the ground. Everything needed to be in line with current legislation, policies and procedures, which were frequently changing. Sometimes there was support for a particular action from government and even CHHHS/QH leaders, but then things stalled before they could be implemented due to other policy or legislation which stipulated that action could not be taken. This lack of capacity for reflexivity, innovation and creativity in the machinery of government bureaucracy bogged down the whole transition process for everyone involved, and was a hindrance to effective collaboration between the services.

"I think sometimes when people get into middle management or upper level management in bureaucracies and Queensland Health is a massive one, they just can't make decisions, so they deflect that decision across to a sub-committee that'll look at it for six to twelve months and it drifts into the ethos and gets lost in translation." (ex-CHHHS, current Gurriny staff)

"One of the barriers was that it seemed at like the really high levels of Government… they seemed to support this idea but when you got down to the bureaucrats who were supposed to do it… they then didn't know how to do it and I don't know even if the politicians even understood that they might have some legislation or some policies that are actually gonna stop or impact on what they're saying they want done" (Gurriny staff)

Lack of Clarity about the Transition Process

Aside from the failings of the government and CHHHS/QH systems, another important contextual factor which created barriers to effective transition was the general lack of clarity amongst all involved parties about the process of transitioning CHHHS services to community control. As early as 2008 the issue of limited literature on the process of transition to community control and its barriers, opportunities and outcomes was acknowledged. A lack of expert knowledge around specific areas including HR and IR was also raised as an issue by the Transition Committee in 2009. Progression towards transition was hampered by not having the appropriate state and local level frameworks to support the transition. There was no one clear process that all relevant parties agreed upon.

This was the first time such a transition had been undertaken in Queensland. It was an unprecedented situation, and therefore there was a lack of knowledge and guidance for the process. Hence, politicians who supported the transition were not aware of legislation and policies that could work against it. Similarly, with the complicated process of deciding what to do with CHHHS staff, as it was the first time

anything like it had been done, whilst advice was taken from state based industrial relations experts, policy was being developed as it was happening.

One participant who played an important leadership role with CHHHS acknowledged that neither they nor their team had the correct expertise or experience to oversee the process. Many lessons were learned about how the process could have gone better; however, these were developed with hindsight. This included important lessons such as the need to treat such a transition as a formal procurement. This lack of knowledge and guidance, combined with the lack of dedicated resources and leadership, resulted in poor preparation for the transition. There was also a lack of understanding about and appreciation for community control, what it meant, and why it was so important. Some people involved with Gurriny felt like most CHHHS people never really understood community control and how the inherent self-determination was foundational to Aboriginal development and flourishing

"we had this unprecedented industrial arrangement where we then had to question how staff would transition from one service to another… So we took advice from the Industrial Relations people in Brisbane but it was the first time it had happened, so policy was kind of being developed as it was happening." (ex-CHHHS staff)

"there was nobody in Queensland Health who ever really got community control… right up until twenty fourteen. Like all the guys that we worked with, right from the NUMS (Nurse Unit Manager) and the DONS (Director of Nursing), up to like the C.E.O.'s and all those ones in management – the D.G.'s (Director Generals). They never got it. Ever!" (Gurriny staff)

Internal Barriers

Lack of Experience and Capacity

As already mentioned, the concerns of government and CHHHS/QH about a lack of capacity within Gurriny to manage PHC delivery in Yarrabah were not unfounded. Many Gurriny leaders, including board directors and some key senior managers, had very little experience in health. A lack of expertise in the area of finance, particularly among board members, was also a genuine limitation. This was addressed through recruitment of an ex-officio Board member with financial expertise and capacity building opportunities. Finally, there was more general, organisation wide lack of capacity, mostly associated with being a small, under resourced organisation. There was a lack of resourcing support provided to Gurriny to build its capacity, which acted as a barrier in the transition process.

"the problem that we had all the way through, was that we were just a small organisation and we didn't have the capacity to just churn out all these things that Queensland Health were expecting us to churn out and they were trying to measure us on our ability to provide that documentation, or provide that evidence." (Gurriny staff)

"I think within Gurriny, the process was slow because probably some of the staff I think or maybe the senior staff weren't up to scratch. In some positions… you know you're going to get to a point where you know you can't do any more. And I believe that's what happened with the previous C-E-O. He got to a point where he couldn't do any more so he left." (Board member)

Community Conflicts of Interest

The second internal barrier faced by Gurriny relates to the conflicts of interest that arise from being an ACCHS in a small community. The Gurriny Board is a community representative board, which leads to complexities including cultural, clan, integrity and legitimacy of representation from the community's perspective. Actual and perceived conflicts of interest in the board membership and familial relationships undermined Gurriny's and the Board's reputation. To address this risk, Gurriny assured that all staff members understood the meaning of conflicts and the need to keep familial conflicts separate to business. Conflict of interest forms were also completed at board induction processes and conflicts were noted at each meeting as they arose.

Difficulties Obtaining and Maintaining the Necessary Workforce

Finally, finding and maintaining adequate staffing to meet the workforce requirements was a barrier that Gurriny faced all through the transition process and is reflective of an issue faced in the general

healthcare sector. From 2006-2008, Gurriny struggled to recruit a GP despite extensive advertising and increasing the offered salary. However, despite these challenges, Gurriny was able to meet its staffing requirements and successfully achieved service continuity during transition.

Outcomes

There were several important outcomes that arose specifically through stage two of the transition process. The most obvious was the successful transition of CHHHS PHC services to community control through Gurriny. The official handover occurred at the end of June 2014 and a big celebration day was held in Yarrabah to commemorate this significant achievement. The organisational learning and development achieved by Gurriny in the process of becoming ready to take control of PHC services was a profound achievement. Despite there being a relative lack of experience, expertise and resource support, Gurriny and its staff and leaders rose to the challenge, slowly learning and building capacity from the inside. This increased capacity came hand in hand with an increased workload and responsibility, which grew particularly in the lead up to the transition. For instance, during this period the board had to take on a greatly increased workload and responsibility, having more frequent meetings and being intensively involved in the period leading up to the official transition.

There were also several negative outcomes that came out of this second stage of the transition. Stage two of the transition was the most intensive and challenging and resulted in significant stress, fatigue and burnout for many Gurriny staff and leaders. In particular the challenges experienced with CHHHS as well as the sheer workload required to make the transition happen were extremely stressful. Gurriny realised upon completion of the official handover that many core leaders and staff were burnt-out and fatigued from the whole process. This stage of the transition was described by one participant as "traumatic" for Gurriny.

One other negative outcome of the transition, which was also a major source of stress, was the community conflict between local staff from Gurriny and CHHHS, particularly starting from the co-location and continuing through to the official handover. The resistance to the transition by local CHHHS staff and the challenges around staff transition were ongoing, resulting in conflict in the community which did not stay completely within the boundaries of these organisations.

Significant disruptions for CHHHS staff were another result of the second stage of the transition. Various CHHHS staff resigned during the lead up to the transition, including managers, board members, and general staff. Participants suggested that CHHHS staff loss during this time occurred because of the unhealthy environment that was created with co-location. Also, the process of transitioning CHHHS staff, with the resultant redundancies offered and the lack of interest in working for Gurriny meant that several local Yarrabah CHHHS staff lost their employment, causing disruption to their careers. However, we have limited data on these impacts due to being unable to interview local CHHHS staff who chose not to work for Gurriny.

A final effect in this stage was the wasted resources due to delays in the transition process. Various reports and pieces of consultancy work completed in the early years of this period 2006-2008 became outdated due to the slow progress of the transition and could no longer be used to inform the transition once it progressed.

4.6 Stage 3: Post Transition and Beyond

The final part of this analysis is concerned with the stage of the transition journey after the official handover of funding and services. Although control for PHC in Yarrabah was officially transitioned to community control by Gurriny on June 30, 2014, this was by no means the end of the transition journey. The first six to twelve months following the official handover was a period of significant organisational adjustment for Gurriny. Different challenges with QH remained a barrier in the years following the handover, some of which continue to this day. This was also a period of important growth and development not only within Gurriny as an organisation, but also in the wider Yarrabah community. Reflecting on the changes that have occurred over the four-year period from transition in 2014 until 2018 when this study was conducted, it is evident that the transition has resulted in impressive outcomes that have disseminated across the entire Yarrabah community and beyond.

Strategies

While the bulk of the data was focussed on stage two of the transition journey, there were a range of strategies that emerged from the analysis concerning the post transition journey. These include strategies undertaken within Gurriny to improve its services and organisational culture. They also include strategies focussed on development beyond Gurriny, in the wider Yarrabah community and elsewhere.

Continued Growth and Development

One of the primary strategies implemented by Gurriny post-transition has been the continued growth and development of the organisation and its services. Gurriny has continued to explore ways to improve and expand the type and scope of services delivered. For example, to increase service attendance, Gurriny health teams now send reminders to clients of appointments and provide transport to appointments. Gurriny has also started to provide health checks in the workplace, such as for Yarrabah Council staff, to help reduce the barrier for people who cannot attend during work hours. The service is exploring options for offering after hours' services.

Gurriny is also looking to expand their services. Current efforts include a refocussing on SEWB and mental health through the establishment of a healing centre to provide mental health care. Gurriny is also exploring ways to expand dialysis care capabilities in the community and improving continuity of care for dialysis patients. Another key focus is addressing the social determinants of health, which it plans to do through a new Youth Hub for which funding has been secured. Other areas of organisational development include: developing new models of care to strengthen services; improving the business model; using Medicare funds to support workforce stability and expansion; human resources processes focussed on change management and restructuring teams; and improving and building new infrastructure.

"at the moment we're working on a whole new model of care… that really shows the inter-connection between all the programs and staff as well and demonstrating that in a diagram... We're really looking at ramping up a lot of our infrastructure. So we continue to put in more funding applications for money to fix this place up and build the Youth Hub." (Gurriny staff)

Table 7: Stage 3: Post Transition and Beyond

July 1st 2014 - Present
KEY EVENTS • **July 1st 2014 PHC services were in Community control** • **Issues with QH funding being paid late and in arrears in the first few months following transition** • **All Gurriny positions had been filled by December 2014** • **Bentley's conducted their follow up review of Gurriny in 2015, 6 months after transition** • **The Yarrabah Leadership Forum exploring opportunities to increase community control of other programs and services guided by Gurriny's experience** • **Operating Deed set to expire in June 2019**
CONDITIONS • **Successful transition of PHC services and funding from QH to community control through Gurriny**
STRATEGIES • **Continued organisational growth, development, improvement and expansion** • **Improving Gurriny's organisational culture** • **Strengthening the local workforce** • **Engaging the Yarrabah community** • **Improving relations with QH** • **Strengthening whole of community leadership** • **Influencing the broader ACCHS sector**
ENABLERS • **Strong leadership** • **Research partnerships** • **Gurriny growth, improvement and success** • **Ongoing negotiation and collaboration between Gurriny and QH**
BARRIERS • **Funding being paid late and in arrears** • **Ongoing issues with client information sharing** • **Divisions between the services** • **Risk averse and paternalistic Operating Deed and Lease Agreement** • **Some workforce and funding instability**
OUTCOMES • **Community support for and pride in the community controlled PHC service** • **Demonstration of Gurriny/Yarrabah capacity** • **Further development of Yarrabah leadership capacity and community control** • **Increased Medicare income** • **Instability in QH Nurse workforce**

Improving the Work Culture

Post transition, Gurriny has taken action to improve the work culture of the organisation. This has included efforts to foster connection between staff, respond to conflicts, and develop team building processes to help rebuild connection, improve communication, and create stronger teams. It has also included professional development workshops with Gurriny managers, to better understand different leadership styles and build cohesion between leaders. Finally, Gurriny has undertaken efforts to embed trauma informed care models into the organisation for both clients and staff. This has included delivering a trauma informed care workshop with staff, developing a trauma informed organisational model and analysing policies and procedures which may or may not support such a model.

"this healing foundation gave us some funding and we used some of that to do a trauma informed workshop with our staff. It was two-fold. It was looking at models of care and how we would work with our clients, and then it was also about the organisation and how we look after each other and trying to look at what sort of policies and procedures that we have in place that may or may not be barriers or enablers to helping people with trauma." (Gurriny staff)

Local Workforce Development

Gurriny has also focussed effort on improving local workforce development. To achieve this, a range of approaches are being planned or are already in action. These include: succession planning for SMT; building local leadership capacity through mentoring, shadowing and training; improving career pathways for Gurriny staff; supporting local community members into senior management roles; and supporting local community members into training in medical professions including allied health.

Engaging the Community

The process of engaging the Yarrabah community is ongoing. Gurriny continues to communicate with the Yarrabah community through its newsletter, Facebook page, health forums and events, and through promoting membership. Gurriny takes a pro-active approach regarding attendance at services, with health teams offering transport and reminders. While health promotion teams are focussed on encouraging people to take greater control of their own health, Gurriny also does work educating community members about the services available, the difference between PHC and ED, and about Gurriny's holistic, comprehensive PHC model.

Improving Relations with CHHHS

An important strategy following the official transition which continues today was to improve relationships between Gurriny and QH. Gurriny has looked at ways to strengthen the relationship with CHHHS, improve service collaboration, and enable real partnership between the two organisations. One way this is being achieved is through the establishment of a joint working group to replace the previous Operating Deed, which is due to expire, with a new Deed that recognises Gurriny as an equal partner in service delivery in Yarrabah. Specifically, Gurriny is negotiating for an Operating Deed that stipulates reporting and compliance requirements that are appropriate to the funding component that CHHHS provides. Gurriny is also looking for ways to improve service collaboration and coordination with CHHHS; for example, through improving discharge processes with the hospital to allow for better continuity of care; and exploring options to allow the Gurriny Maternal Health Nurse to support Yarrabah women in child birth at the Cairns Base Hospital. Improving relations and service collaboration between Gurriny and QH is an ongoing process which will continue while both organisations are servicing the Yarrabah community.

Strengthening Whole Community Leadership

An expansion of community control and a strengthening of whole community leadership is currently occurring in Yarrabah. The Yarrabah Leadership Forum is focussed on addressing the social determinants of health through the pillars of health, education, law and order, housing and economic development. The leadership forum is a community-wide effort to increase community say in and control over the design and delivery of services in each of these spaces. Learning from Gurriny's experience of organisational and leadership capacity development, Yarrabah is focussed on strengthening collective leadership and action toward a united vision for community development in Yarrabah. The community has already been successful in securing four years of funding to pilot a community-controlled employment and training service. There are currently plans to set up local enterprises to: strengthen local economic development; establish a school council and strengthen the capacity of the parents and citizens committee to support community voice in education; and create opportunities for community led events and projects in the music and arts industry, such as transferring the management of the Yarrabah Band Festival to community members.

"When we did the Leadership Forum, there's five pillars, and one of those pillars is health... one's law and order, one's education, one's economic development… Each one fundamentally is about the community having a greater say in the design and delivery and accountability levels for each of those spaces." (Gurriny staff)

"Yarrabah Leader's Forum's trying to build that capacity and trying to be a bit more unified in their leadership so we have a whole Yarrabah shire representation of addressing a lot of our issues. So we don't (do) things in isolation. We do it as a collective." (ex-Gurriny staff)

Influencing the Broader ACCHS Sector

Since the transition, Gurriny has been providing advice and support to other ACCHSs which are also looking to transition government PHC services to community control. This has included communities in Palm Island, Mt Isa, the Torres Strait and Cape York. Being the first organisation to transition and having done it successfully, Gurriny plays an important leadership role for other ACCHSs which are considering following a similar path. These organisations can learn from Gurriny's experience about what worked well and what could be done better. They have also been able to provide lessons for QH/Government services to better support further transitions to community control.

4.15 Enablers

There are several enabling factors that have supported the process of organisational consolidation and development post-transition. The strong leadership that was so crucial to building Gurriny's organisational capacity and progressing the transition through stages one and two have continued to be an important enabler in stage three. Gurriny's leaders continue to shape Gurriny's current and future directions, further developing and strengthening the organisation.

> *"It's an ongoing process, that restoration? I think we've been really fortunate to have some really good people… who bought a lot of knowledge and a lot of calmness and a lot of acceptance." (Gurriny staff)*

Research partnerships, such as with this project, continue to play an enabling role in the development of Gurriny. They help to build the evidence base for Gurriny's model of community-controlled healthcare. Success and improvement in the organisation motivates and enables Gurriny to keep going. This has been an important process to help heal from the stress of the transition, helping people to feel like the difficult times of transition were worth it. The success, growth and improvement in Gurriny provide a positive reinforcing loop, contributing to more success and growth, allowing Gurriny to go from strength to strength.

Finally, there has been continued negotiation and collaboration between Gurriny and CHHHS since the official transition to deal with any issues arising, find solutions, and make sure things run smoothly. Such collaboration has continued, for example, through the working group which was established to re-negotiate the Operating Deed. High-level committee meeting minutes from December 2014 demonstrate that representatives from both CHHHS/QH and DoHA were present and engaged in the transition process and negotiations about the service level agreement, KPI reporting agreements and issues between Gurriny and CHHHS. Other initiatives implemented to enable collaboration between Gurriny and CHHHS included: fortnightly clinical leadership meetings and weekly doctor's meetings to address poor communication and understanding between CHHHS staff and Gurriny staff; Transition Steering Committee meetings; and regular CEO to CEO meetings.

Barriers

Ongoing Challenges with QH/CHHHS

Challenges with CHHHS have continued to be the most significant barrier for Gurriny since the official handover of funding and services. A major challenge experienced by Gurriny was the late payment of funds by CHHHS. Gurriny had allocated eleven positions to be paid with CHHHS funding leading up to the transition date but CHHHS didn't pay the funding or respond to the invoices sent for the first three months following transition. CHHHS funding was also being paid at the end of the month as opposed to the beginning of the month. These issues created very significant financial burden and threatened to push Gurriny to insolvency.

Other key barriers in stage three stemmed from issues that were present through much of the transition journey, and which seem no closer to being resolved. In particular, progress with client medical record sharing has been stalled due to concerns regarding consent and confidentiality, despite agreement on the solution of getting clients to sign mutual consent forms for the exchange of information. A system was recently implemented where discharge summary information from the previous night is made available to Gurriny the following day; however, patients are not given a copy of their consultation

record to bring to Gurriny. This is an example of the way that bureaucratic processes continue to hinder collaboration between the two services. Similarly, there are ongoing challenges regarding the sharing of resources. For example, Gurriny is not able to use the CHHHS ultrasound machine despite still being housed in the same building. There is still a very clear division between the services that impedes the provision of healthcare for the Yarrabah community. Furthermore, the lack of prioritisation and dedicated resources continued post transition.

"once we transitioned in July, those positions came across but in reality what Queensland Health then did, didn't pay their first monthly remittance for those positions until the September of that year so Gurriny was almost pushed to bankruptcy because they had once again, good faith and employed people but the funds weren't there because Queensland Health didn't pay." (ex-CHHHS, current Gurriny staff)

Internal Barriers

Gurriny has also continued to experience a range of internal barriers which hinder service provision and development. While Gurriny was able to meet their staffing requirements and successfully achieve service continuity during transition, issues with workforce stability and development are one of the most significant barriers faced post transition. Ensuring sufficient, appropriately qualified staff is an ongoing challenge. For example, there is instability in the nursing workforce, as well as organisational vulnerability associated with weak succession planning for core senior management team members. The lack of appropriately qualified and experienced local community members remains an ongoing challenge to local capacity development and succession planning for increased local leadership. Gurriny recognises the need to continuously review staffing needs and in particular plan for the succession of senior management staff.

Impacting on these workforce challenges is a lack of funding stability. Some key positions in Gurriny do not have permanent funding, leading to instability and stress for those staff members, as well as instability for the programs and services they provide. Lack of funding is also a barrier to service improvement. For example, one challenge for Gurriny and QH is that some community members still present to ED after hours for PHC because they cannot access Gurriny's services during the day due to work commitments. Gurriny would like to offer extended hours services and the staff accommodation necessary to provide this, but is held back by a lack of funding. Finally, Gurriny is also limited by insufficient infrastructure, with the organisation having outgrown the allocated building space. To continue developing the organisation and growing the services to meet demand, Gurriny needs new infrastructure.

Outcomes

There were a range of positive outcomes achieved in the third stage of the journey following the official transition. Perhaps one of the most important was the level of community support achieved. Following early doubts and misgivings by some community members, the outcomes that have been achieved in terms of local employment and capacity development have resulted in a strong community acceptance of and pride in Gurriny as Yarrabah's PHC provider.

Through the successful transition and the successful delivery of services since, Gurriny has demonstrated its capacity to itself, to the Yarrabah community and to other stakeholders within and beyond Yarrabah. Gurriny has proven itself more than capable of providing an effective, high quality PHC service, which has strengthened confidence in the leadership capacity not only of Gurriny, but the Yarrabah community more broadly. Gurriny is playing a key role in the Yarrabah Leadership Forum, as the core exemplar of what can be achieved through community control. The Yarrabah Leadership Forum demonstrates strengthened whole of community leadership, with impressive outcomes already being seen for Yarrabah community development and increased community control. Gurriny leadership extends beyond Yarrabah, supporting other ACCHSs that are looking to transition to community control and generally playing an important role in the development of the ACCHS sector in Australia.

Other outcomes achieved in stage three include an increase in Medicare revenue. In 2017, Gurriny's Medicare revenue was $1.75 million. This extra revenue has given Gurriny greater financial stability and autonomy, supporting the employment of extra staff and the purchasing of equipment. Also, despite the

challenges experienced between Gurriny and CHHHS following the official handover, some participants talked about the effective collaboration that has been achieved between the services. Greater clarity with regard to roles, with CHHHS as ED provider and Gurriny as PHC provider, has helped to build respect between the services and develop clear collaboration processes such as referral and triaging.

Stage three of the transition also saw some negative impacts on both QH and Gurriny. Participants talked about it being a challenging process for CHHHS staff, letting go of delivering PHC programs and adjusting to being a purely ED service. This and other factors have likely contributed to an instability in the CHHHS nursing workforce, which has increased following the transition. Not having PHC programs makes it less enticing for nurses to work for CHHHS in Yarrabah. This workforce shortage has meant that CHHHS has to rely more on locum staff, which has impacts on relationships with community members.

"So we had this euphoria that we finally we were in charge and we could get on with it, but then what we discovered was that we had some really fatigued staff and we had some fractured relationships internally amongst us." (Gurriny staff)

Overall Transition Outcomes and Impacts

Data from participant interviews and historical documents indicate a range of outcomes and impacts that have been achieved as a consequence of the transition of management and delivery of Yarrabah's PHC services to community control. These outcomes and impacts are in addition to and compliment those identified in the outcome analysis that was also completed as part of the evaluation. These include achievements in healthcare and service delivery, organisational outcomes and positive community impacts.

Healthcare and Service Delivery Outcomes
One of the principle positive impacts achieved through the transition has been the engagement of Yarrabah community members in their healthcare. Gurriny has seen strong engagement from patients living with diabetes and other chronic diseases. Some participants talked about seeing an increase in people taking control of the management of their conditions through self-initiating health checks and making improvements in their lifestyle and diet to manage chronic health conditions. Participants also noted really positive engagement from young people in the young person's health checks, as well as having success with adult health checks. Service enhancements implemented which encourage this strong client engagement include: providing transport to get people to their appointments; and proactive follow with patients, for example by visiting people's homes if they don't attend appointments.

With their strong multidisciplinary care teams and visiting Allied Health Specialists, Gurriny are providing the Yarrabah community with truly holistic, comprehensive PHC. Aside from the suite of comprehensive PHC delivered directly by Gurriny which includes maternal health, child health, chronic disease care, sexual health, and SEWB, patients have access to a wide range of visiting specialists including: dentist; diabetes educator; dietician; dermatologist; exercise physiologist; endocrinologist; gynaecologists; obstetrician; paediatrician; podiatrist; psychologist; and physiotherapist. Gurriny are also in the process of expanding and improving their SEWB care services to include more mental health care.

The stability of Gurriny's workforce allows for strong continuity of care and supports the building of trust between staff and patients. There is trust, rapport and mutual respect between doctors and service users which has been built over time, and the medical workforce stability means that Yarrabah community members do not have to tell their stories again and again. The service model of having local Health Workers facilitate the multi-disciplinary team care and support clients through their patient journey also helps to establish trust between service users and other medical professionals. Some participants believed that this continuity of care has helped to increase awareness among clients of key health risks and concerns, and has been instrumental in supporting service users to be more proactive around managing their health.

Gurriny's services have been built based on a community health profile and are therefore responsive to community health needs. Having community input into the service through board members helps to ensure that the organisation remains responsive to the community. Having Yarrabah's PHC under community control has also provided the autonomy needed to be creative in exploring and testing

approaches to improving healthcare access and quality. Gurriny is constantly reflecting on their services and outcomes, and looking where improvements are needed. The autonomy of being community controlled allows the organisation to be to adapt and change rapidly in response to what works and what doesn't.

Organisational Outcomes

There were also several positive organisational outcomes achieved through transitioning PHC control to Gurriny. These were particularly seen in Gurriny's workforce. The transition has created new jobs in the Yarrabah community with Gurriny being the second largest employer in Yarrabah. Around 70-80% of staff are local people and increased local employment has been achieved through roles such as Health Workers, drivers and administration. Significant stability in the medical workforce has also been achieved. Gurriny has had a stable GP workforce of seven or so doctors for the last 2 years, since transition, and many doctors have been with Gurriny for many years. Gurriny has a good patient to doctor ratio, with less patients per doctor than the national standard. This helps to support strong patient doctor relationships and continuity of care.

Following the transition, Gurriny has also achieved strong staff satisfaction. Some participants who previously worked for CHHHS and were unsure about the transition have since begun working for Gurriny and expressed feeling very happy with the change. Gurriny staff reported feeling satisfied doing work where they are really at the centre of community, and that his community orientation is very different to their experience with CHHHS. Staff appreciate working in a supportive, stress free environment where there is respect, confidence and good working relationships with other staff. Gurriny have achieved strong commitment to the organisation and the community from both local and non-local staff.

The process of transitioning to community control supported increased capacity, empowerment and self-worth for Gurriny staff. This was seen right throughout the whole transition process. Gurriny's organisational growth and development has provided lots of opportunities for the development of local staff capacity. The simple fact of being employed by Gurriny has been empowering for some staff. Being given opportunities to show that they can achieve and succeed in the Gurriny workforce has led to increased self-worth. Gurriny actively support the development and empowerment of its workforce through the professional development opportunities available. This increased local capacity is also achieved through training of the board of directors.

Other organisational outcomes achieved through the transition to community control include: successful research partnerships and research output; improved HR policies and procedures; improved governance through strengthened financial and operational governance, the maintenance of accreditations, and changes to board membership and training; improved management of health data; improved coordinated clinical care; and improvements in health data capture, storage and reporting.

Community Outcomes

Finally, the transition to community control in Yarrabah also resulted in several positive impacts for the Yarrabah community. The transition had contributed both directly and indirectly strengthened community engagement and empowerment across the Yarrabah community.

Increased community empowerment can be seen in the strengthened local leadership that is being demonstrated through the Yarrabah Leaders Forum. The entire transition experience was a major learning experience which is available to the whole community. Yarrabah's leaders are taking the lessons learnt from Gurriny's journey and applying it to organisational growth and development in other areas, such as employment and training. In this way the transition to community control of PHC has accelerated community and organisational development and capacity building. The local Leadership Forum has contributed to a strengthening and unification of community leadership and vision to address Yarrabah concerns and meet Yarrabah needs. Yarrabah is building a strong and unified local vision for development in a range of areas, including housing, education, and employment and training which has been enabled by Gurriny's process of transition.

Increased empowerment has been noted on many levels in the Yarrabah community following the transition. Not only has the transition helped to support increased empowerment among Gurriny staff and Yarrabah leaders, but also in the broader Yarrabah community. The transition of PHC to community control has given the Yarrabah community increased confidence in their capacity. Based on

the example Gurriny provides, the Yarrabah community knows they can be in control of their own services, that they can run complex organisations, and that they can do it with incredible success.

Gurriny has also achieved strong community engagement following the transition to community control. The majority of Yarrabah community members use Gurriny's services, including hard to reach groups such as youth and men, and the service is starting to see improvements with people taking control of their own health. The transition has helped to create a true sense of community ownership over their own health care. Gurriny is owned and run by Yarrabah, for Yarrabah, and this is felt by the community

Broader community engagement is seen through the Yarrabah Leaders Forum, as well as the Yarrabah Youth Forum which has had strong attendance and engagement in the previous years. Many people in Yarrabah feel that they have a voice, that they will be supported in their ideas, and that they can have an influence and impact in their community. This has helped to create hope for the future among Yarrabah community members. Indirectly through its impact on community empowerment and engagement, the transition to community control has helped to create hope that things can change in Yarrabah, on both a personal level through improved health, but also on a whole of community level.

Other positive impacts of the transition for the Yarrabah community include the strengthening of the local economy through local employment. Increased local employment has positive social and financial impacts for employees' families and more broadly in the community. Not only is more money being spent in and circulated around the community, but employed locals also act as financial and social role models for others in the community.

The success of Gurriny's transition has also helped to garner government support and trust in Yarrabah capacity. Gurriny is recognised for its incredible success and achievement and is well-known as a best practice model. Through this, Gurriny and the Yarrabah community, are being recognised more broadly for their leadership and capacity. Gurriny has proven to be a model of success in community control of PHC and there is recognition of this from QH and government, as well as the broader ACCHS sector. Gurriny acts as evidence for governments in Queensland and other states around the country, that community controlled comprehensive PHC is the way to go. Gurriny's experience with the transition as well as their model of care and organisational framework can be applied to support organisational development of other organisations both in Yarrabah and beyond.

Lastly, the transition led to a shift in the balance of power between Yarrabah and government services. Gurriny gained power through the transition, and because Gurriny is and always has been a community organisation, that meant a shift of power, an accumulation of power for the whole community. This is a very significant outcome, representing what is at the heart of the struggle for community control.

5. OUTCOME EVALUATION

5.1 Introduction

The outcome evaluation seeks to verify a causal link between pre-defined activities and outcomes. (NSW government). In the Yarrabah setting, there is a high burden of disease present, and the performance of Gurriny must be measured against this backdrop to fully understand how well the organisation has done.

5.2 Methods

Gurriny data for outputs (client access, episodes of care, Medicare services and workforce), and healthcare performance, health risk factors, and health outcomes were analysed retrospectively from 2012-13 to 2017-18[2] and, where possible, also compared against national benchmarks. The PHC data were extracted from the electronic medical records using in-built software within Gurriny's medical record system and compared with national Online Service Reporting. Data for indicators related to the utilisation of secondary and tertiary healthcare by Yarrabah people were obtained from an external database from CHHHS, Queensland Statistical Services Branch, QH.

The annual national OSR provide information collected annually since 2008–09 from organisations funded by the Australian Government to provide Aboriginal PHC services (AIHW, 2013, 2014a, 2015a, 2016, 2017, 2018a, 2018c). Data collected include the characteristics of these organisations, staffing (both employed and visiting), the types of health services provided and service gaps and challenges, the total number of individual clients seen (both Indigenous and non-Indigenous), and client contacts and episodes of care. Each individual, including visitors and temporary Yarrabah residents, is counted as a client once only, regardless of how many times they are seen. Clients attending group activities only, such as many of those who participate in health promotion or SEWB activities (who do not receive individual care) are excluded from OSR data. Gurriny data were compared with those from the other 265 organisations that report OSR data.

Since 2012, nKPI data have also been reported annually by Indigenous PHC services (AIHW, 2014c, 2014d, 2015b, 2018d; AIWH, 2017). The nKPI monitoring system was funded, in part, to assess progress in addressing the 'Closing the Gap' campaign of the Council of Australian Governments (COAG), and provides indicators of health system performance generated through operational PHC activities. The purposes of the nKPIs are to improve PHC service delivery through promoting continuous quality improvement activity among service providers, and to support policy and planning at the national and state/territory level by monitoring progress and highlighting areas for improvement. The nKPIs cover three broad topics: maternal and child health, preventive health activities, and chronic disease management. In contrast to the OSR data, all of the nKPI indicators, except the two on birthweight, are based on the number of regular clients at Gurriny. A regular client is defined as a person who has attended the PHC organisation at least three times in the previous two years.

External routinely collected data for secondary and tertiary healthcare utilisation by Yarrabah residents, including individual level inpatient and ED data, were sought from the data custodians at CHHHS to understand the relationship between community-level resourcing and its impact on health care utilisation, access and cost. PPHs and ED presentations for Yarrabah residents and their corresponding cost were obtained from the CHHHS Casemix team.

Data on variables of interest (Table 8) were searched for six-month periods (where available) between 1st January 2012 and 31st July 2018. For client variables that are assessed regularly, for example, blood pressure, an average of their systolic and diastolic blood pressure was determined for each period. For pathology results, e.g. glycosylated haemoglobin (HbA1c), if there was more than one result within a six month period, the latest result was included in the study database.

---

[2] National OSR and nKPI reports for 2017-18 are not scheduled for publication until July 2019.

Following extraction of the variables into an Excel datasheet, the results were imported into a Stata database for statistical analysis. Descriptive statistics were used to summarise the data across the time period from 2012-2018. The data were analysed for time trends. Time series data looked both at changes to those achieving targets (e.g. HbA1c <52 mmol/, BP <130/80) as well as changes among cohorts of Gurriny clients, for example a cohort of clients with type 2 diabetes mellitus.

Table 8: Variables of interest from Gurriny healthcare service data

Performance indicator	Variables of interest
Active clients	
Client demographics	Age Gender
Episodes of care per client	Aboriginal health worker contacts, Nurse & midwife contacts, GP contacts
Maternal and child health	Early and regular antenatal care, Birth weight recorded, MBS health assessment (item #715) for children aged 0–4, Child immunisation, Birthweight result, and Smoking status of females who gave birth within the previous 12 months
Preventive health	Smoking status recorded, Alcohol consumption recorded, MBS health assessment (item #715) for adults aged 25 and over, Risk factors assessed to enable cardiovascular disease (CVD) risk assessment, Cervical screening, Immunised against influenza—Indigenous regular clients aged 50 and over, Smoking status result, Body mass index classified as overweight or obese, Alcohol Use Disorders Identification Test – Consumption (AUDIT-C) result, and Cardiovascular disease risk assessment result
Chronic disease management	General Practitioner Management Plan—clients with type 2 diabetes, Team Care Arrangement—clients with type 2 diabetes, Blood pressure result recorded—clients with type 2 diabetes, HbA1c result recorded—clients with type 2 diabetes, Kidney function test recorded—clients with type 2 diabetes, Kidney function test recorded—clients with cardiovascular disease, Immunised against influenza—clients with type 2 diabetes, Immunised against influenza—clients with chronic obstructive pulmonary disease, Blood pressure result—clients with type 2 diabetes, HbA1c result—clients with type 2 diabetes, Kidney function test result—clients with type 2 diabetes—eGFR, Kidney function test result—clients with type 2 diabetes—Albumin to Creatinine Ratio (ACR) and Kidney function test result—clients with cardiovascular disease—Estimated Glomerular Filtration Rate (eGFR).

Potentially preventable hospitalisations	Crude rate, PPH over time, sensitivity analyses by age and admission type
Emergency Department visits	ED visits over time, ED visits by triage rating

5.3 Results

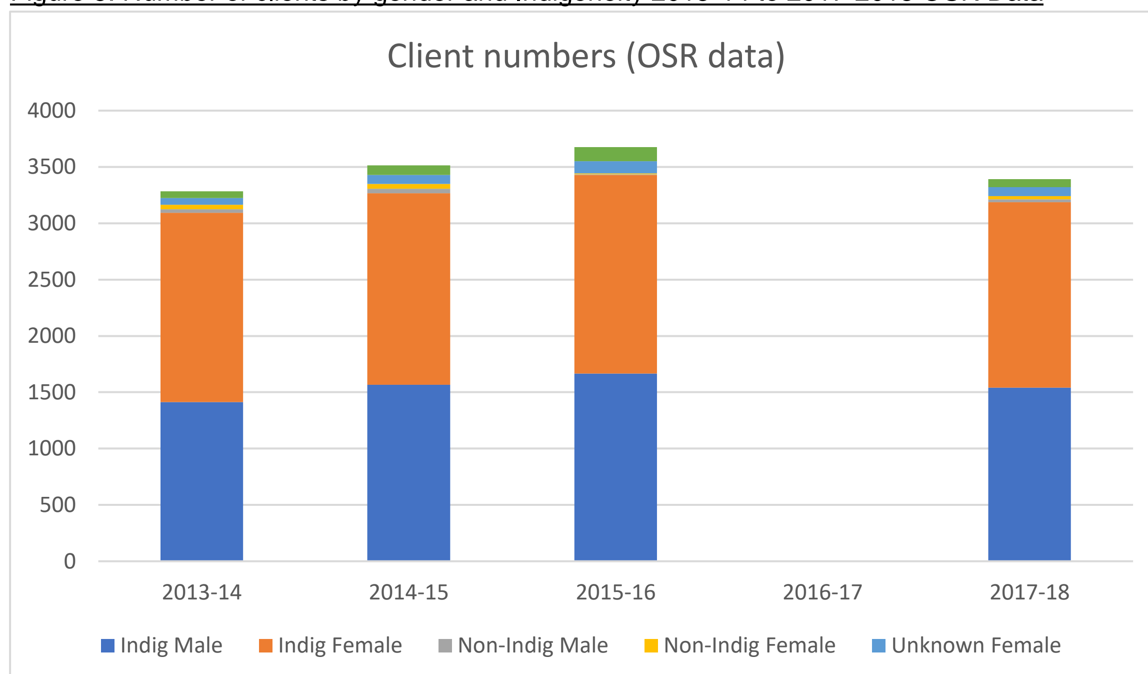
Outputs

Access – client numbers

Gurriny has a growing client population (Figure 5). In the year pre-transition to community control (1 July 2013 to 30 June 2014), the number of clients seen by Gurriny was 3,284. Upon transition in 2014, Gurriny experienced a 7% increase in client numbers to 3,513 individuals (2014 to 2015) and a further increase of 4.6% 3,675 individuals (2015-16). (This was approximately 1,000 more people than reported in Census data for Yarrabah). These rates are similar to national changes in Indigenous clients of 4.2% to 2014-15 and 5.3% 2015-16 suggesting community confidence in the organisation following transition to community control. Subsequent data are not comparable due to a change in the national data generation/ extraction system and the apparent decrease in client numbers in 2017-18 is a function of these changes.

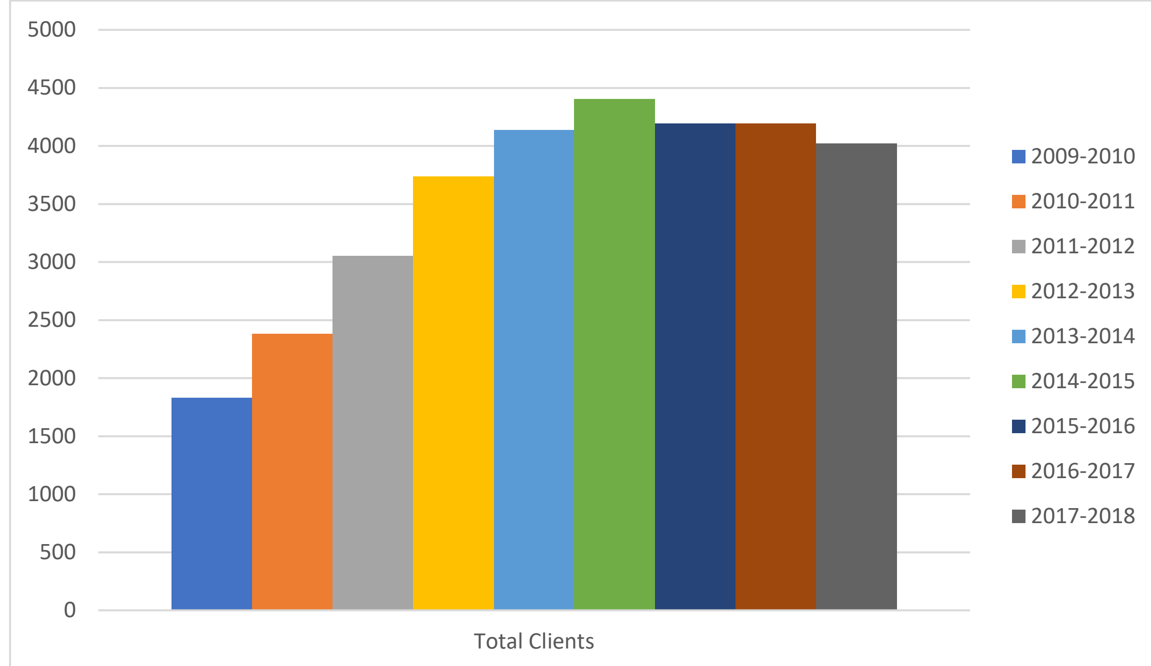
More than 93% of Gurriny's clients identified as being Indigenous each year 2013-14 to 2016-17; compared to 82% of Indigenous PHC service clients nationally who identified as being Indigenous (Australian Institute of Health and Welfare, 2018). There were more female than male Gurriny clients at 2013-14, but there has been a consistent increase in the proportion of male clients from 45.7% in 2013-14 to 48.5% in 2017-18. This demonstrates a successful recruitment strategy of male clients, who have been nationally difficult to engage.

Figure 5. Number of clients by gender and Indigeneity 2013-14 to 2017-2018 OSR Data



Data recorded through Gurriny's in-house PEN Clinical Audit Tool (PEN CAT) records clients seen. Records are available from 2009-2010 until 2017-2018. They show a strong increase from 1,829 clients seen in 2009-10 to 4,405 in 2014-15, followed by a steadying to 4193/4 clients in 2015-16 and 2016-17, and 4022 in 2017-18 (Figure 6).

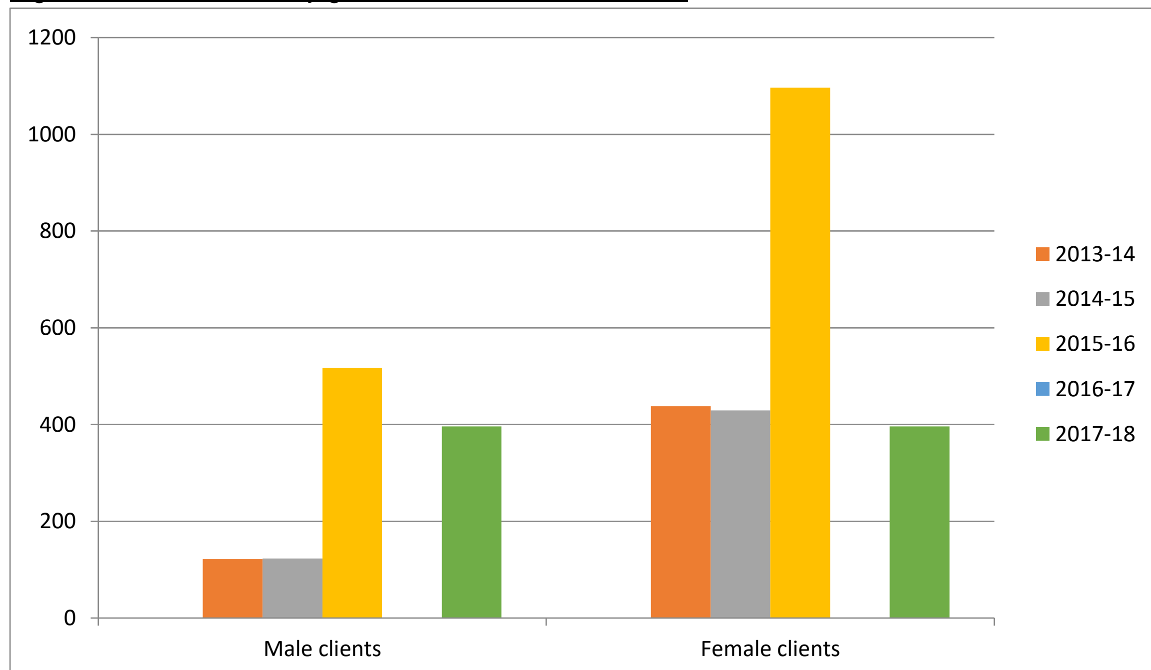
Figure 6. Number of clients by gender 2009-2010 to 2017-2018 Pen Clinical Audit Tool (penCAT) Data



Social and emotional wellbeing (SEWB) clients

Clients attending group activities only – such as participants of health promotion and SEWB activities - are not included in OSR data. SEWB data are maintained through separate patient records. Data indicate that the number of Gurriny's SEWB clients fell slightly from 560 clients in 2013-14 to 552 in 2014-15, increased to 1613 clients in 2015, and fell to 792 in 2017-18 (Figure 7). The spike in numbers of female clients in 2015-16 is likely due to a change in recording of client numbers.

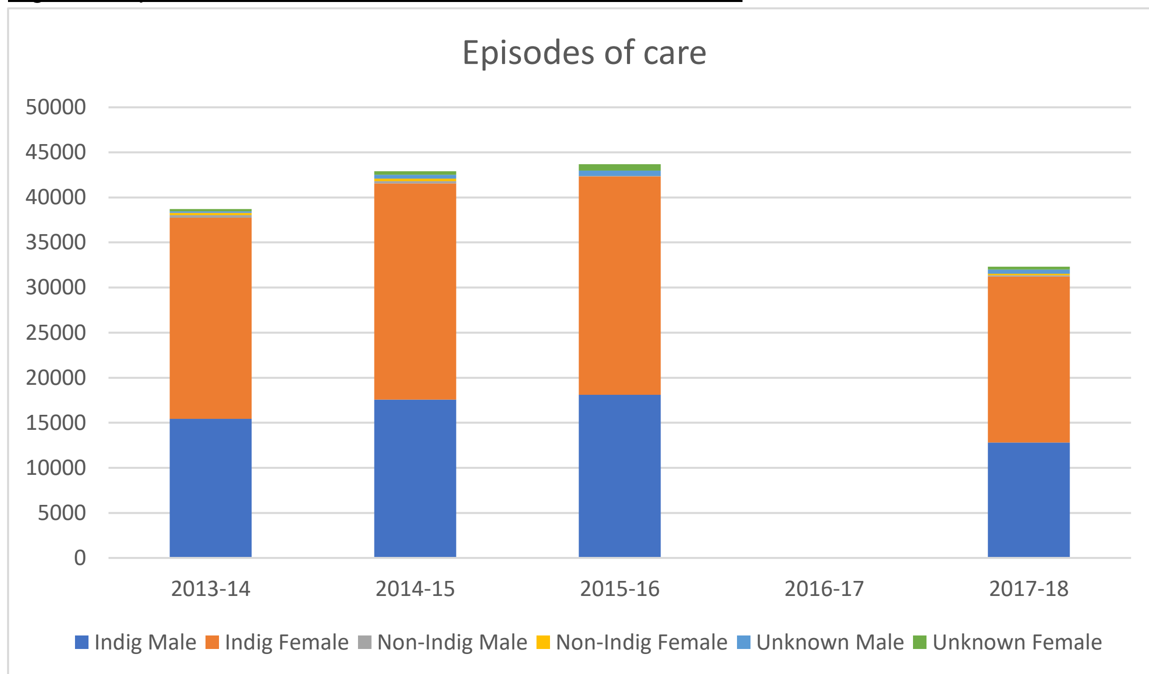
Figure 7. SEWB clients by gender, 2013-14 to 2017-2018



Episodes of care

An episode of care is considered to be contact between an individual client and a service by one or more staff providing health care within a calendar day (Australian Institute of Health and Welfare, 2018). The data for episodes of care also applies only to those who receive individual care – this excludes many participants of health promotion or SEWB activities, administrative contacts and transport-only contacts. The 38,705 episodes of care provided by Gurriny in 2013-14 increased during the immediate transition period by 10.9% to 42,916 episodes of care in 2014-15 and 43,690 in 2015-16 (Figure 8). This compared favourably with the increase in the national rate of episodes of care by 7% from 2012-13 to 2013-14. Again, subsequent data are not comparable due to the push in 2016-17 to enforce the OSR definition of an episode of care, and for greater consistency in the types of contacts included. In 2017-18, Gurriny recorded 32,122 episodes of care.

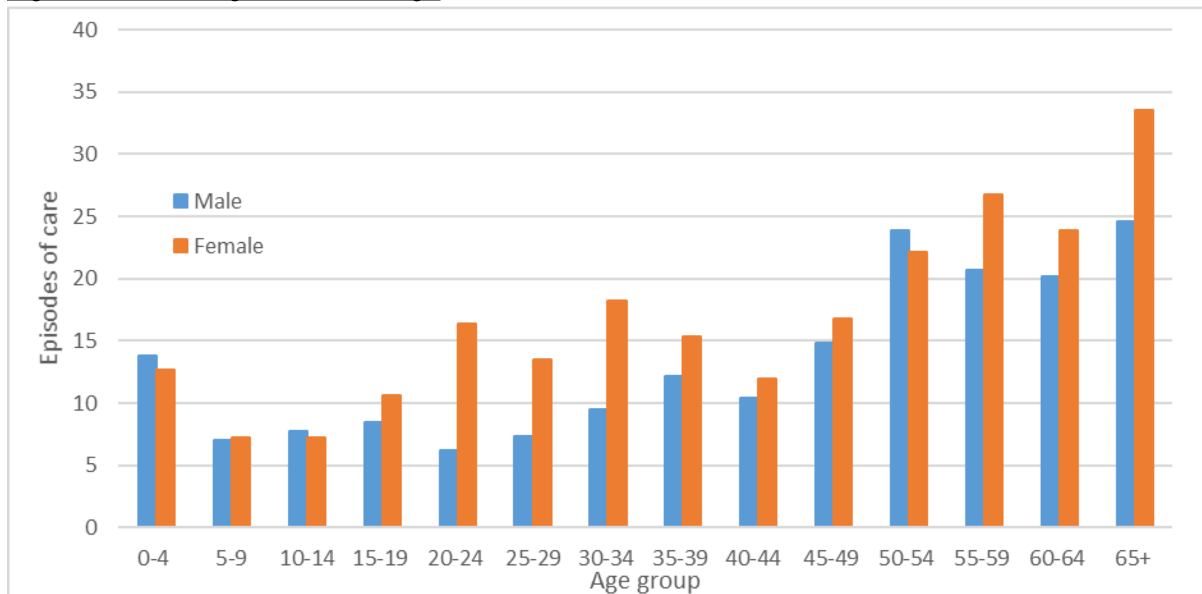
Figure 8. Episodes of care, 2013-14 to 2017-2018 - OSR Data



The average number of episodes of care per client increased from 11.8 in 2013–14 to 12.2 in 2014–15 and 11.9 in 2015-16. The substantially higher number of episodes of care per client than the national average of 8 in 2013-14 reflects Gurriny's effort to achieve high follow up rates for clients. An increase was reported in the episodes of care per client in 2017-18 to 9.5, despite changes to the definition of episodes of care and client contacts through the OSR system.

Based on 2015/16 data, Figure 9 shows the how the age of Gurriny's clients is associated with an increase in episodes of care.

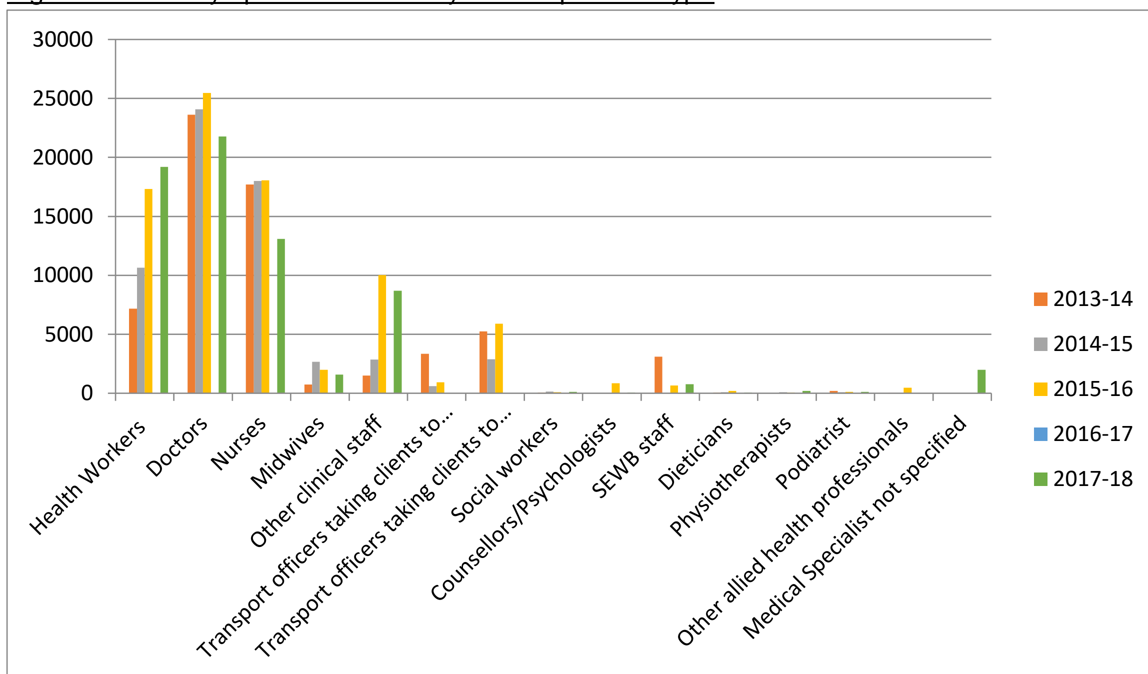
Figure 9: Increasing access with age



Episodes of Care by Service Provider Type

Doctors, nurses and health workers provided the majority of episodes of care at Gurriny. In 2015/16, each client had an average of 12 contacts per year, 7 of these being with a general practitioner. From 2013-14 to 2017-18, an increasing number of episodes of care were provided by health workers. This is consistent with the enhanced focus on team-based care since transition, Indigenisation of Gurriny's workforce, and focus on care delivered in the community through local Aboriginal and Torres Strait Islander people.

Figure 10: Gurriny episodes of care by service provider type



Medicare services

Figure 11 provides an overview of Medicare services claimed by Gurriny for Aboriginal and Torres Strait Islander clients over the period 2011-12 to 2017-18. The key Medicare services included health assessments (Health Check - MBS item #715), preparation of general practitioner management plans

(GPMP - MBS item #721), and development of a team care arrangement (TCA - MBS item #723) and a review of either a GPMP or TCA (Review - MBS item #732).

Figure 11: Engagement with primary health physicians by Medicare service

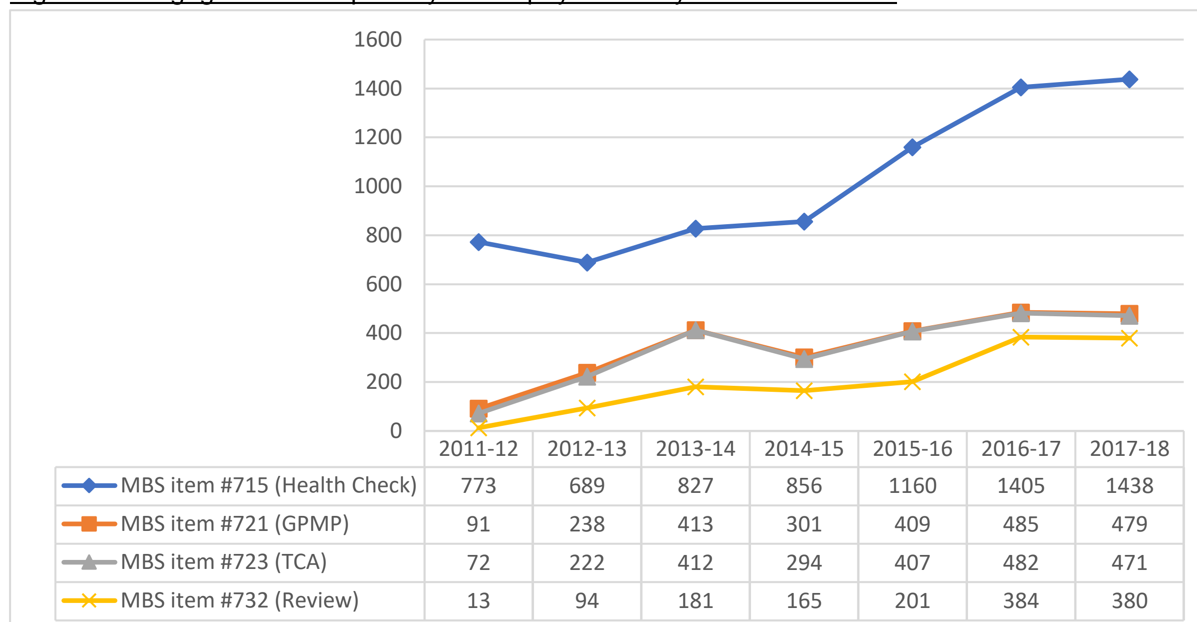


Table 9 provides a comparison of the performance of Gurriny with national rates for 2017-18. Table 9 suggests the rate of service provision for Gurriny clients is considerably above the national average. For example, in 2017-18, Gurriny conducted 577 health assessments (MBS item #715) for every 1,000 people, compared to an Australia-wide average of 367 health assessments for every 1,000 people.

Table 9: MBS services rate per 1,000 people, 2017-18

Service provided	Australian average	Gurriny
Health assessment (#715)	367	577
GP management plans (#721)	110	187
Team care arrangements (#723)	94	184
Review of chronic care plans (#732)	147	148

Note: Population related to 2016 Census for Yarrabah (Total) 2559 population; Yarrabah (Indigenous) 2491 population; by state and territory for Aboriginal and Torres Strait Islander peoples, obtained from (Australian Bureau of Statistics) http://www.abs.gov.au/ausstats/abs@.nsf/MediaRealesesByCatalogue/02D50FAA9987D6B7CA25814800087E03?OpenDocument

Healthcare performance, health risks and outcomes

Maternal and child health indicators

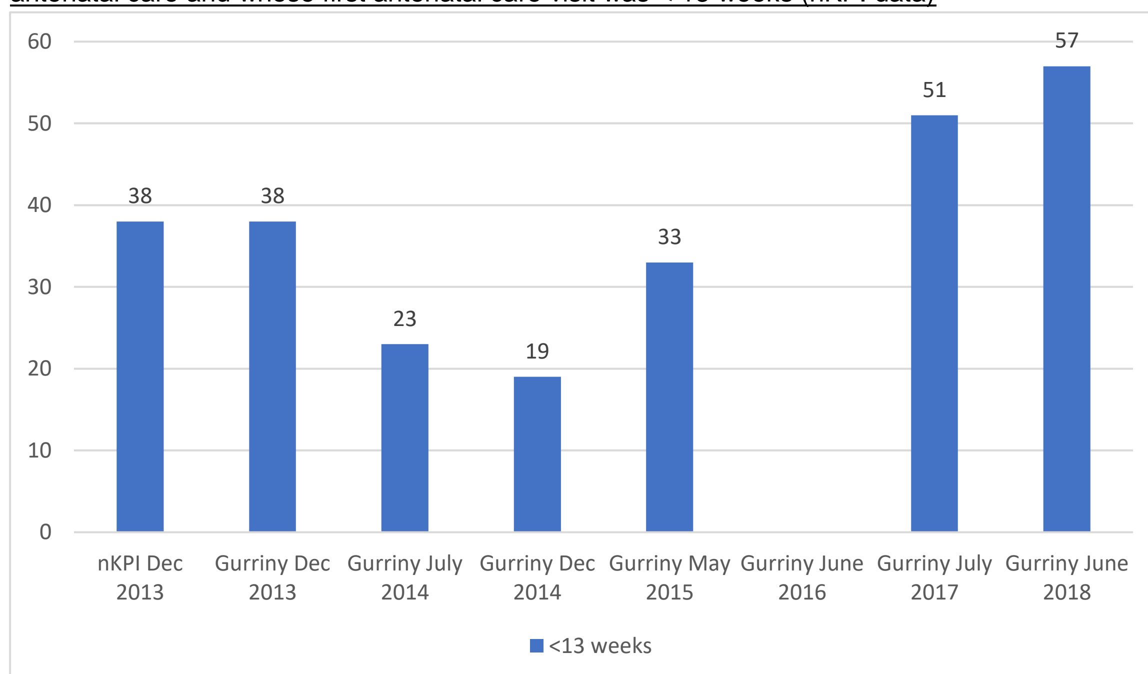
Gurriny provides a range of maternal and child health services to women and children. Providing these services is crucial as nationally, Indigenous women have lower rates of access to antenatal care in the first trimester of pregnancy than non-Indigenous women (49% compared with 67%) (Australian Institute of Health and Welfare, 2015). Furthermore, nationally, the numbers of Indigenous women smoking during pregnancy are high (50%); almost four times the rate among non-Indigenous women (Australian Institute of Health and Welfare, 2015). Indicators related to maternal and child health include: Early and regular antenatal care, Birth weight recorded, MBS health assessment (item #715) for children aged 0–

4, Child immunisation, Birthweight result, and Smoking status of females who gave birth within the previous 12 months.

Early and regular antenatal care

Gurriny started at the national average performance rate (38% in December 2013), fell below the national rate (at 23% of women with first antenatal visit before 13 weeks in July 2014 and 33% in May 2015), but has improved its performance to 57% of regular clients in June 2018 and remained consistently above the national rates for early antenatal visits (2017-18) (Figure 12). The trend was due to awareness-raising programs by the service, including through women's group activities. The data for June 2016 wasn't accurate so cannot be used. In July 2017, 51% of Gurriny's regular clients had their first antenatal visit before 13 weeks of pregnancy (compared to the national average of 39% in June 2017). This increased substantially to 57% of regular clients in June 2018 (no national comparator yet but the Gurriny achievement compares favourably with the national rate of 41% for the closest timeframe available - December 2017).

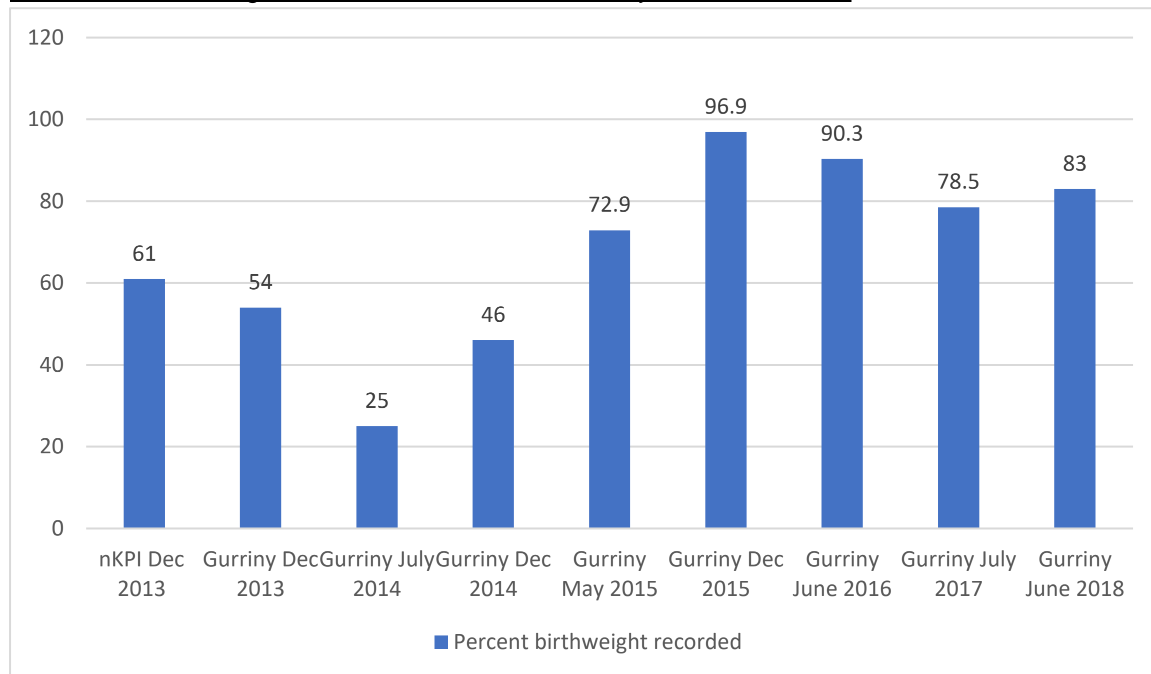
Figure 12: Proportion of Indigenous women who gave birth in the last 12 months and attended antenatal care and whose first antenatal care visit was < 13 weeks (nKPI data)



Birth Weight Record

The nKPI birth weight recorded is intended to improve a health service's awareness of infants that have been born with abnormal birth weight, and to facilitate improved follow-up. The upward trends in nKPI data for recordings of birthweight indicates an improved capacity of Gurriny's data management systems since transition. At 54%, Gurriny scored below the national average of 61% in December 2013. This rate decreased markedly to 25% in July 2014, but significantly improved after transition to 46% in December 2014. By May 2015, Gurriny reported that 73% of all babies born had their birthweight recorded and an almost universal recording (97%) was achieved in December 2015. Since then, the proportion of babies with recorded birthweights has reduced slightly to 90% in June 2016, 79% in July 2017 and 83% in June 2018 (Figure 13). This performance compares favourably with national rates of 69% in June 2017 and 73% in December 2017. The upward trend in nKPI data for recordings of birthweight indicates an improved capacity of Gurriny's data management systems since transition. However, without collecting gestational age or adjusting for prematurity, Gurriny's ability to appropriately follow up the growth and development of an infant is limited.

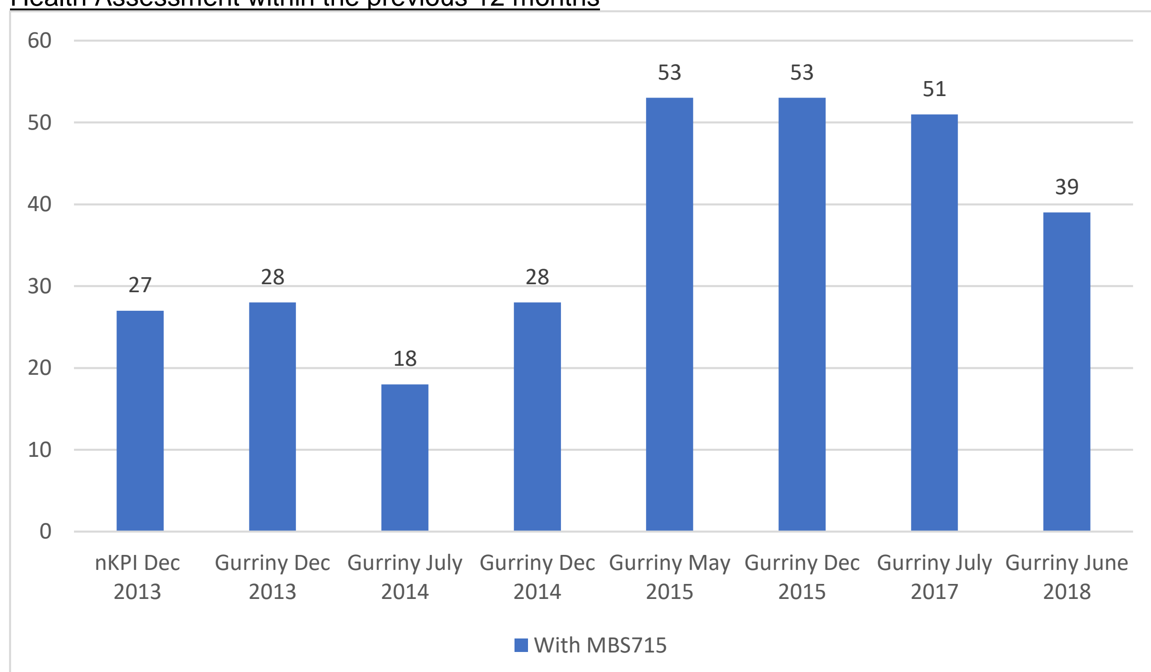
Figure 13: Proportion of Indigenous babies born in the last 12 months whose birth was recorded as live and whose birth weight has been recorded in the baby's medical record



Health assessments (MBS #715) ages 0-4

Gurriny's rate of 28% of children completing a health assessment was similar to the national average of 27% in December 2013. Its rate reduced with the organisational changes of transition to 18% in July 2014 and then improved again after transition to 28% coverage in December 2014, and 53% by May 2015, where it remained steady in December 2015 (53%). Gurriny's rate of 51% in July 2017, and 39% in June 2018 exceeded the national rates of 35% in June and December 2017 (Figure 14). Gurriny's results still exceed the national rates of 35% in June and December 2017. Obviously, however, achieving improved health outcomes requires use of the check to provide anticipatory guidance on healthy lifestyle options, follow up to treat conditions identified in the check, and a parent's decision to adopt the recommended change.

Figure 14: Health Assessments (MBS #715) - Proportion of clients aged 0-4 years who have received a Health Assessment within the previous 12 months

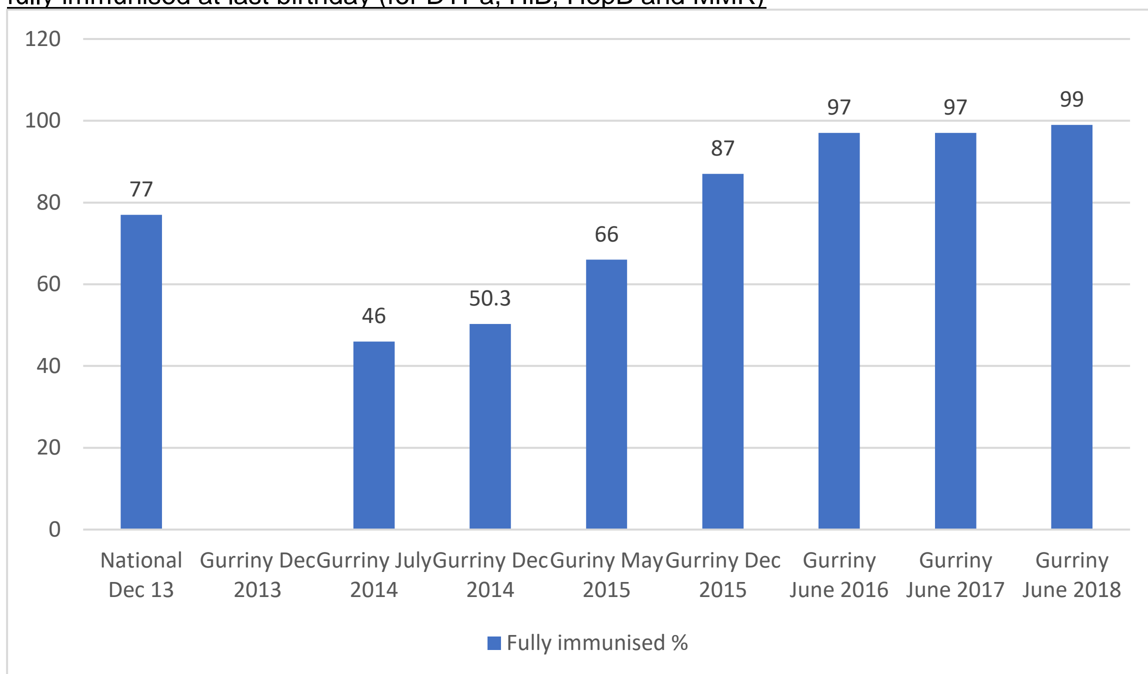


Children who are fully immunised

The records from the Australian Childhood Immunisation Register indicate that about 96% of Indigenous children nationally are assessed as being fully immunised (AIHW, 2018b). The nKPI data indicated that PHC records are capturing 19 to 31 percentage points fewer cases nationally of fully immunised children; considerable variation was found across states with 57% of children immunised in Queensland and 92% in South Australia. The best available data is that from the Australian Childhood Immunisation Register since this is entered in a contemporaneous manner, whereas data for the nKPI may be entered retrospectively, possibly based on a patient's recollection. This strongly suggests that the nKPI data are not the best source of data.

However, nKPI results for Gurriny show that the organisation has improved considerably in this area since transition began. In June 2013, Gurriny recorded 46% of children aged 12-24 months (first half of 2014) immunised; this was less than state and national averages. Since that time, Gurriny has regularly matched or outperformed state and national averages, with 50.3% of children fully immunised at 12, 24 or 60 months in December 2014, 66% in May 2015, 87% in December 2015 and 97% in June 2016 and 2017, reaching almost universal coverage in June 2018 (99%) (Figure 15).

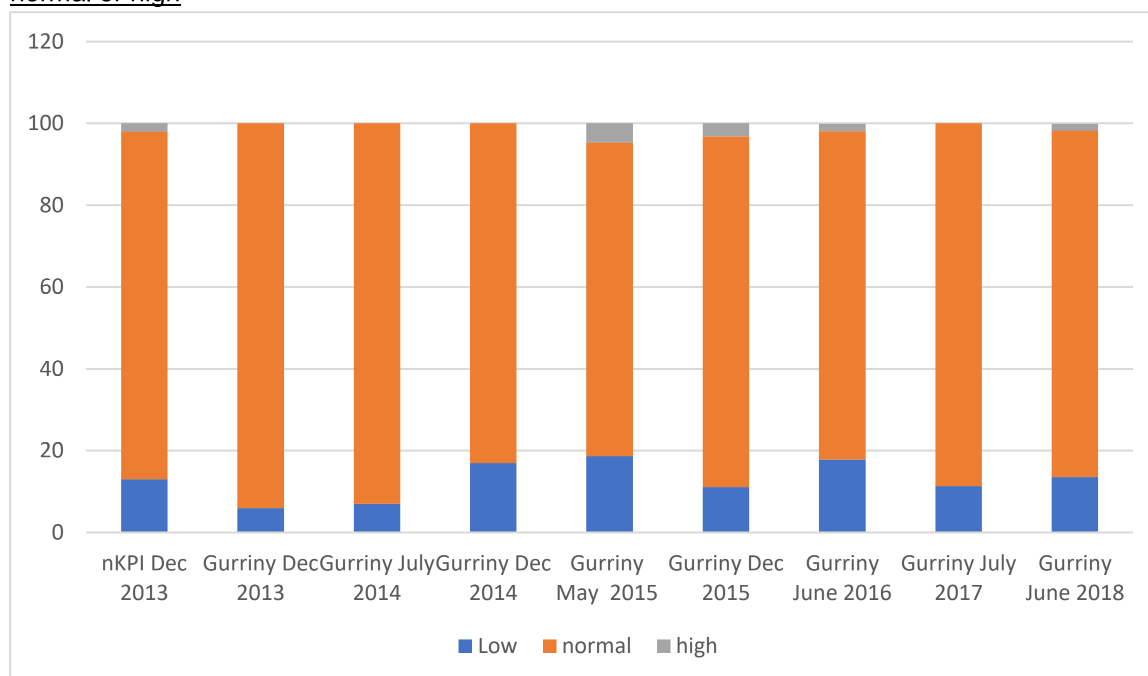
Figure 15: Proportion of Indigenous children with age at last birthday of 12, 24 or 60 months who were fully immunised at last birthday (for DTPa, HiB, HepB and MMR)



Birthweight result (low)

Birth weight is an important health outcome that has impacts on infant morbidity and mortality as well as on adult chronic disease. At December 2013, Gurriny fared better than the national average of 13% Indigenous babies born in the previous year with a low birthweight, showing 6%, but this figure has continued to vary with rates of 7% for low birthweight in June 2014, 17% in December 2014, 19% in May 2015, 11% in December 2015, 18% in June 2016, 11% in July 2017 and 14% in June 2018 (Figure 16). These figures compare with the national figures of 11% Indigenous babies born with a low birth weight in June 2017 and 12% in December 2017. Gurriny is aware of the need to reduce low birthweight through improved antenatal care and addressing other factors including those determinants that are outside of the remit of the health service. For example, young maternal age and high parity have both been associated with lower birth weight in Aboriginal and Torres Strait Islander infants (Humphrey & Holzheimer, 2000). Furthermore, for Gurriny to impact upon modifiable risk factors, clients must adopt interventions that have been recommended following screening.

Figure 16: Birth weight results for Indigenous babies born in the last 12 months - categorised as low, normal or high



Smoking status of females who gave birth within the previous 12 months

As at December 2017, 62.5% of Gurriny's Aboriginal and Torres Strait Islander regular clients aged 15 and over who gave birth in the previous 12 months had their smoking status recorded as 'current smoker'; this compares with the national rate of 50%. Time series data are not available.

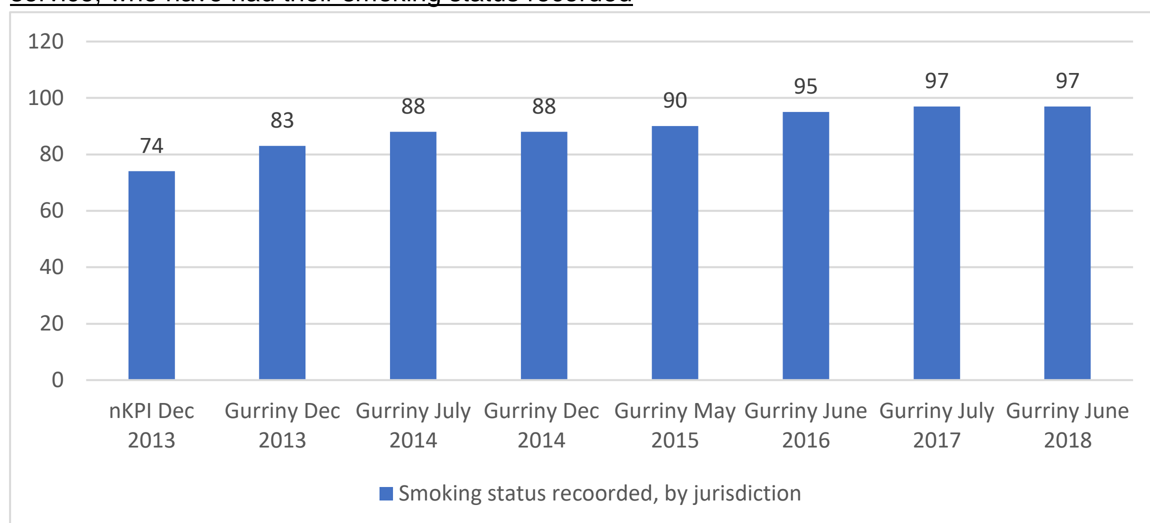
Preventive health

Smoking, obesity and excess alcohol consumption are important preventive health issues for Aboriginal and Torres Strait Islander people and non-Indigenous Australians alike. Nationally available preventive care indicators for Indigenous PHC include: Smoking status recorded, Alcohol consumption recorded, MBS health assessment (item #715) for adults aged 25 and over, Risk factors assessed to enable cardiovascular disease (CVD) risk assessment, Cervical screening, Immunised against influenza—Indigenous regular clients aged 50 and over, Smoking status result, Body mass index classified as overweight or obese, Alcohol Use Disorders Identification Test – Consumption (AUDIT-C) result, and Cardiovascular disease risk assessment result. While the nKPI data provides a timely and efficient method of collecting these data, there are concerns about selection bias, and overestimation of true levels.

Smoking status recorded

Gurriny performed consistently above the national average and consistently improved results on this indicator. Results show a performance of 83% in December 2013 (compared to 74% nationally), 88% in the first and second half of 2014, 90% in May 2015, 95% in June 2016, and 97% in July 2017 and June 2018 (compared to 81% nationally) (Figure 17). The upward trends in nKPI data for recordings of smoking and alcohol consumption indicate an improved capacity of Gurriny's data management systems since transition. More females than males across the age groups have smoking status recorded. Interestingly, women exceed men as current smokers in the 25-34 age group, but men exceed women in the 35-44 group.

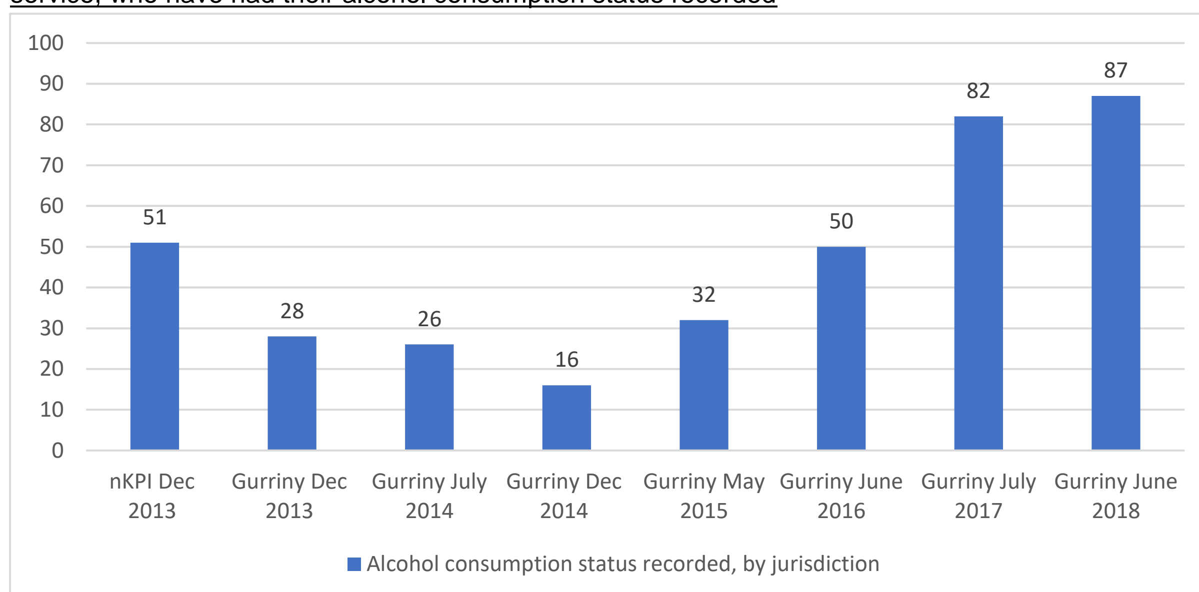
Figure 17: Proportion of Indigenous clients aged 15 years and over who are regular clients of the service, who have had their smoking status recorded



Alcohol consumption status recorded

With alcohol consumption status recorded in the previous 24 months for only 28% of clients in December 2013, Gurriny fell behind the national average of 51%. Decreasing rates were recorded in July 2014 (26%) and December 2014 (16%). By May 2015, recording of alcohol consumption had improved to 32%, and it continued to improve to 50% in June 2016, 82% in July 2017 and 87% in June 2018 (Figure 18). These rates compare favourably with the national rate of 63% in June 2017 and December 2017. The upward trend in recordings of alcohol consumption status indicates an improved capacity of Gurriny’s data management systems since transition.

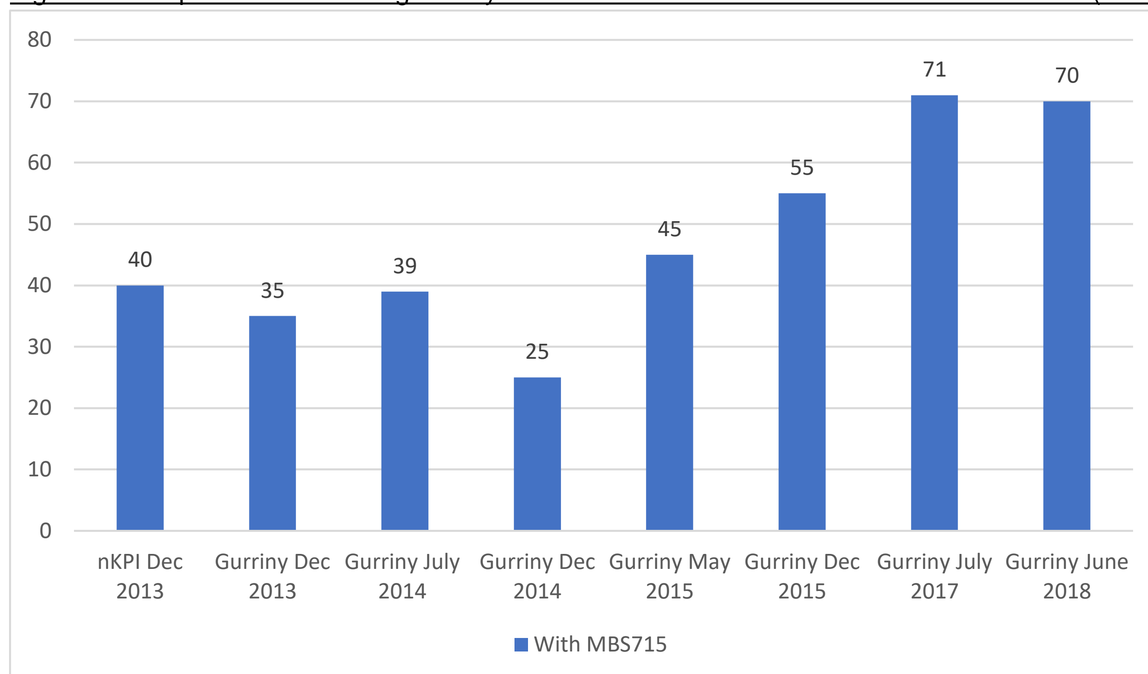
Figure 18: Proportion of Indigenous clients aged 15 years and over who are regular clients of the service, who have had their alcohol consumption status recorded



Health assessments (MBS #715) aged 25 years and over

For Gurriny, the December 2013 result of 35% was less than the national rate of 40% of Indigenous regular clients aged 25+ years who received a health assessment in the past 24 months. This rate improved to 39% in July 2014 but decreased to 25% in December 2014. Gurriny recorded a huge increase to 45% in May 2015, 55% in December 2015, 71% in July 2017 and 70% in June 2018 (Figure 19). This compares very favourably to national rates of 50% in June and December 2017.

Figure 19: Proportion of clients aged 25 years and over who received a Health Assessment (MBS #715)



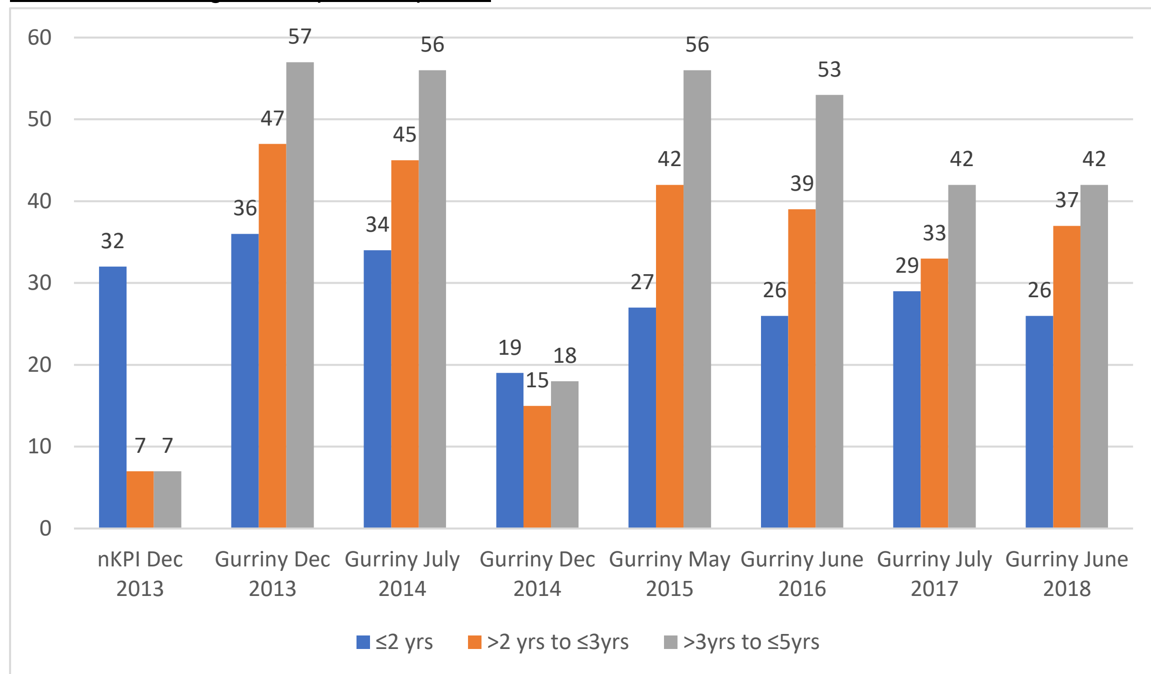
Risk factors assessed to enable cardiovascular disease (CVD) risk assessment

As at December 2017, 81.1% of Gurriny's Aboriginal and Torres Strait Islander regular clients aged 35-74 with no known CVD had information available from the previous 2 years to calculate their absolute CVD risk by age and sex. This compares favourably with the national rate of 47%.

Cervical screening

In December 2013, Gurriny performed above the national average, recording a rate of 36% of female Indigenous regular clients aged 20-69 years who had had a cervical screening in the previous 2 years (compared to 32% nationally). Following transition to community control, screening fluctuated, with 34% of women screened in July 2014, 19% in December 2014, 27% in May 2015, 26% in June 2016, 29% in July 2017 and 26% in June 2018 (Figure 20). These rates are similar to the national average rates of 28% in June 2017 and 27% in December 2017. However, analysis of extracts taken from Gurriny's Medical Director system prior to migration and from Communicare (October 2015) showed that the change of medical records software impacted cervical screening results to the extent that they were considered to be invalid.

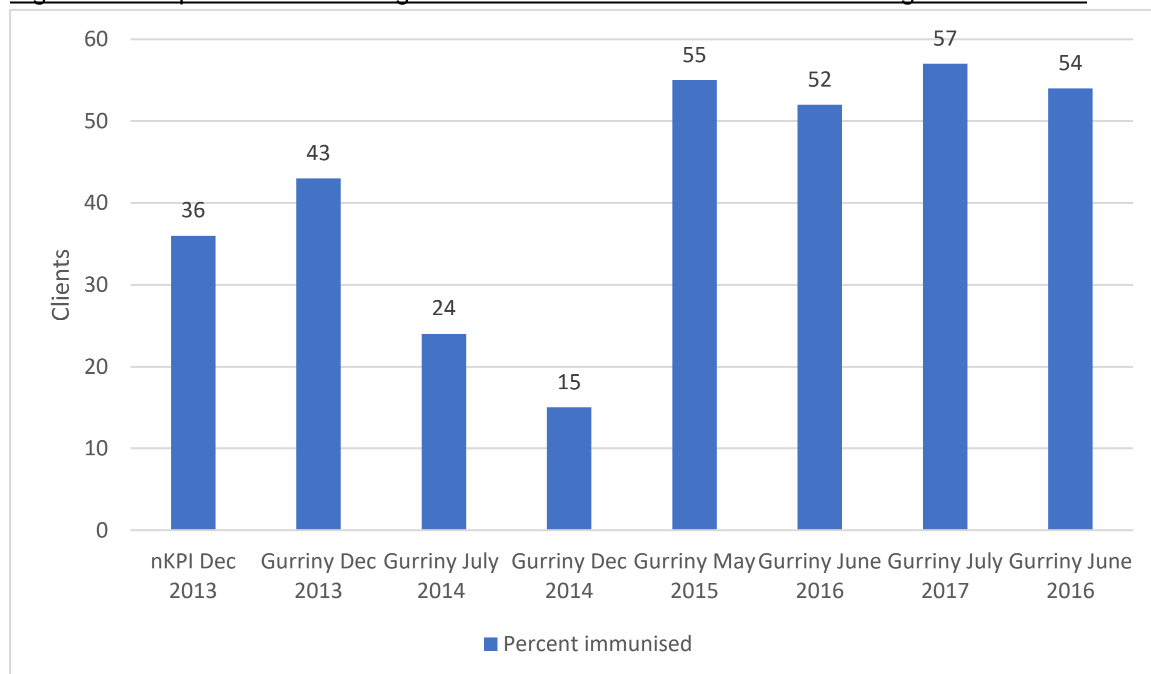
Figure 20: Proportion of Indigenous women aged 20-69 years who are regular clients who have had a cervical screening in the specified period



Immunisation against influenza (flu) in clients 50 years and over

The Gurriny result of 43% of Indigenous regular clients aged 50 and over who were immunised against influenza was higher than the national average of 36% at December 2013. The Gurriny result fell to 24% in July 2014, and 15% in December 2014. However, in May 2015, Gurriny achieved a rate of 55%, and this stabilized at 52% in June 2016, 57% in July 2017 and 54% in June 2018 (Figure 21). These rates are particularly strong when compared with the national rates of 32% in June 2017 and 36% in December 2017.

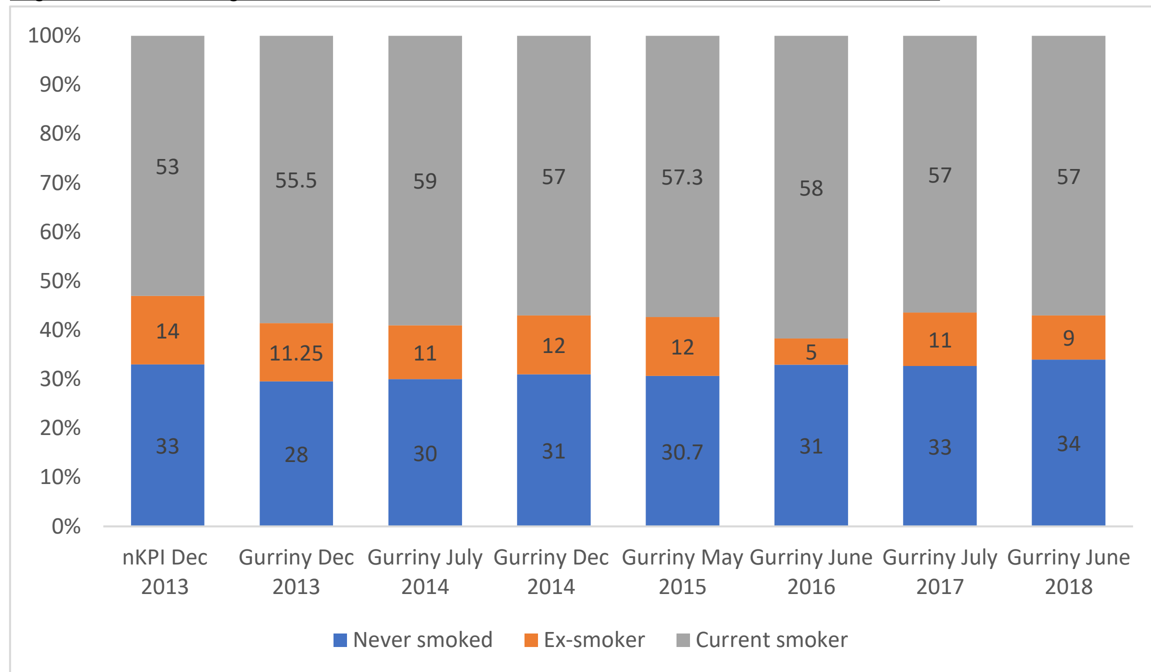
Figure 21: Proportion of clients aged 50 and over and who are immunised against influenza



Smoking status result

There is a well-established association between smoking and poor health outcomes, such as premature mortality from cardiovascular disease. In December 2013, 55.5% of Gurriny's regular clients were current smokers (compared to 53% nationally). In July 2014, the rate was 59%, after which the rate remained stable at around 57% to 2018. This rate compares with the national rate of 52% in June 2017 and 51% in December 2017. One-third (33%) of clients had a smoking status recorded as 'never smoked' in the previous 2 years for both June and December 2017. Improving the smoking status result requires clients to decide to quit smoking – a decision impacted by numerous personal and social influences as well as PHC provision of supports to enable this to occur.

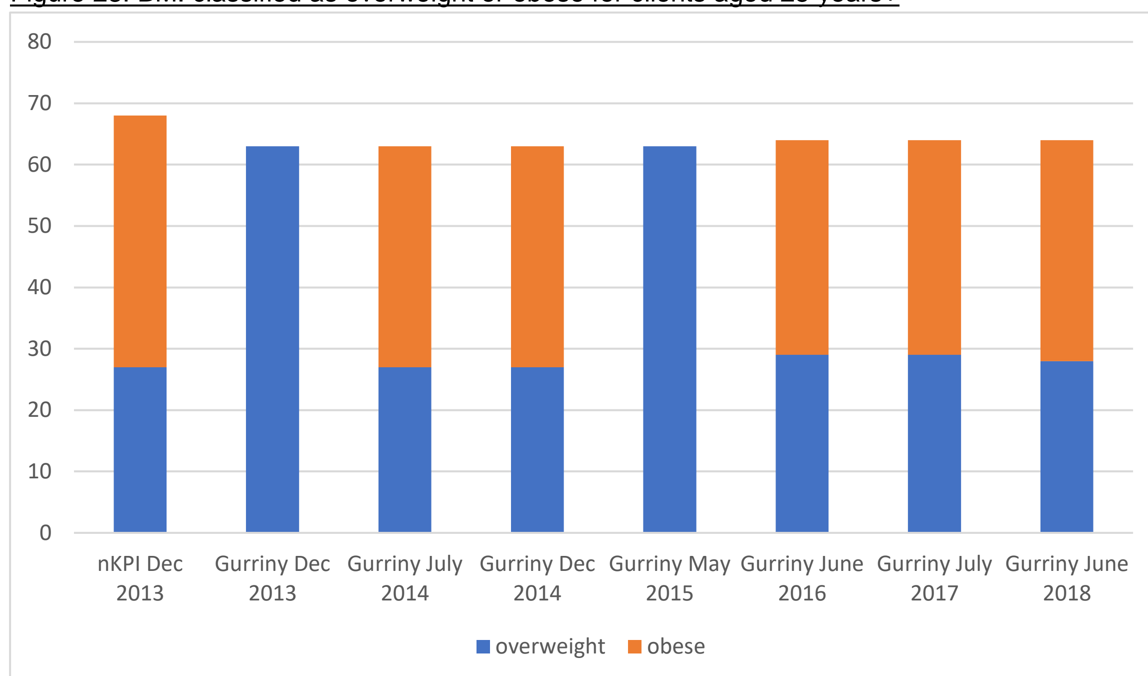
Figure 22: Smoking status result - current smoker, ex-smoker or never smoked



Body Mass Index (BMI) classified as overweight or obese

At Gurriny, records indicate that 63% of regular clients were overweight or obese in December 2013, a better result than the national average of 68%. The Gurriny figure increased to 64% in each of June 2016 (29% overweight, 35% obese), July 2017 (29% overweight, 35% obese), and June 2018 (28% overweight; 36% obese) (Figure 23). This was better than the national average of 71% (27% overweight and 44% obese). Despite the lower proportion of overweight and obese people in Yarrabah, the risk to chronic disease incidence warrants brief interventions and other nutrition and physical activity promotion programs. Risk factors such as obesity are difficult to treat – Gurriny's ability to impact clients' weight relies on access to appropriate allied health staff (such as dieticians) and procedures such as gastric banding.

Figure 23: BMI classified as overweight or obese for clients aged 25 years+



AUDIT-C result

A positive AUDIT-C score indicates that clients are drinking at levels that put them at risk of harm. Nationally, as at June and December 2017, an estimated 46% of Aboriginal and Torres Strait Islander regular clients aged 15 and over had a positive AUDIT-C result recorded in the previous 2 years, of 4 or over for males and 3 or over for females. For Gurriny, as at December 2017, the data were not reportable, suggesting that they may not be collected well.

Cardiovascular disease risk assessment result

Effective prevention and management of CVD is promoted when there is early identification of persons at high risk of disease. For Gurriny, as at December 2017, 101 males and 111 females aged 35-74 years has an absolute CVD risk assessment result within the previous 2 years. Of these, 35.8% of clients (43.6% of men and 28.8% of women) were at high risk, having a greater than 15% probability of CVD in the next 5 years (compared to 31% nationally).

Chronic disease management indicators

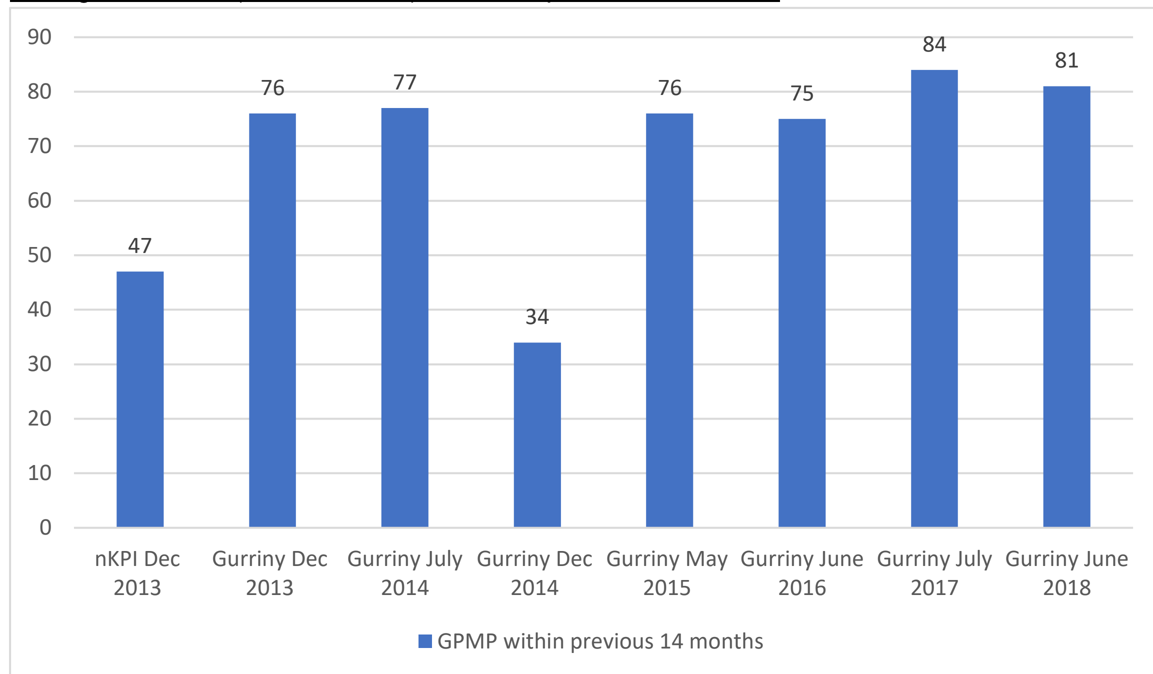
The 13 chronic disease management nKPIs are: General Practitioner Management Plan—clients with type 2 diabetes, Team Care Arrangement—clients with type 2 diabetes, Blood pressure result recorded—clients with type 2 diabetes, HbA1c result recorded—clients with type 2 diabetes, Kidney function test recorded—clients with type 2 diabetes, Kidney function test recorded—clients with cardiovascular disease, Immunised against influenza—clients with type 2 diabetes, Immunised against influenza—clients with chronic obstructive pulmonary disease, Blood pressure result—clients with type 2 diabetes, HbA1c result—clients with type 2 diabetes, Kidney function test result—clients with type 2 diabetes—eGFR, Kidney function test result—clients with type 2 diabetes—Albumin to Creatinine Ratio (ACR) and Kidney function test result—clients with cardiovascular disease—Estimated Glomerular Filtration Rate (eGFR).

GP Management Plan (MBS item 721) - clients with type 2 diabetes

Gurriny performed far above the national average rate in December 2013, with 76% of Indigenous regular clients with type 2 diabetes having had a GP Management Plan (item 721) in the past 2 years, compared to 47% nationally. The percentage declined to 34% in December 2014, but rebounded to 76% in May 2015, 75% in June 2016, 84% in July 2017, and 81% in June 2018 (Figure 24). This

compares well to a national average of 54% in June 2017 and 55% in December 2017. This is an area where Gurriny has shown sustained performance.

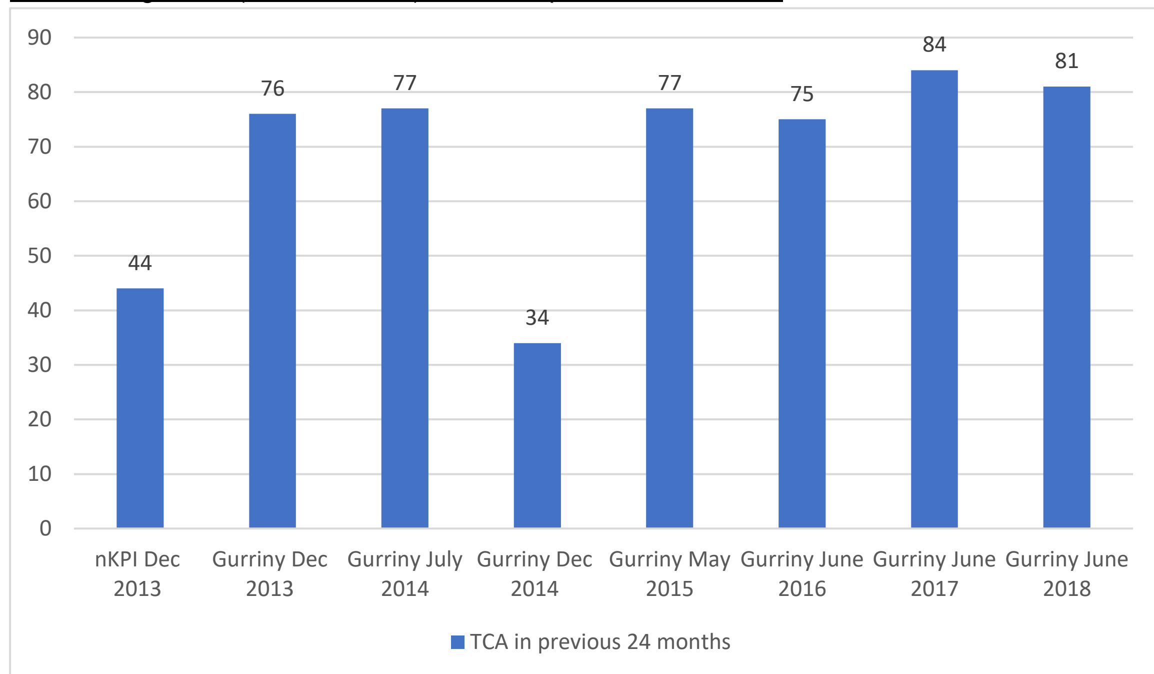
Figure 24: Percentage of clients diagnosed with chronic disease who have received a current GP Management Plan (MBS item 721) within the previous 24 months



Team Care Arrangements Plan

Gurriny showed a high rate (76% in December 2013) of Indigenous regular clients with type 2 diabetes who had had a Team Care Arrangement (TCA) (item 723) in the past 2 years, which was far better than national average of 44%. There was a noticeable decline in December 2014 to 34%, then an improvement to 77% in May 2015, 75% in June 2016, 84% in July 2017 and 81% in June 2018 respectively (Figure 25). These rates were much higher than national rates, which in June 2017 were 51% and in December 2017, 53%. From the first records in December 2012, Gurriny has performed strongly against this indicator compared with both state and national averages.

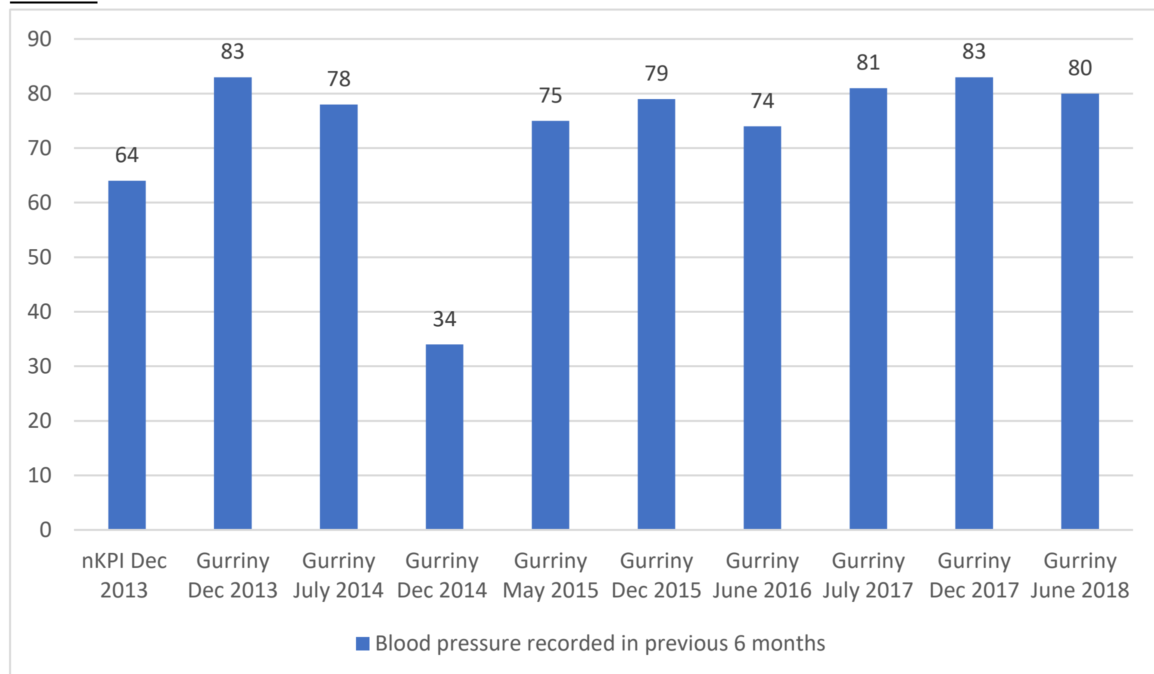
Figure 25: Percentage of clients diagnosed with chronic disease, who have received a current Team Care Arrangement (MBS item 723) within the previous 24 months



Blood pressure result recorded in the last six months —clients with type 2 diabetes

At 83% in December 2013, Gurriny's rate for blood pressure result recorded in the past 6 months for Indigenous regular clients with type 2 diabetes exceeded the national average of 64%. The recording of 78% BP testing in July 2014 reduced to 34% in December 2014, but increased to 75% in May 2015, then 79% in December 2015. It was 74% in June 2016 and then increased again to 81% in July 2017, 83% in December 2017, and then reduced slightly to 80% in June 2018(Figure 26) . The national rates for June and December 2017 were 64%.

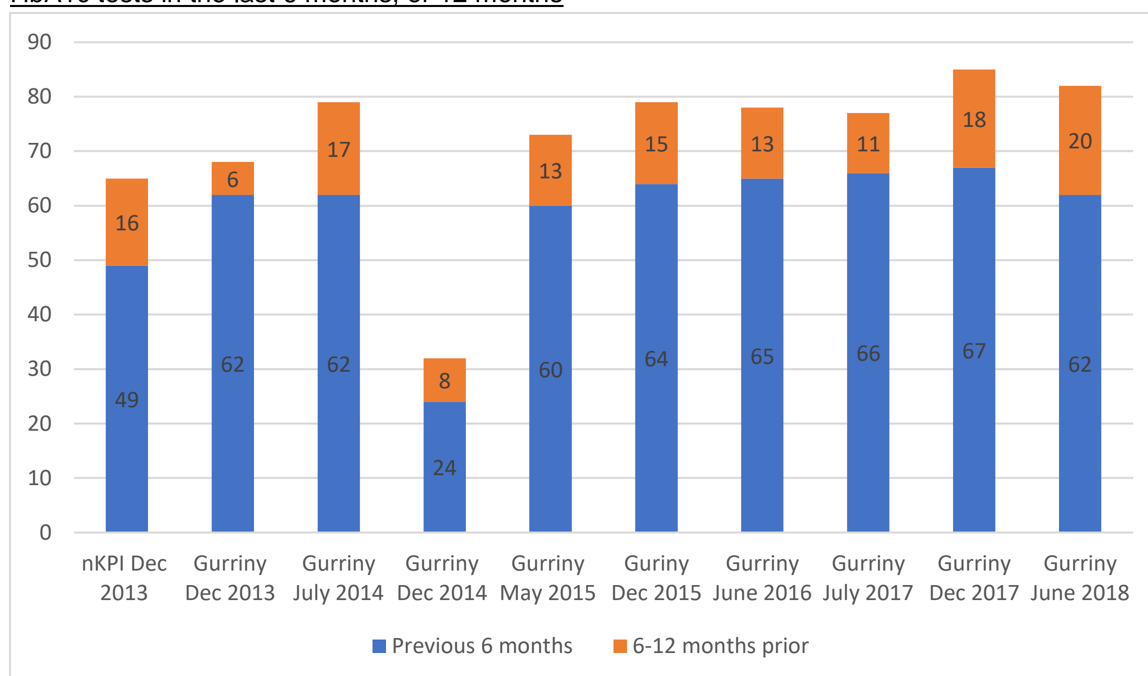
Figure 26: Proportion of clients who are diagnosed with type 2 diabetes and had a BP test in the last six months



HbA1c result recorded—clients with type 2 diabetes

The measurement of HbA1c is an important aspect of diabetic care. In June 2013, at 62% of Indigenous regular clients with type 2 diabetes with their glycosylated haemoglobin (HbA1c) result recorded within the past 6 months, Gurriny performed considerably better than the national level of 49%. Gurriny recorded 62% in July 2014, a decrease in December 2014 to 24%, but by May 2015, the percentage stood at a commendable 60%, and increased further to 64% in December 2015, 65% in June 2016, 66% in July 2017, 67% in December 2017, before dipping back to 62% in June 2018 (Figure 27). This is significantly higher than the national rate, at December 2017, of 48% of Indigenous regular clients with type 2 diabetes who had their HbA1c result recorded in the previous 6 months, and the further 16% who had a result recorded in the previous 6–12 months. The limitation with this indicator is that no data are collected to enable an explanation of an abnormal result.

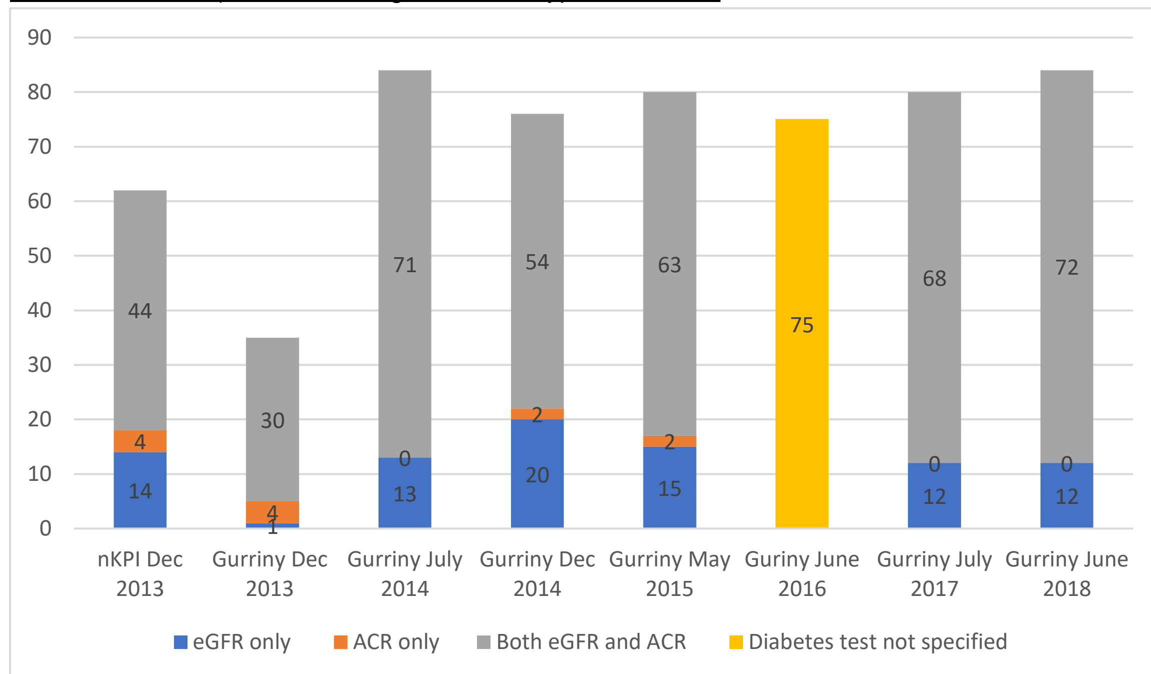
Figure 27: Proportion of clients who are diagnosed with type 2 diabetes and have had one or more HbA1c tests in the last 6 months, or 12 months



Kidney function test recorded in clients with type 2 diabetes

In line with the national trend, the preferred practice at Gurriny is to include both eGFR and ACR records of Indigenous regular clients with type 2 diabetes aged 15 and over. Gurriny demonstrated that 84% of clients had received a test for eGFR and/or ACR in June 2014, far above the national average of 62% and up from its result of 35% in December 2013. Following transition to community control, the result remained high in December 2014 at 76%, in May 2015 at 80%, June 2016 at 75%, July 2017 at 80% and in June 2018 at 84% (Figure 28). The rates compare favourably with national rates of 63% of Indigenous regular clients aged 15 and over with type 2 diabetes that had either an eGFR or ACR recorded, or both an eGFR and an ACR recorded in the previous 12 months in December 2017. This indicates a well-functioning system of preventive care, as early diagnosis greatly minimises chances of end-stage kidney disease which is prevalent among Indigenous populations.

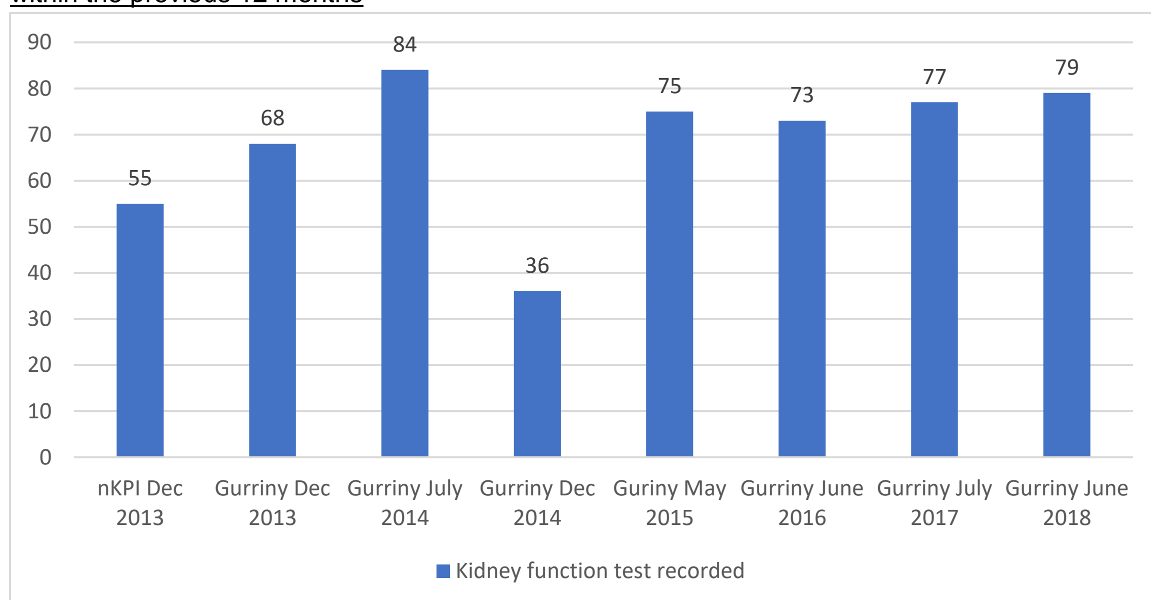
Figure 28: Percentage of regular clients who had a kidney function test - eGFR, ACR (or other microalbumin test) - who are diagnosed with type 2 diabetes



Kidney function test recorded – clients with cardiovascular disease

At Gurriny in December 2013, 68% of clients diagnosed with cardiovascular disease had a kidney function eGFR test recorded in the past 12 months compared to 55% nationally. In July 2014, this improved further to 84%. Following transition to community control, the result reduced to 36% in December 2014, largely due to human resource constraints and inadequate reporting mechanisms. In May 2015, it had climbed to 75%, in June 2016 to 73%, with further improvements to 77% in July 2017 and 79% in June 2018 (Figure 29). These Gurriny data compare favourably to the national data which, at December 2017, cited that 58% of Indigenous regular clients aged 15 and over with CVD had an eGFR recorded in the previous 12 months.

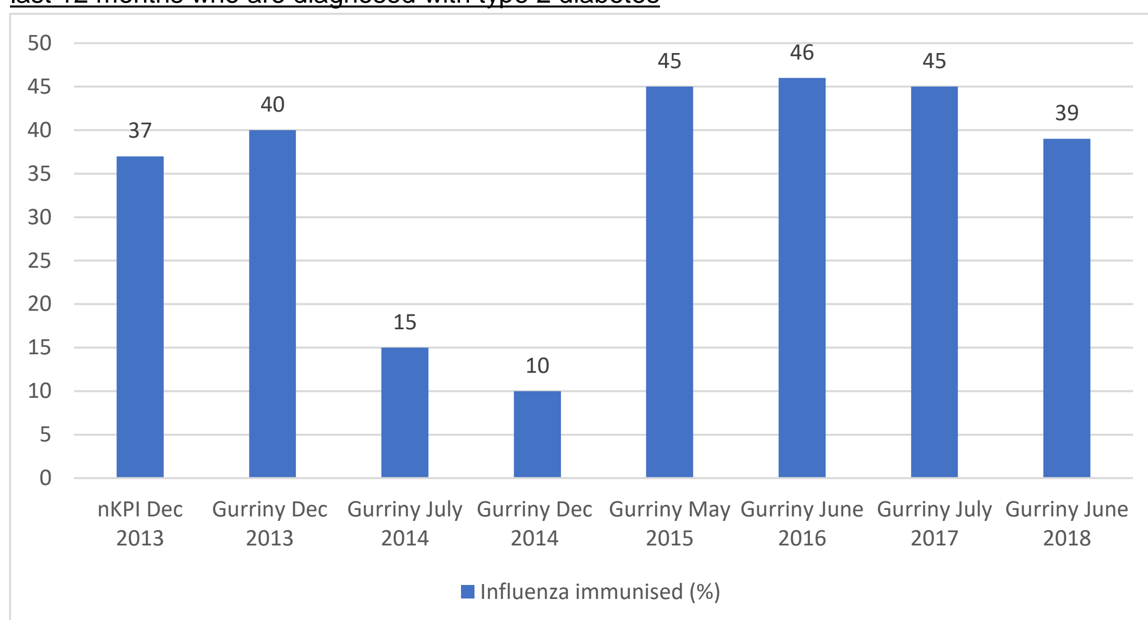
Figure 29: Percentage of regular clients 15 years and over with CVD who had a kidney function test within the previous 12 months



Influenza immunisation in clients with type 2 diabetes aged 15-49 years

Gurriny results for immunisation against influenza of regular clients aged 15–49 with type 2 diabetes were strong at 40% in December 2013 compared to the national rate of 37%. Gurriny results fell to 15% in July 2014 and 10% in December 2014. Significant gains were made by mid-2015 when the percentage rose to 46%. The rate remained somewhat steady at 46% in June 2016 and 45% in July 2017, then decreased slightly to 39% in June 2018 (Figure 30). However, Gurriny's rate was considerably higher than the national rate of 31% in June 2017 and 36% in December 2017.

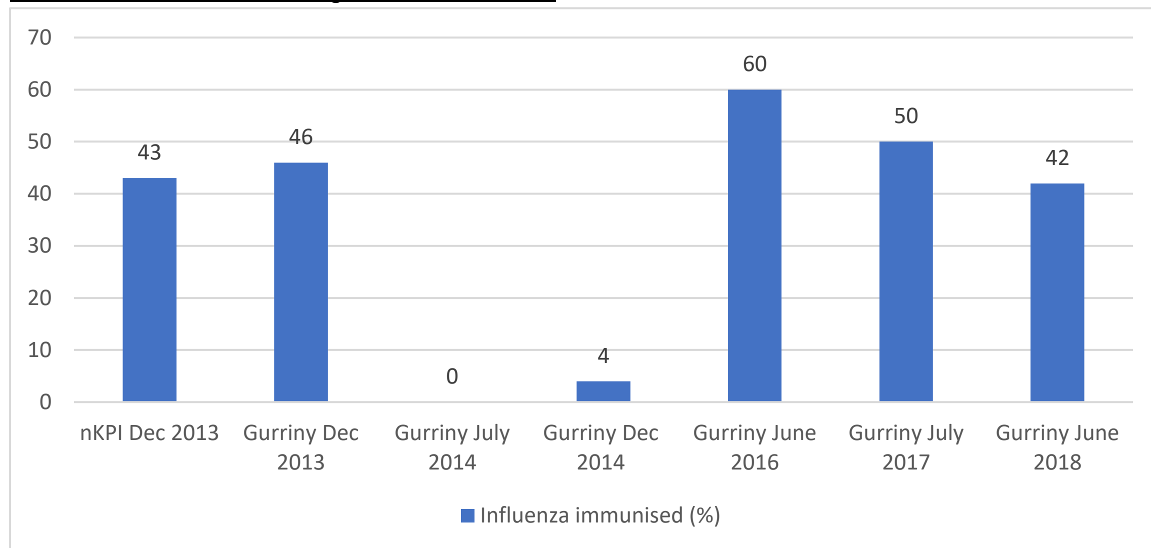
Figure 30: Percentage of clients aged 15-49 years who have been immunised against influenza in the last 12 months who are diagnosed with type 2 diabetes



Influenza immunisation in clients with COPD aged 15 – 49 years

The Gurriny result for immunisation against influenza of Indigenous regular clients aged 15–49 with Chronic Obstructive Pulmonary Disease (COPD) was 46% in December 2013, higher than the national rate of 43%. The Gurriny result was a low 4% in December 2014. Results are not available for May or December 2015 due to the small sample size. In June 2016, 60% of regular COPD clients were immunized against influenza, however this dropped to 50% in July 2017 and 42% in June 2018 (Figure 31). The rates are considerably higher than the national rates of 32% in June 2017 and 37% as at December 2017.

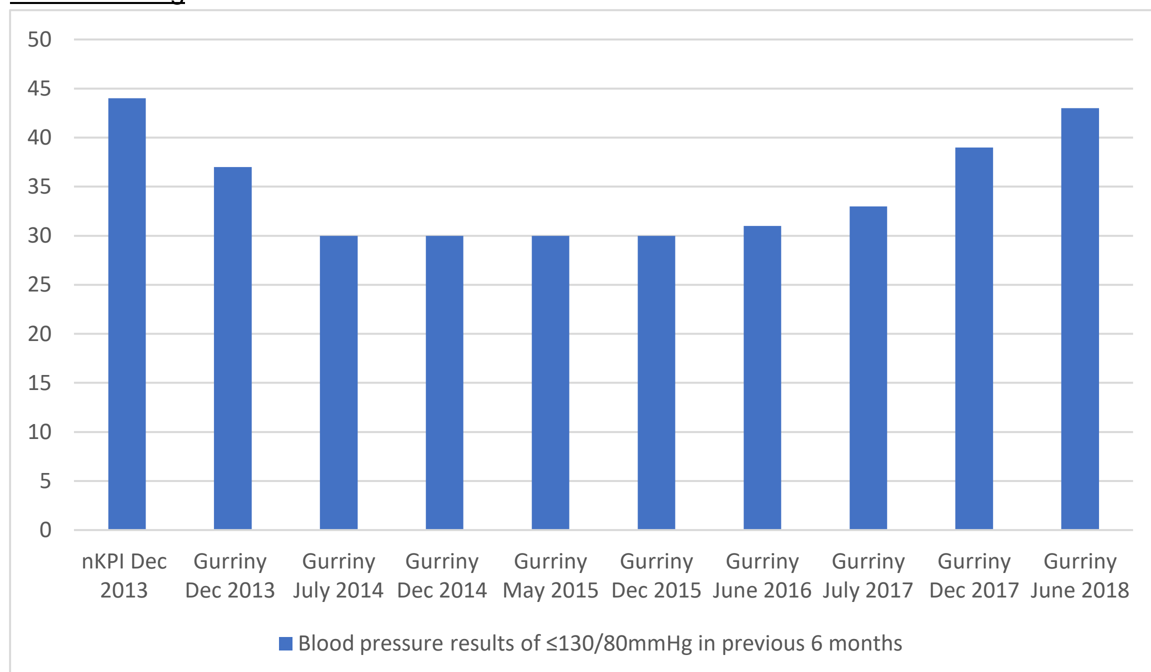
Figure 31: Proportion of clients aged 15-49 years who have been immunised against influenza in the last 12 months who are diagnosed with COPD



Blood pressure result in type 2 diabetes clients who had a BP test in the last six months

In December 2013, 37% of Gurriny Indigenous regular clients with type 2 diabetes had a blood pressure result of less than or equal to (≤) 130/80mmHg, compared to 44% nationally. Improvement with this indicator has subsequently been achieved, with rates of 30% in July and December 2014 and May and December 2015, 31% in June 2016, 33% in July 2017, 39% in December 2017, and 43% in June 2018 (Figure 32). This compares with the national data, as at December 2017, of 43%.

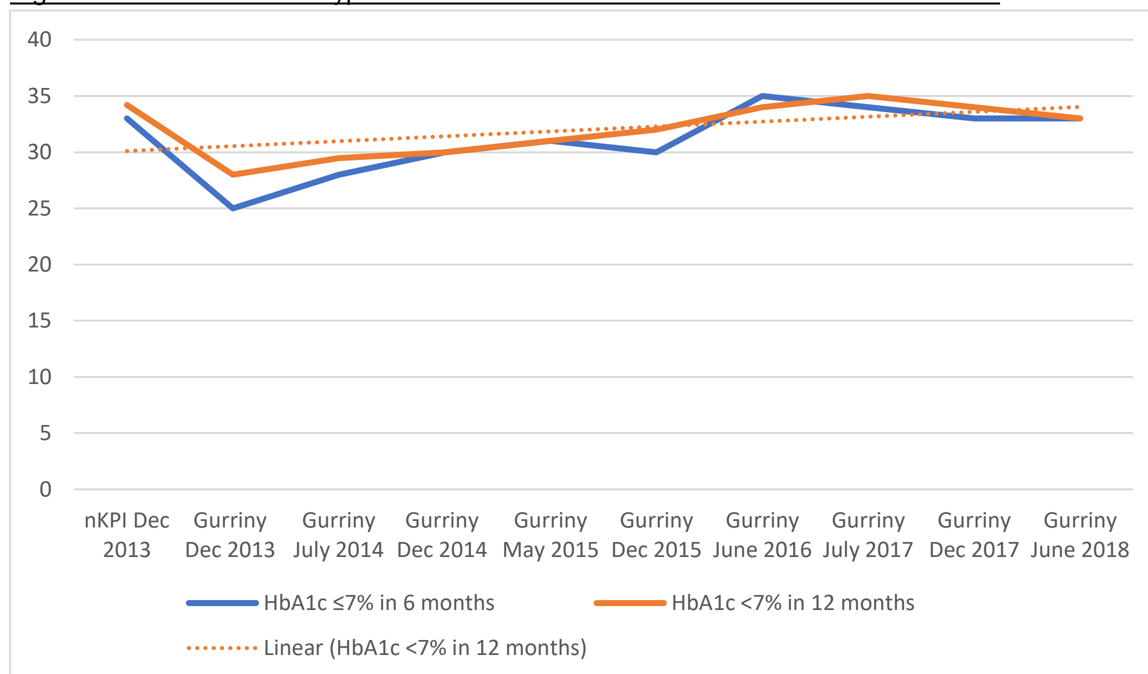
Figure 32: Blood pressure result in type 2 diabetes clients whose BP test in the last six months were ≤130/80mmHg



HbA1c result - clients with type 2 diabetes

At December 2013, 25% of Gurriny's Indigenous regular clients had an HbA1c (glycated haemoglobin) result of less than or equal to (≤) 7% in the past 6 months, compared to 33% nationally. Gurriny's results show a steady improvement over time, with 25% in December 2013, 28% in July 2014, 30% in December 2014, 31% in May 2015, 30% in December 2015, and 35% in June 2016, and remained somewhat steady at 34% in July 2017, 33% in December 2017 and in June 2018. These rates are lower than the national average which was recorded at 37% in December 2017 (Figure 33). This nKPI is especially influenced by "a range of social determinants and lifestyle factors" (Australian Institute of Health and Welfare, 2014b).

Figure 33: HbA1c result in type 2 diabetes clients who have an HbA1c test recorded



Kidney function test result—clients with type 2 diabetes—eGFR

At Gurriny in June 2017, 89% of clients had an eGFR recorded in the previous 12 months of 60 mL/min/1.73 m² or over (a level associated with increased risks of adverse renal, cardiovascular and other clinical outcomes); this decreased to 86% in December 2017. This was higher than the national rate, at December 2017, of 81%. Time series data are not available.

Kidney function test result—clients with type 2 diabetes—ACR

ACR results are the ratio of albumin to creatinine in the urine. In December 2017, 41.3% (32.1% male regular Gurriny clients and 48.6% female regular clients) aged 15 and over with type 2 diabetes had an albumin to creatinine (ACR) recorded in the previous 12 months with a healthy result. This compares to the national rate of 39%. Time series data are not available. Kidney function test result—clients with cardiovascular disease—eGFR. At Gurriny, 82.4% of regular clients aged 15 and over with CVD had an eGFR kidney function test recorded in the previous 12 months with results within the specified levels of 60 mL/min/1.73 m² or over in December 2017. This compares well with the national rate of 76%. Time series data are not available.

Secondary and tertiary healthcare utilisation (access)

Potentially Preventable Hospitalisations (PPHs)

Admissions for PPHs reflect hospitalisations that might have been prevented through the timely and appropriate provision and use of primary care or other non-hospital services (Li, Gray, Guthridge, & Pircher, 2009). Between July 2013 and June 2015, there were around 179 such hospitalisations

(excluding dialysis) for Indigenous people residing in Yarrabah; based on Census data, this equates to a crude rate of 38.2 per 1000 population compared to the much higher 49.3 per 1000 Indigenous population in Australia. For Indigenous Australians nationally, the rate of overall PPHs per 1,000 population was 3 times the rate for other Australians (Australian Institute of Health and Welfare, 2017). However, the crude rate of 26.4 per 1000 clients based on Gurriny client data reflects the effect of the Yarrabah Census undercount on this data. All subsequent calculations, however, are conservatively based on Census data.

Table 10: National comparison: Potentially preventable hospitalisations from July 2013 to June 2015, crude rate per 1000 population

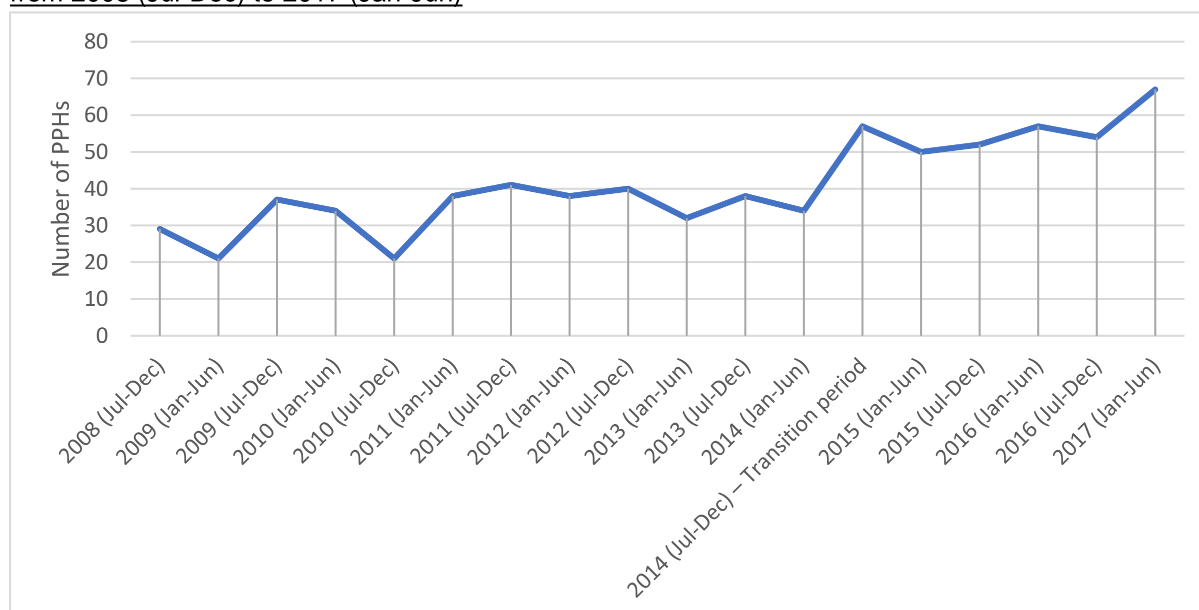
	YARRABAH (Indigenous)		**YARRABAH (Indigenous)**		**AUSTRALIA (Indigenous)***
	Number	Crude rate per 1000 Census[3]	Number	Crude rate per 1000 Clients[4]	Crude rate per 1000
Males	83	35.8	83	25.2	45.0
Females	96	40.6	96	27.5	53.7
Persons	179	38.2	179	26.4	49.3

* AIHW 2017. Aboriginal and Torres Strait Islander health performance framework 2017: supplementary online tables. Cat. no. WEB 170. Canberra: AIHW.

Potentially Preventable Hospitalisations (PPH) for Indigenous people residing in Yarrabah from 2008 (Jul-Dec) to 2017 (Jan-Jun)

As shown in Figure 34, there has been an upward rising trend in PPH over the time span, with the most notable increase at and post-transition to community control. Overall, there was an increase in the number of PPH admissions per person for males, particularly for those aged 35+, from 1.4 PPH admissions/person before transition to 2.1 PPH admissions/person after transition (see tables and graphs in Appendix 4).

Figure 34: Potentially preventable hospitalisations (PPH) for Indigenous people residing in Yarrabah from 2008 (Jul-Dec) to 2017 (Jan-Jun)



[3] Note: According to the 2011 Census in Yarrabah (Indigenous Areas), there were 2,340 Aboriginal and Torres Strait Islander people. Of these, 1,157 (or 49.5%) were male and 1,181 (or 50.5%) were female. This is likely an under-representation of the actual Yarrabah population.

[4] There were 3,392 regular Gurriny clients (1645 male and 1747 female clients) reported in 2017-18.

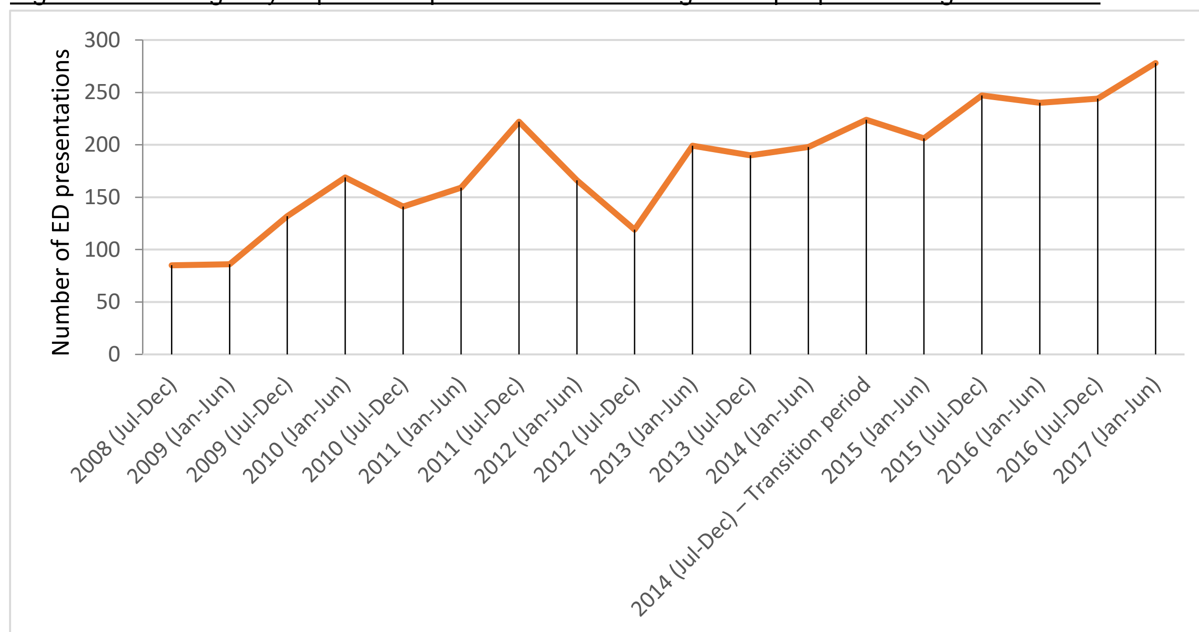
Emergency Department (ED) presentations

The analysis of ED presentations pertains to those at the CHHHS-operated emergency department in Yarrabah and at Cairns Base Hospital. Factors such as the availability of the only after-hours healthcare service in Yarrabah and practitioner preference may have therefore influenced clients' reasons for presentation. The recording of the presentations followed the triage priority scale: **Rating 1** patients are those currently experiencing life-threatening illnesses or injuries that require immediate attention, including conditions like: requiring resuscitation, haemorrhages, severe burns or anaphylaxis. **Rating 2** patients require very urgent attention, and may be seriously ill or injured. A patient might be classified as Rating 2 if they have had a stroke, have acute respiratory problems, have had an epileptic seizure, have a condition like meningitis or severe sepsis, or are experiencing acute psychosis. **Rating 3** relates to patients with serious illness or injury who are in a stable condition. **Rating 4** is for patients who are not in immediate danger or severe stress. **Rating 5** is for patients who have presented with a non-emergency health concern.

Emergency Presentation (all)

Emergency presentations for Indigenous residents of Yarrabah increased steadily from 2002-18 (Figure 35). Gurriny has invested through the involvement of health workers and provision of transport in supporting Yarrabah residents to access hospital care when needed. This is appropriate given the high burden of disease in the community.

Figure 35: Emergency department presentations for Indigenous people residing in Yarrabah



The results of the Gurriny investment are evident in the increasing presentations for emergency care at all triage ratings over the post-transition than compared to pre-transition periods (Table 11 and Appendix 5). However, an appropriate decrease occurred from 2017 for those presentations of triage rating 4 and 5. It is too soon to say whether this is a trend effect.

Comparison of ED presentations for Yarrabah (before-after)

Table 11: Total ED presentations

Activity	Total presentations			Difference in total attendance	Higher or lower compared to before
	Before (Jan12–Jun14) 30 months	During (Jul14-Dec14) 6 months	After (Jan15-Jun17) 30 months		
Emergency (all)	872	224	1439	567	Higher
Triage 3	387	106	573	186	Higher
Triage 4-5	346	84	376	30	Higher

Summary of outcomes

Preliminary analysis of Yarrabah's performance data throughout their transition to community control indicates there have been substantial improvements in processes of care for maternal and child health, preventive health, and chronic disease management from 2013-14 to 2017-18 (e.g. regular childhood immunisation, child and adult health checks, measurement of blood pressure and HbA1c, and fluvax coverage). Importantly, there have also been improvements in intermediate health outcomes (e.g. blood pressure and HbA1c levels in clients with type 2 diabetes), which are rarely documented. For example, despite other studies finding significant improvements in diabetic processes of care, including access to services and improved adherence to diabetes check guidelines, pneumococcal vaccination and use of hypoglycemic medication (Chung F, Herceg A, & Bookallil, 2014; Harch, 2012; Reeve, 2015), only Harch et al. (2012) found any improvement in intermediate diabetes outcomes. Such improvements in intermediate outcomes produce significant improvements in morbidity and mortality (Mihaylova, 2014; Sundström et al., 2013).

Without whole of community change, however, it is unrealistic to consider that improved healthcare services can influence indicators such as the proportion of smokers, people with overweight/obesity and the proportion of low birth weight. The social determinants of health, such as education, employment, overcrowded housing and household income, together with behavioural risk factors, explained up to 57% of the gap in health outcomes between Aboriginal and Torres Strait Islander people and other Australians (AIHW, 2014b). To improve health outcomes, a focus on improving clinical care must be balanced with a potentially even more important focus on improving the social determinants of health.

6. ECONOMIC EVALUATION

6.1 Introduction

Economic evaluation was used to identify, measure, and value aspects of the economic costs and benefits of transition to community control of PHC services at Yarrabah. Gurriny activities are diverse, multifaceted and lead to a range of outputs. The outcomes of these activities are closely aligned with the strategic goals of the service: self-determination through active participation in the planning, management, delivery and evaluation of health services; access to health services at the same rates as non-Indigenous people relative to their need; quality including culturally secure, clinically appropriate and evidence-informed services; and efficient use of funding to meet the needs of the community.

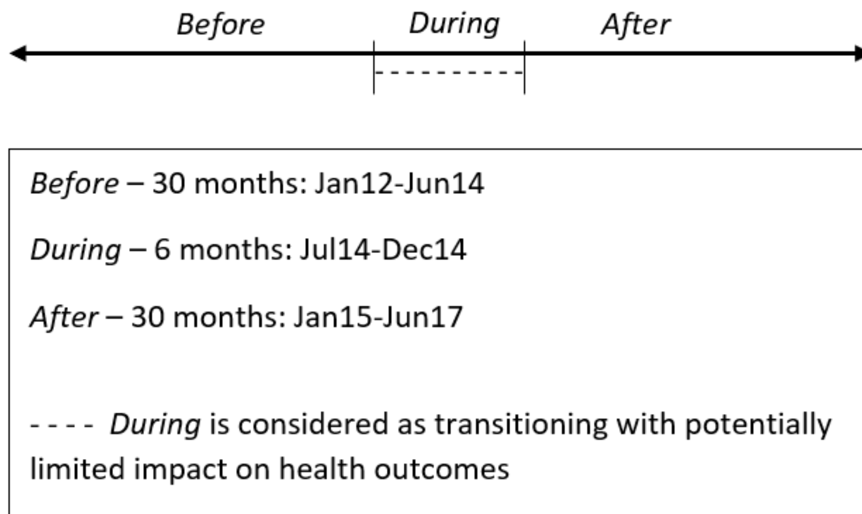
6.2 Methods

The economic analysis employed the Social Return on Investment framework and cost-benefit analysis methods to determine the inputs, outputs, and outcomes associated with the transition. These data were used to calculate SROI ratios, which determine the level of social value created for every $1 of investment before and after transitioning to community control. The SROI of the transition was derived by comparing the cost of operating Gurriny with the quantifiable outcomes achieved before and after transitioning to the community-controlled PHC. The Australian health care system perspective formed the basis of values that will be included, or excluded, as either a cost or an impact. The timeframe was set between 2008 (or earliest available) and 2018 (or latest available) to take advantage of the longitudinal nature of the data allowing the comparison of a pre-transition period with the post-transition period. For the purposes of the current economic evaluation, only quantifiable economic returns were included, such as funding receipts, the multiplier effect of employment, cost/value of PPHs in comparison to the previous period, and value potential of Disability Adjusted Life Years (DALYs) averted through preventive healthcare of Gurriny. Outcomes that could not be monetised are identified and recommended for inclusion in any further analyses.

Data for the economic analysis were obtained from routinely collected sources: an internal database using in-built software within Gurriny's medical record system, and an external database from CHHHS, Queensland Statistical Services Branch. Internal routinely collected data were extracted, in consultation with the service managers, from the electronic medical and administrative records using in-built software such as Gurriny Yealamucka's medical record system – Communicare, and finance system. Variables of interest included the number of Yarrabah residents accessing the service; financial records by funding source; and workforce FTE. Financial records were assessed to identify any changes in the inputs required to run Gurriny pre- versus post-transition. The data were analysed yearly from 2011-12 to 2017-18. External routinely collected data, including individual level inpatient and ED data, were sought from the data custodians (CHHHS) to understand the relationship between community-level resourcing and its impact on health care utilisation, access and cost. PPHs and ED presentations for Yarrabah residents and their corresponding cost were obtained from the CHHHS Casemix team.

The comparison before (pre) versus after (post) transition to community control was performed using equal pre- and post- periods of 30 months, as follows: Before (January 12–June 14); During (July 14-December 14); and After (January 15-June 17) (Figure 36).

Figure 36: The comparison before (pre) versus after (post) transition to community control



6.3 Results of the economic evaluation

Costs

Operating costs

Gurriny's service operating costs have increased over time. Compared to $3.83 million in the pre-transition period of 2011-12 and $5.20 million in 2013-14, the operating expenses of Gurriny in 2017-18 were $8.15 million (Figure 37). These operating expenses have been proportional to the number of staff employed, as discussed below.

Figure 37: Gurriny operating costs

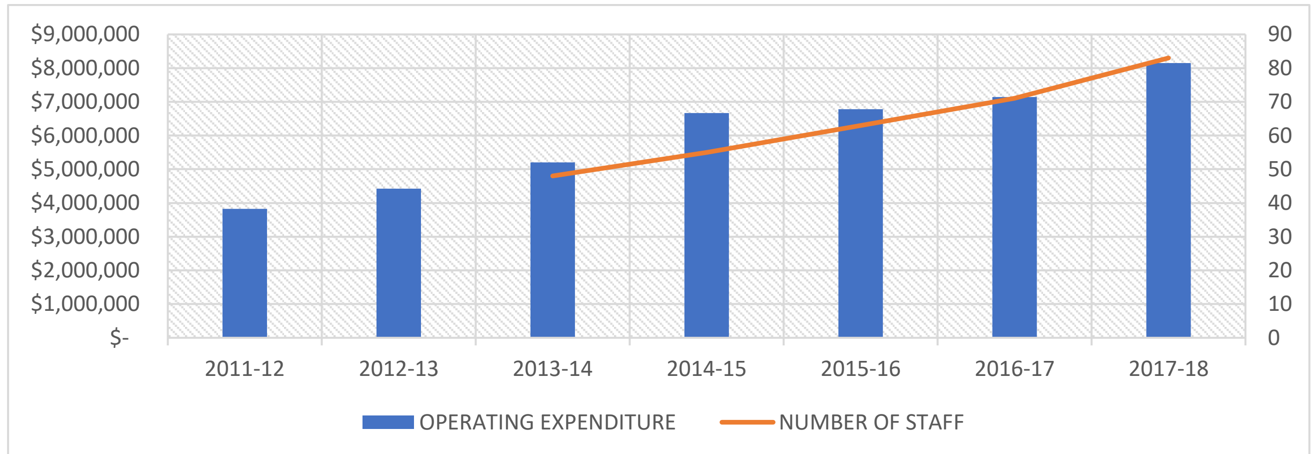


Table 12: Gurriny operating expenditure

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
OPERATING EXPENDITURE	$3,827,822	$4,426,230	$5,200,400	$6,664,746	$6,785,098	$7,137,150	$8,146,834
Number of staff	na	na	48	55	63	71	76

na-not available

Benefits

Funding receipts

Gurriny is a not-for-profit organisation and receives the majority of its funds to deliver health services as grant income (72-86% of total income). The Commonwealth Department of Health and Queensland Health are the two major grant income sources. Other important sources are the Queensland Department of Families, Housing, Community Services and Indigenous Affairs, also known as the Department of Social Services. The North Queensland Primary Health Network (NQPHN) and Department of the Prime Minister and Cabinet started providing grants during the transition period 2014-15. Grants are provided to co-ordinate the delivery of: health checks; specialist and allied health clinics; patient transport; and social and emotional wellbeing, child and maternal health, care coordination/chronic care, and health promotion programs (Gurriny Yealamucka Health Service, 2019). This funding is provided on the basis that Gurriny complies with the conditions specified in funding agreements or contracts. If it fails to meet accountability requirements, funding may be cut, placing at risk the efficient and effective delivery of health services. Non-grant income is derived from various sources including Medicare rebates, fees and reimbursements, and other sundry income, e.g. donations, consultancies and contracts for services.

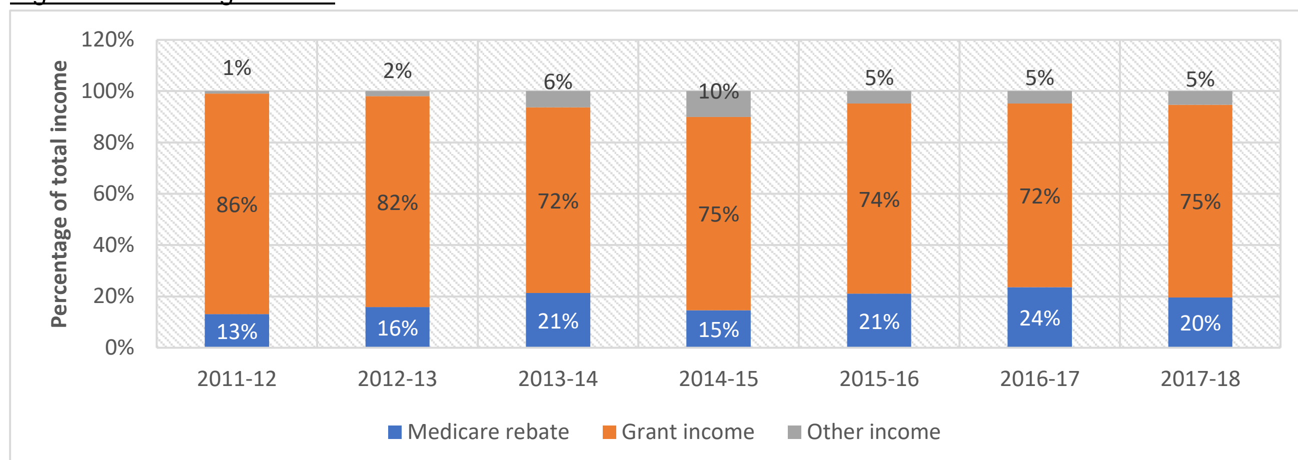
Table 13. Gurriny - key sources of funding 2011-12 to 2017-18

	2011-12	2012-13	2013-14ł	2014-15*	2015-16	2016-17	2017-18
INCOME (total)	$3,887,474	$4,677,777	$4,937,985	$7,445,320	$6,864,496	$7,483,260	$8,284,144
Grant income	$3,342,154	$3,846,015	$3,570,411	$5,609,398	$5,087,556	$5,355,907	$6,215,057
Top funders							
Commonwealth Department of Health	$2,537,358	$2,914,074	$2,482,616	$2,535,423	$2,694,821	$2,817,317	$3,329,458
Queensland Health	$221,177	$330,179	$465,571	$2,063,486	$1,850,253	$1,891,555	$2,090,502
Department of Communities	$172,438	$304,248	-	-	-	-	-
Department of Social Services		$122,144	$227,923	$294,879	-	-	-
NQ PHN	-	-	$150,000	$278,213	$171,250	$310,333	$178,875
Department of the Prime Minister & Cabinet	-	-	-	$110,806	$110,806	$185,806	$510,806
Medicare rebate	$508,756	$738,707	$1,054,215	$1,089,334	$1,446,408	$1,766,924	$1,627,528
Other non-grant income	$36,564	$93,055	$313,359	$746,588	$330,532	$360,429	$441,559

* Transition to community control; Reported for the year ended 30 June 14

One of the objectives of transition to community control was to increase the total amount of health funds flowing into Yarrabah while reducing a reliance on government grants (Queensland Health, 2013). The expected increase in Medicare funding was achieved with the contribution of the Medicare rebate having risen steadily from about 13% of Gurriny's total revenue in 2011-12 to 20% of revenue in 2017-18 (Figure 38). This level of Medicare funding is starting to contribute substantially towards Gurriny's organisational operating costs.

Figure 38: Funding sources

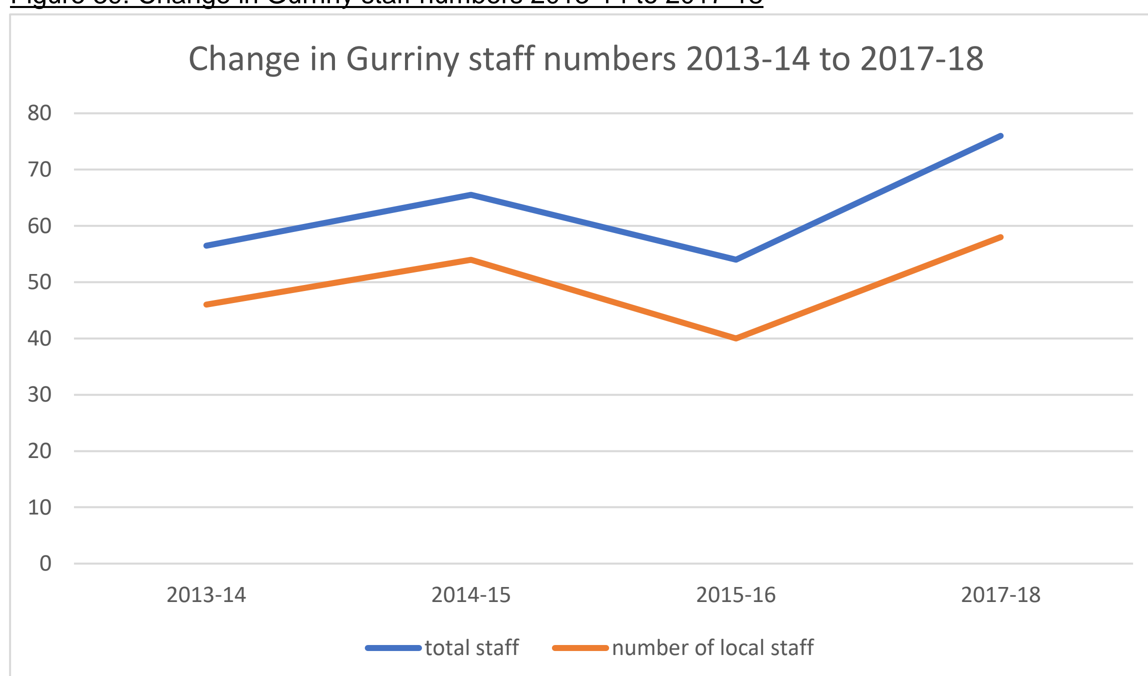


Multiplier effects of employment

Gurriny has developed a competent and culturally aware health workforce. Since transition, the numbers of staff and mix of workforce skills required to maintain service delivery under Gurriny's model of care has grown considerably. Overall, staff numbers increased by 71% from 44.5 FTE in 2013-14 to 61.5 FTE in 2014-15, 54 FTE in 2015-16 and 76.0 FTE in 2017-18[5] (Figure 39). This compares favourably with national employment rates that were stable 2013-16 and declined by 2% 2016-17 (AIHW, 2018e).

Gurriny has actively recruited local Yarrabah health professionals and operational staff. The proportion of local people employed has been maintained at high levels, with 58/76 (76%) positions filled by Indigenous people in 2017-18. This compares favourably with the national average for Indigenous PHC organisations of 53% in 2015-16 and 2016-17 (AIHW, 2018e). Employment of Indigenous people has increased by more than 26% since transition (46 positions in 2013-14 to 58 positions in 2017-18).

Figure 39: Change in Gurriny staff numbers 2013-14 to 2017-18

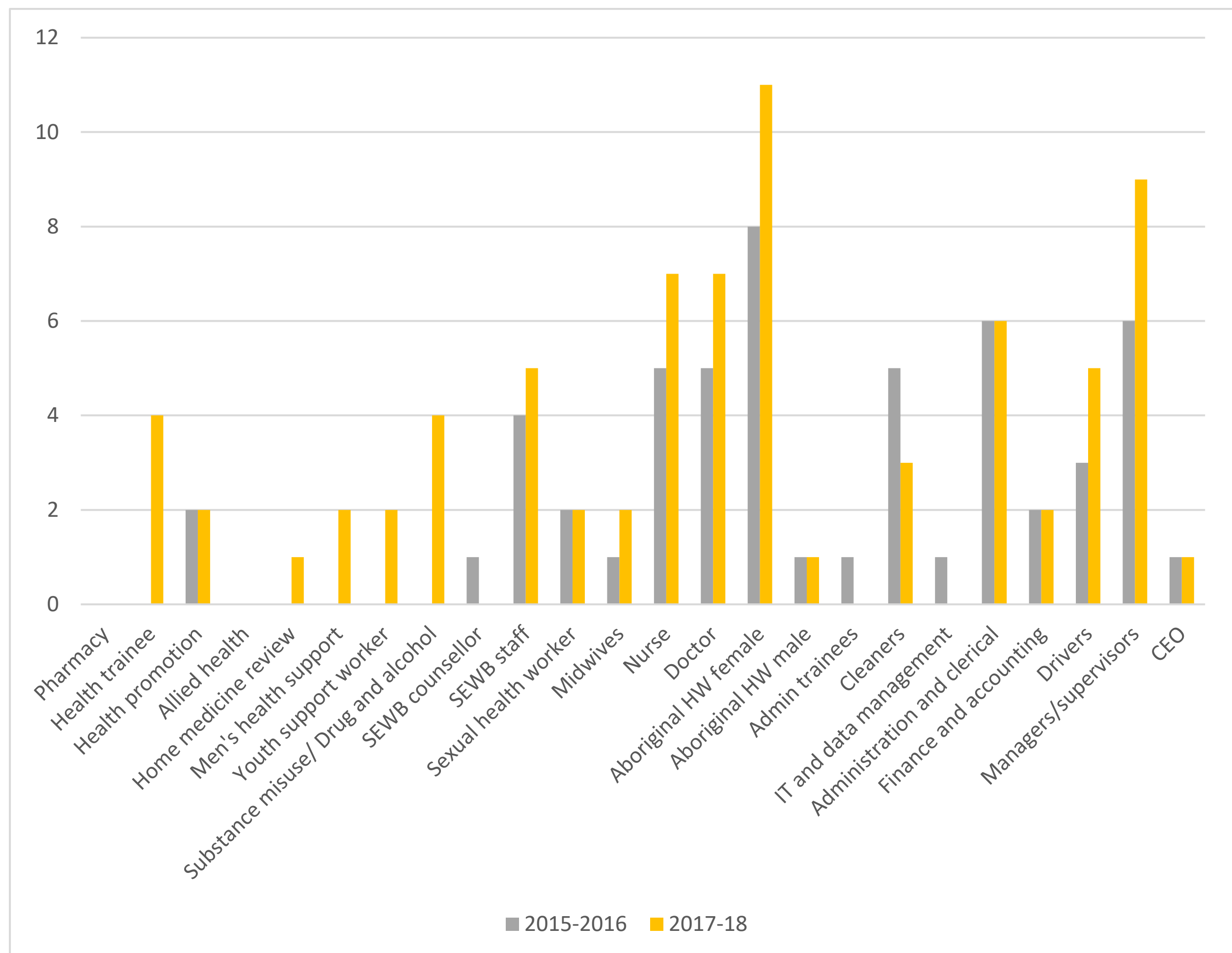


The composition of the Gurriny workforce has also changed. The focus of additional positions has been in management, drivers, administrative/clerical, cleaning, health worker, medical, nursing, drug and

[5] The Gurriny Online Service Report for 2016-17 was not available.

alcohol worker, health promotion and health trainee positions (Figure 40). Gurriny is also working to improve access to allied health services such as dieticians, diabetes educators, physiotherapists, exercise physiologists, podiatrists, psychologists and social workers (Gurriny, 2015). Gurriny provides cultural orientation for non-Indigenous staff.

Figure 40: Numbers of Gurriny staff by occupation 2015-16 to 2017-18



The outcome of this workforce rise has multiplier benefits to the community on a number of levels. First, it is the human resources of an organisation that are considered the most important of the health system's inputs. The skills, motivation and cultural competence of the workforce contribute to better communication with clients and improved care. Better patient care can improve patient health outcomes. Second, Gurriny has implemented education, training and support strategies to increase the productivity and cultural competence of its workforce. Third, from an economic viewpoint, the employment of a greater number of staff generates a multiplier effect and contributes significantly to economic activity. This is because an injection of extra income leads to more spending (consumption), which creates more economic activity and, in turn, boosts income elsewhere in the economy. The multiplier effect refers to the increase in final income arising from any new injection of spending. The increased employment will also have positive ripple effects on the social and emotional wellbeing of immediate families and the community. Positive improvements are also likely to be seen through strong community role models.

The Australian Bureau of Statistics has historically reported multipliers for use in input-output modelling (Australian Bureau of Statistics, 2007). Although there is some debate on the magnitude of the size of a multiplier, a conservative estimate is to assume a multiplier value of 0.25. For every $1 in additional income, the added economic ripple effect is $0.25. For example, in 2011-12, Gurriny spent $2.91 million

on staff salaries, with a flow on effect of $0.73 million. In 2017-18, Gurriny spent $6.17 million on staff salaries and the flow-on effect from this expenditure was estimated to be an additional $1.54 million.

Value potential Disability Adjusted Life Years (DALYs) averted

Clients of Gurriny experience a considerable burden of disease. Burden of disease studies use the DALY as a summary measure of the disease burden. A recent report from Queensland Health suggests that the overall disease burden in Queensland's Aboriginal and Torres Strait Islander people is equivalent to a DALY rate of 250.7 DALYs per 1,000 people (Queensland Health, 2017). Thirty-six percent of this disease burden is attributed to modifiable risk factors such as high body mass, tobacco use, high blood pressure and high cholesterol. Research suggest that primary health can modify between 10-20% of the total disease burden (Booske, Athens, Kindig, Park, & Remington, 2010; McGinnis, Williams-Russo, & Knickman, 2002). Potentially averted disease burden, measured in DALYs, is calculated by multiplying client numbers with the proportion of modifiable disease (i.e., 36.6%) and the extent to which primary health care can impact on disease (i.e., 15%). Gross domestic product (GDP) per capita, obtained from Australian Bureau of Statistics time series data, is commonly used to value a DALY (ABS, 2019). Table 14 below provides an overview of the estimated number of DALYs averted and subsequent value of this averted burden.

Table 14: Estimated number of DALYs averted, and value of the averted burden

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Total clients	1829	2383	3056	3738	4138	4405	4193	4194	4022
DALY rate / 1000	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7
Total DALY for clients	458.5303	597.4181	766.1392	937.1166	1037.3966	1104.3335	1051.1851	1051.4358	1008.3154
% disease due to risk factors	36.6%	36.6%	36.6%	36.6%	36.6%	36.6%	36.6%	36.6%	36.6%
% modifiable due to health care	15%	15%	15%	15%	15%	15%	15%	15%	15%
No. potential DALYs averted	25.17	32.80	42.06	51.45	56.95	60.63	57.71	57.72	55.36
Value of DALY (GDP / capita)	$59,518	$63,900	$66,586	$67,014	$68,622	$68,721	$69,317	$72,381	$74,605
Value potential DALYs averted	$1,498,265	$2,095,808	$2,800,677	$3,447,716	$3,908,234	$4,166,411	$4,000,288	$4,178,108	$4,129,873

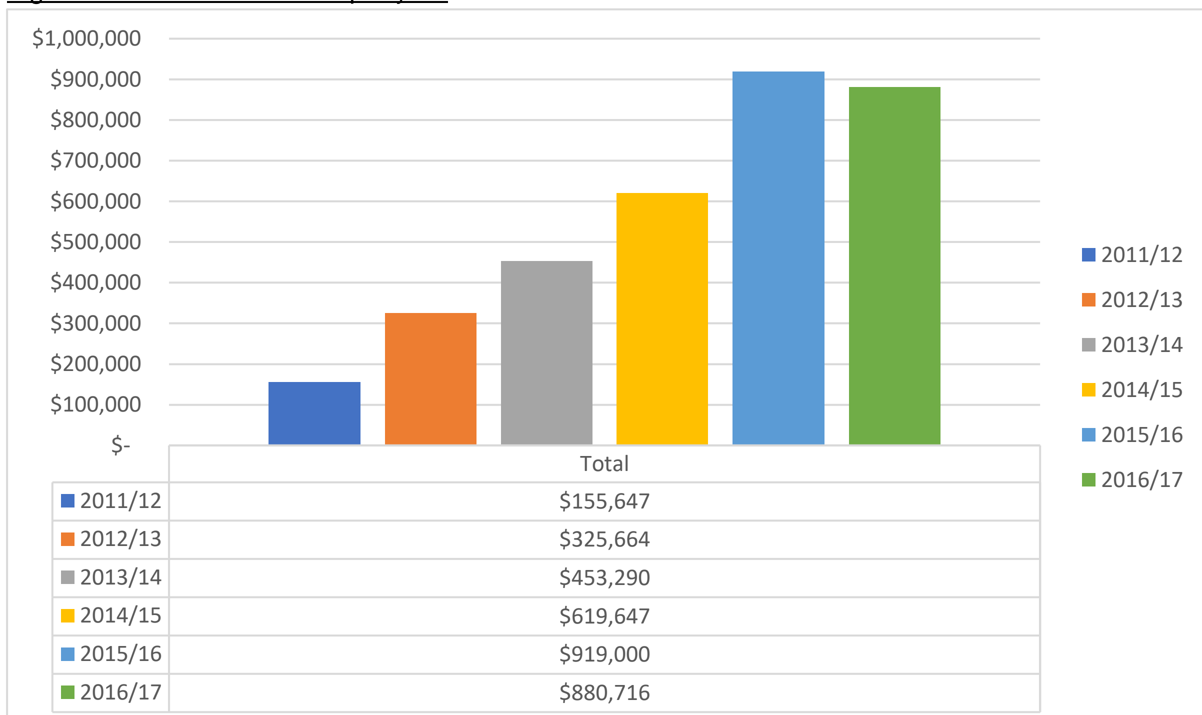
Quantifying the outcome on health system (access)

The following hypothesis guided the quantification of the outcome on health system (access): Early presentation at a health service greatly increases the chances of prevention, detection and successful management of acute and chronic conditions. The provision of appropriate care to manage chronic conditions also reduces the risk factors for disease sequelae and may lead to a reduction in PPHs due to avoided complications.

For the analysis, we assumed that PPHs can be averted through the provision of: 1) early disease management usually delivered in primary care and community-based care settings; 2) appropriate preventive health interventions; and 3) enhanced hospital discharge practices (Tran, Falster, Douglas, Blyth, & Jorm, 2014; Vest, Gamm, Oxford, Gonzalez, & Slawson, 2010). Whilst PHC services can contribute to reducing PPH admissions through effective primary and secondary preventive interventions that modify individual behaviours and reduce risk, there is evidence that 29% of PPH are attributable to the behaviour risks of smoking, alcohol consumption, physical inactivity, nutrition, sedentary behaviour and lack of sleep. Modification of these behaviours requires population-level primary prevention strategies more broadly (Tran et al., 2014). Furthermore, for Yarrabah clients, hospital discharge practices contribute to PPHs. For example, for Yarrabah clients discharged with a Closing the Gap prescription on a Friday afternoon, it is not possible to fill the prescription over the weekend, often resulting in readmission early the next week. An expert opinion by the Gurriny Senior Medical Officer estimated that up to 50% of PPHs are attributable to such system failures. Given these broader contextual issues, we conservatively attributed 60% of PPH cost to PHC responsibility; 15% to broader health behaviours beyond the control of PHC, and 25% to hospital discharge practices.

Figure 41 depicts the yearly cost of inpatient admissions classified as PPH. From 2011-12 the cost of PPH was increasing proportionally to the number of admissions. However, in 2016-17, the cost started to drop. The future trend is inconclusive and requires further investigation once new data become available.

Figure 41: The cost of PPHs per year



Non-quantifiable benefits

A range of other benefits was also recognised. These include the value of avoided time in hospital, value of improved quality of life, value of avoidable death, value of community gain, value of student

placements, value of networking/partnerships and the value of building the evidence base. However, allocating a monetary value to these factors would require engagement with Yarrabah community stakeholders to determine their value locally. This was beyond the scope of this evaluation, but is recommended for future analyses.

Social Return on Investment (SROI)

The social return on the investment at Gurriny can be derived by comparing the cost of operating the service with the quantifiable benefits achieved. A positive ratio or ratio greater than 1 suggests that benefits are greater than costs indicating a favourable return on investment. The logic underpinning this analysis relies on the pathway from activity to output to impact (see program logic, section 2).

Table 15 provides a summary of the cost and benefits quantified in monetary terms for each year from 2012-13 to 2016-17. The years 2011-12 and 2017-18 were excluded from the analysis due to the lack of hospital data and therefore their limited comparability.

Table 15: Summary of SROI

Year	2012-13	2013-14	2014-15*	2015-16	2016-17
Base-case					
Cost					
Operating expenditure	$4,426,230	$5,200,400	$6,664,746	$6,785,098	$7,137,150
Benefit					
Funding receipts	$4,677,777	$4,937,985	$7,445,320	$6,864,496	$7,483,260
Multiplier effect of employment	$759,902	$890,826	$1,225,128	$1,214,943	$1,324,221
Value of PPHs (60% attribution)	-$102,010	-$76,575	-$99,814	-$179,611	$22,970
Value potential DALYs averted (15% attribution)	$2,095,808	$2,800,677	$3,447,716	$3,908,234	$4,166,411
Subtotal	*$7,431,476*	*$8,552,912*	*$12,018,350*	*$11,808,061*	*$12,996,862*
Benefit cost ratio	1.68	1.64	1.80	1.74	1.82
Benefit - cost	$3,005,246	$3,352,512	$5,353,604	$5,022,963	$5,859,712
Sensitivity scenario 1: ***DALYs averted (10% attribution)***					
Benefit cost ratio	1.52	1.47	1.63	1.55	1.63
Benefit - cost	$2,306,644	$2,418,953	$4,204,365	$3,720,219	$4,470,908
Sensitivity scenario 2: ***DALYs averted (20% attribution)***					
Benefit cost ratio	1.84	1.82	1.98	1.93	2.02
Benefit - cost	$3,703,849	$4,286,070	$6,502,842	$6,325,708	$7,248,515
Sensitivity scenario 3: ***Value of PPHs (50% attribution)***					
Benefit cost ratio	1.68	1.65	1.81	1.74	1.82
Benefit - cost	$3,022,248	$3,365,274	$5,370,239	$5,052,898	$5,855,883

In 2012-13 the operating cost of Gurriny was $4.4 million; this increased to $7.1 million in 2016-17. The value of quantifiable benefits (from funding receipts, the multiplier effect of employment, value of potentially preventable hospitalisations [60% attribution], and value of potential Disability Adjusted Life Years averted [15% attribution]) was estimated at $7.4 million in 2012-13 and at $13.0 million in 2016- The ratio of benefits to costs suggests that for every $1 invested in Gurriny, the social and economic return was conservatively estimated at $1.68 in 2012-13 and increased to $1.82 in 2016-17.

Sensitivity analyses suggest that these estimates range from $1.52-1.84 in 2012-13 to $1.63-2.02 in 2016-17. It should be noted, that SROI did not produce a market-based, or actual valuation; rather it

used monetisation of value to create consistency between the benefits and costs of the service and enable assessment of changes over time. The SROI ratio is not comparable to other services.

Whilst the current SROI framework produced negative results, its purpose was: to start building an understanding and awareness of broader impacts generated by Gurriny, which go beyond healthcare system; the need for including people and the community in valuing the service and what matters to them; and to put recommendations forward on how to strengthen the measurement and management of social value provided. Any attempt to place a monetary value on intangible benefits not captured in this analysis will improve the benefit-cost ratio. Examples of healthcare and social values that were identified during conversations with Gurriny staff but not quantified in the current analysis included the positive changes in the majority (20/24) of maternal and child healthcare, preventive healthcare and chronic disease management nKPIs. Over time, these should decrease pressure on the secondary and tertiary health system through reduced hospitalisations. For example, a 1% reduction in HbA1c (above normal levels) can lead to a 25% reduction in micro-vascular complications for people with type 2 diabetes. Such benefits should be analysed through future research studies.

Social values should also be considered for inclusion in any further analyses. These include the:

- Value of avoided time in hospital
- Value of improved QOL
- Value of avoidable death
- Value of community gain
- Value of student placements
- Value of networking/partnerships
- Value of building the evidence base

Inclusion of broader impacts will require an increased level of stakeholder engagement. It is recommended that an appropriate number of interviews with clients should be conducted. Equally, additional stakeholders should also be consulted, such as the families and other services that could be affected by the clients' outcomes. As clients experience outcomes, the consequences to close family members and the community, including changes such as improved lifestyle, healthier and stronger relationships and other measures of wellbeing, should also be included to arrive at a more holistic understanding of the impacts of Gurriny.

Following the principles of the SROI framework will enable the voice of key stakeholders to be heard more effectively in understanding what has changed for them, and provide further opportunity to test the significance of factors in the sensitivity analysis. It is also important to explicitly consider any potential negative outcomes that occur as a result of activities, to ensure that an honest understanding of value is created.

7. REFERENCES

ABS. (2016). *Causes of Death, 2015*. Canberra.

ABS. (2019). *5204.0 Australian System of National Accounts*. Canberra: ABS.

Agostino J. (2016). *Utilising data for a better understanding of disease. Chapter 3: Evaluation of a health information system.*Canberra, Australia.

AIHW. (2013). *Aboriginal and Torres Strait Islander health services report 2011–12: Online Services Report—key results.* Canberra.

AIHW. (2014a). *Aboriginal and Torres Strait Islander health organisations: Online Services Report—key results 2012–13.* Canberra.

AIHW. (2014b). *Australia's health 2014. Australia's health series no. 14. The size and causes of the Indigenous health gap Cat. no. AUS 178.* Retrieved from Canberra: https://www.aihw.gov.au/getmedia/785f924a-85f4-4ca0-9dad-1abe0152c14c/7_8-indigenous-health-gap.pdf.aspx

AIHW. (2014c). *National Key Performance Indicators for Aboriginal and Torres Strait Islander primary health care: first national results June 2012 to June 2013*. Retrieved from Canberra:

AIHW. (2014d). *National Key Performance Indicators for Aboriginal and Torres Strait Islander primary health care: results from December 2013*. Canberra.

AIHW. (2015a). *Aboriginal and Torres Strait Islander health organisations: Online Services Report: key results 2013–14.* Canberra.

AIHW. (2015b). *National Key Performance Indicators for Aboriginal and Torres Strait Islander primary health care: results from December 2014*. Canberra.

AIHW. (2016). *Aboriginal and Torres Strait Islander health organisations: Online Services Report—key results 2014–15.* Canberra.

AIHW. (2017). *Aboriginal and Torres Strait Islander health organisations: Online Services Report—key results 2015–16*. Canberra.

AIHW. (2018a). *Aboriginal and Torres Strait Islander health organisations: Online Services Report—key results 2016–17*. Canberra.

AIHW. (2018b). *Admitted patient care 2016-17, Australian hospital statistics*. (84). Canberra: AIHW.

AIHW. (2018c). *Australian Institute of Health and Welfare. On-line Services Report (OSR) 2016-17.* Retrieved from Canberra:

AIHW. (2018d). *National Key Performance Indicators for Aboriginal and Torres Strait Islander primary health care. Results for 2017.*

AIHW. (2018e). *On-line Services Report (OSR) 2016-17*. Canberra.

AIWH. (2017). *National Key Performance Indicators for Aboriginal and Torres Strait Islander primary health care: results from June 2016.* Canberra.

Alford K. (2005). *Comparing Australian with Canadian and New Zealand primary care health systems in relation to Indigenous populations: Literature review and analysis. Discussion Paper No. 13. 2005*. Melbourne, Victoria.

Allonso M. (2011). Essential elements and limitations of biomedical literature review. *Medwave, 11*(10), e5194.

Anderson I, & Saunders W. (1996). *Aboriginal health and institutional reform within Australian federalism. Discussion Paper 117/1996*. Canberra.

Anonymous. (2001). Tiwi Health. *Aboriginal and Islander Health Worker Journal, 25*(4), 4-10.

Australian Bureau of Statistics. (2007). *Australian National Accounts: Input-Output Tables*. Canberra: ABS.

Australian Bureau of Statistics. (2014). *Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-13*. Canberra Retrieved from http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4727.0.55.001Chapter1002012-13.

Australian Bureau of Statistics. (2016). Census: Aboriginal & Torres Strait Islander population. 2016. http://www.abs.gov.au/ausstats/abs@.nsf/MediaRealesesByCatalogue/02D50FAA9987D6B7CA25814800087E03?OpenDocument [cited 4 July 2018].

Australian Bureau of Statistics. (2018). *2016 Census Quickstats. Yarrabah.* Retrieved from https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC33236

Australian Institute of Health and Welfare. (2015). *The health and welfare of Australia's Aboriginal and Torres Strait Islander Peoples*. Canberra,

Australian Institute of Health and Welfare. (2017). *Aboriginal and Torres Strait Islander Health Performance Framework 2017 Report*. Canberra.

Australian Institute of Health and Welfare. (2018). Indigenous Australians' access to and use of health services. In AIHW (Ed.), *Australia's health 2018* (pp. 1-4). Canberra: AIHW.

Baird, L., Mick-Ramsamy, L., & Percy, F. (1998). *Yarrabah Community Multi-purpose Primary Health Care Service Study: Final Report*. Yarrabah.

Bartlett B, & Boffa J. (2001). Aboriginal community controlled comprehensive primary health care: The Central Australian Aboriginal Congress. *Australian Journal of Primary Health, 7*(3), 74-82.

Bartlett B, & Boffa J. (2005). The impact of Aboriginal community controlled health service advocacy on Aboriginal health policy. *Australian Journal of Primary Health, 11*(2), 53-61.

Behrendt L. The 1967 Referendum: 40 years on [online].Australian Indigenous Law Review, v.11, special edition, 2007: 12-16. Available at: <https://search-informit-com-au.elibrary.jcu.edu.au/documentSummary;dn=200912828;res=IELAPA> ISSN: 1835-0186. [cited 03 July 2018].

Bentleys. (2014). *Gurriny Yealamucka Health Service: Organisational capacity review 2014*. Cairns.

Booske, B., Athens, J., Kindig, D., Park, H., & Remington, P. (2010). *Different perspectives for assigning weights to determinants of health: County health rankings working paper*. Retrieved from Madison (WI):

Brigg M, & Curth-Bibb J. (2017). Recalibrating intercultural governance in Australian Indigenous organisations: the case of Aboriginal community controlled health. *Australian Journal of Political Science, 52*(2), 199-217.

Burns C, Clough A, Currie B, Thomsen P, & Wuridjal R. (1998). Resource requirements to develop a large, remote Aboriginal health service: whose responsibility? *Australian and New Zealand Journal of Public Health, 22*(1), 133-139.

Campbell M, Hunt J, Scrimgeour D, Davey M, & Jones V. (2018). Contribution of Aboriginal Community-Controlled Health Services to improving Aboriginal health: an evidence review. *Australian Health Review, 42*(2), 218-226.

Charmaz, K. (2014). *Constructing grounded theory: A practical guide through qualitative analysis*. London: SAGE.

Chung F, Herceg A, & Bookallil, M. (2014). Diabetes clinic attendance improves diabetes management in an urban Aboriginal and Torres Strait Islander population. *Aust Fam Physician, 43*(11), 797-802.

Clarke, A. (2005). *Situational analysis. Grounded theory after the postmodern turn*. Thousand Oaks: Sage.

Davis, A., Lewis, S., Bainbridge, Z., Brodie, J., & Shannon , E. (2008). Pesticide residues in waterways of the lower Burdekin region: challenges in ecotoxicological interpretation of monitoring data. *Australasian Journal of Ecotoxicology, 14*, 89-108.

Dwyer J, Boulton A, Lavoie J, Tenbensel T, & Cumming J. (2014). Indigenous Peoples' Health Care: New approaches to contracting and accountability at the public administration frontier. *Public Management Review, 16*(8), 1091-1112.

Dwyer, J., Boulton, A., Lavoie, A., Tenbensel, T. and Cumming, J. . (2013). Indigenous peoples' health care: new approaches to contracting and accountability at the public administration frontier. *Public Management Review*. doi:10.1080/14719037.2013.868507

Fredericks B, & D., L. (2011). *Revitalizing Health for All: International Indigenous Representative Group Learning from the Experience of Comprehensive Primary Health Care in Aboriginal Australia—A Commentary on Three Project Reports*. South Carlton, Australia:

Fredericks, B. P., L. (2007). Privileging the voices of the Aboriginal and Torres Strait Islander community-controlled health service sector. *Journal of Australian Indigenous Issues, 10*(2), 35-44.

Freeman T, Baum F, Lawless A, Labonte R, Sanders D, Boffa J, . . . Javanparast S. (2016). Case Study of an Aboriginal community-controlled health service in Australia: Universal, rights-

based, publicly funded comprehensive primary health care in action. *Health and Human Rights Journal, 18*(2), 93-108.

Gajjar D, Zwi A, Hill P, & Shannon C. (2014). A case study in the use of evidence in a changing political context: an Aboriginal and Torres Strait Islander health service re-examines practice models, governance and financing. *Australian Health Review, 38*, 382-386.

Glaser, B. G. (1978). *Theoretical sensitivity : advances in the methodology of grounded theory*. Mill Valley, Calif.: Sociology Press.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory; strategies for qualitative research*. Chicago,: Aldine Pub. Co.

Gracey M, & King M. (2009). Indigenous health part 1: determinants and disease patterns. *The Lancet, 374*(9683), 65-75.

Gurriny. (2015). *Gurriny Yealamucka Health Service Newsletter*. Gurriny Newsletter. Retrieved from http://www.gyhsac.org.au/resources/publications/

Gurriny Yealamucka Health Service. (2019). Gurriny Yealamucka Health Service. Retrieved from https://www.gyhsac.org.au/

Hahr, A. J., & Molitch, M. E. (2015). Management of diabetes mellitus in patients with chronic kidney disease. *Clinical diabetes and endocrinology, 1*(1). doi:10.1186/s40842-015-0001-9

Harch, S., Reeve, D, Reeve, C. (2012). Management of type 2 diabetes: A community partnership approach. *Aust Fam Physician, 41*(1-2), 73-76.

Harfield S, Davy C, McArthur A, Munn Z, Brown A, & Brown N. (2018). Characteristics of Indigenous primary health care service delivery models: a systematic scoping review. *Globalization and Health, 14*(12).

Hill P, Wakerman J, Matthews S, & Gibson O. (2001). Tactics at the interface: Australian Aboriginal and Torres Strait Islander health managers. *Social Science and Medicine, 52*, 467-480.

Howard D. (2006). *Cross-cultural management in Aboriginal community controlled health services*. Retrieved from Darwin, Australia:

Humphrey, M., & Holzheimer, D. (2000). A prospective study of gestation and birthweight in Aboriginal pregnancies in far north Queensland. *Aust NZ J Obstet Gynaecol, 40* (3), 326-330.

Hunter, E. R., J. Baird, M. Reser, P. (2001). *An analysis of suicide in indigenous communities of North Queensland : the historical, cultural and symbolic landscape*. Retrieved from Canberra:

Hurley C, Baum F, Johns J, & Labonte R. (2010). Comprehensive primary health care in Australia: findings from a narrative review of the literature. *Australasian Medical Journal, 1*(2), 147-152.

J, L., & J, D. (2016a). Implementing Indigenous community control in health care: lessons from Canada. *Australian Health Review, 40*(4), 453.

Jackson C. (2012). Australian general practice: primed for the “patient-centred medical home”? . *Medical Journal of Australia, 197*(7), 365-366.

Jackson Pulver L, Haswell M, Ring I, Waldon J, Clark W, Whetung V, . . . Sadana R. (2010). *Indigenous Health – Australia, Canada, Aotearoa New Zealand and the United States – Laying claim to a future that embraces health for us all. World health Report Background Paper 33*.

King M, Smith A, & Gracey M. (2009). Indigenous health part 2: the underlying causes of the health gap. *The Lancet, 374*(9683), 76-85.

Lavoie J. (2003). *Indigenous primary health care services in Australia, Canada and New Zealand: policy and financing issues*. Winnipeg, Canada:

Lavoie J. (2004). Governed by contracts: the development of Indigenous primary health services in Canada, Australia and New Zealand. *Journal of Aboriginal Health, 1*(1), 6-24.

Lavoie J, Kornelsen D, Wylie L, & Mignone J. (2016b). Responding to health inequities: Indigenous health system innovations. *1*, e14.

Lawn J. Alma-Ata 30 years on: revolutionary, relevant, and time to revitalise. *The Lancet, 372*(9642), 917-927.

Li, S., Gray, N., Guthridge, S., & Pircher, S. (2009). Avoidable hospitalisation in Aboriginal and non-Aboriginal people in the Northern Territory *Med J Aust, 190*(10), 532-536. doi:10.5694/j.1326-5377.2009.tb02551.x

Liaw, S., Taggart, J., Yu, H., & de Lusignan, S. (2013). Data extraction from electronic health records - existing tools may be unreliable and potentially unsafe. *Aust Fam Physician, 42*(11), 820–823.

Lyon P. (2016). *Aboriginal health in Aboriginal hands: Community-controlled comprehensive primary health care @ Central Australian Aboriginal Congress*. Alice Springs, Australia:

McCalman J, Tsey K, Reilly L, Connolly B, Fagan R, Earles W, & Andrews R. (2014). Taking control of health: Gurriny's story of organisational change. *Third Sector Review, 16*(1), 29-49.

McCalman, J., Tsey, K., Reilly, L., Connolly, B., Fagan, R., Earles, W., & Andrews, R. (2010). Taking control of health: Gurriny's story of organisational change. *Third Sector Review, 16*(1), 29-49.

McGinnis, J. M., Williams-Russo, P., & Knickman, J. R. (2002). The Case For More Active Policy Attention To Health Promotion. *Health Affairs, 21*(2), 78-93. doi:doi: 10.1377/hlthaff.21.2.78

Mihaylova, B., Emberson, J, Blackwell, L, Keech, A, Simes, J, Barnes, EH, Voysey, M, Gray, A, Collins, R, Baigent, C. . (2014). The effects of lowering LDL cholesterol with statin therapy in people at low risk

of vascular disease: meta-analysis of individual data. *Diabetes Metab, 38*, 64-73.

Mills, J., Bonner, A., & Francis, K. (2006). The Development of Constructivist Grounded Theory. *International Journal of Qualitative Methods, 5*(1).

NACCHO. (2018a). Media release. Government announces new funding model for ACCHS. May 9 2018. Available at: http://www.naccho.org.au/wp-content/uploads/Government-announces-new-funding-model-for-ACCHS.pdf [cited 25 June 2018]. [Press release]

NACCHO. (2018b). https://www.naccho.org.au/ [cited 25 June 2018].

NAHS, N. A. H. S. W. P. (1989). *A National Aboriginal Health Strategy*. Canberra.

Oakley P, & Kahssay H. (1999). *Community involvement in health development: An examination of the critical issues*. Geneva.

Panaretto K, Wenitong M, Button S, & Ring I. (2014). Aboriginal community controlled health services: Leading the way in primary care. *Medical Journal of Australia, 200*(11), 649-652.

Queensland Health. (2013). *Transition of primary health care services to Aboriginal and Torres Strait Islander Community Controlled Health Organisations. Funding guidelines (Unpublished report)*.

Queensland Health. (2017). *The burden of disease and injury in Queensland's Aboriginal and Torres Strait Islander people 2017 (reference year 2011) Main report*. Brisbane.

Reeve, C., Humphreys, J, Wakerman, J, Carter, M, Carroll, V, Reeve, D. (2015). Diabetes clinic attendance improves diabetes management in an urban Aboriginal and Torres Strait Islander population. *Aust Fam Physician, 43*(11), 797-802.

Robinson G, d'Abbs P, Bailie R, & Togni S. (2003). Aboriginal participation in health service delivery: Coordinated care trials in the Northern Territory of Australia. *International Journal of Healthcare Technology and Management, 5*, 45-62.

Rosewarne C, Vaarzpm-Morel P, Bell S, Carter E, Liddle M, & Liddle J. (2007). The historical context of developing an Aboriginal community-controlled health service: a social history of the first ten years of the Central Australian Aboriginal Congress. *Health and History, 9*(2), 114-143.

Scrimgeour D. (1997). *Community control of Aboriginal health services in the Northern Territory*. Darwin, Australia:

Shannon C, & Longbottom H. (2004). *Capacity development in Aboriginal and Torres Strait Islander health service delivery : Case studies. Aboriginal and Torres Strait Islander Primary Health Care Review: Consultant Report No 4*. Retrieved from Canberra, Australia:

Strauss, A. L., & Corbin, J. M. (1998). *Basics of qualitative research : techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks: Sage Publications.

Sundström, J., Sheikhi, R., Östgren, C., Svennblad, B., Bodegård, J., Nilsson, P., & Johansson, G. (2013). Blood pressure levels and risk of cardiovascular events and mortality in type-2 diabetes: cohort study of 34 009 primary care patients. *Journal of Hypertension, 31*(8), 1603-1610. doi:10.1097/HJH.0b013e32836123aa

Taylor J, Dollard J, Weetra C, & D, W. (2001). Contemporary management issues for Aboriginal Community Controlled Health Services. *Australian Health Review, 24*(3), 125-132.

Tran, B., Falster, M. O., Douglas, K., Blyth, F., & Jorm, L. R. (2014). Health behaviours and potentially preventable hospitalisation: a prospective study of older Australian adults. *PloS one, 9*(4). doi:10.1371/journal.pone.0093111

United Nations General Assembly. (2008). United Nations Declaration on the Rights of Indigenous Peoples, 2008. Available at http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf [cited 22 June 2018].

Vest, J. R., Gamm, L. D., Oxford, B. A., Gonzalez, M. I., & Slawson, K. M. (2010). Determinants of preventable readmissions in the United States: a systematic review. *Implementation Science, 5*. doi:doi:10.1186/1748-5908-5-88

Wakerman J, Matthews S, Hill P, & Gibson O. (2000). Aboriginal and Torres Strait Islander health managers: issues and strategies to assist recruitment, retention and professional development.

Ward R, F. B., Best O. (2014). Community controlled health services: what they are and how they work. In O. Best and B. Fredericks (Eds.),. *Yatdjuligin: Aboriginal and Torres Strait Islander Nursing and Midwifery Care*, 87-101.

World Health Organization. (1978). *Declaration of Alma-Ata* Paper presented at the International Conference on Primary Health Care, Alma-Ata, USSR. www.who.int/hpr/NPH/docs/declaration_almaata.pdf.

8. APPENDICES

List of tables

Table 1: Summary of the strategies, enablers and barriers to transitioning PHC services to community control in Yarrabah 8
Table 2: Summary table: funding/costs, outputs, healthcare and health outcomes 12
Table 3: Economic indicators 15
Table 4: Requests and participation in interviews 33
Table 5: Stage 1 Establishing and Developing a Community-Controlled Health Organisation 40
Table 6: Stage 2 Preparing for Transition 45
Table 7: Stage 3: Post Transition and Beyond 69
Table 8: Variables of interest from Gurriny healthcare service data 77
Table 9: MBS services rate per 1,000 people, 2017-18 82
Table 10: National comparison: Potentially preventable hospitalisations from July 2013 to June 2015, crude rate per 1000 population 99
Table 11: Total ED presentations 101
Table 12: Gurriny operating expenditure 103
Table 13. Gurriny - key sources of funding 2011-12 to 2017-18 104
Table 14: Estimated number of DALYs averted, and value of the averted burden 107
Table 15: Summary of SROI 109
Table 16: Characteristics of included studies 119
Table 17: Document details 129
Table 18: Total PPH admissions (total) (A) 133
Table 19: Number of people with PPH admissions (B) 133
Table 20: Average PPH admission per person (A/B) 134
Table 21: Average length of stay per PPH admission 134
Table 22: Total difference in PPH cost pre- and post-transition 135
Table 24: Trends by admissions by type: Acute, Chronic Disease, Multiple Conditions, Vaccine Preventable 137
Table 25: Total hospital activity (episode) 138
Table 26: Number of patients 139
Table 27: Per person hospital activity 139
Table 28: Average ALOS (days) 139
Table 29: Total cost by hospital activity 140

List of figures

Figure 1. Yarrabah ... 18
Figure 2: Program logic for the evaluation of transition to community control of primary healthcare services in Yarrabah ... 20
Figure 3: The drivers of transition to community control ... 34
Figure 4: Community desire for community control ... 38
Figure 5. Number of clients by gender and Indigeneity 2013-14 to 2017-2018 OSR Data ... 78
Figure 6. Number of clients by gender 2009-2010 to 2017-2018 Pen Clinical Audit Tool (penCAT) Data ... 79
Figure 7. SEWB clients by gender, 2013-14 to 2017-2018 ... 79
Figure 8. Episodes of care, 2013-14 to 2017-2018 - OSR Data ... 80
Based on 2015/16 data, Figure 9 shows the how the age of Gurriny's clients is associated with an increase in episodes of care. ... 80
Figure 9: Increasing access with age ... 81
Figure 10: Gurriny episodes of care by service provider type ... 81
Figure 11: Engagement with primary health physicians by Medicare service ... 82
Figure 12: Proportion of Indigenous women who gave birth in the last 12 months and attended antenatal care and whose first antenatal care visit was < 13 weeks (nKPI data) ... 83
Figure 13: Proportion of Indigenous babies born in the last 12 months whose birth was recorded as live and whose birth weight has been recorded in the baby's medical record ... 84
Figure 14: Health Assessments (MBS #715) - Proportion of clients aged 0-4 years who have received a Health Assessment within the previous 12 months. 84
Figure 15: Proportion of Indigenous children with age at last birthday of 12, 24 or 60 months who were fully immunised at last birthday (for DTPa, HiB, HepB and MMR) ... 85
Figure 16: Birth weight results for Indigenous babies born in the last 12 months - categorised as low, normal or high ... 86
Figure 17: Proportion of Indigenous clients aged 15 years and over who are regular clients of the service, who have had their smoking status recorded ... 87
Figure 18: Proportion of Indigenous clients aged 15 years and over who are regular clients of the service, who have had their alcohol consumption status recorded ... 87
Figure 19: Proportion of clients aged 25 years and over who received a Health Assessment (MBS #715) ... 88
Figure 20: Proportion of Indigenous women aged 20-69 years who are regular clients who have had a cervical screening in the specified period ... 89
Figure 21: Proportion of clients aged 50 and over and who are immunised against influenza ... 89
Figure 22: Smoking status result - current smoker, ex-smoker or never smoked ... 90
Figure 23: BMI classified as overweight or obese for clients aged 25 years+ ... 91
Figure 24: Percentage of clients diagnosed with chronic disease who have received a current GP Management Plan (MBS item 721) within the previous 24 months ... 92

Figure 25: Percentage of clients diagnosed with chronic disease, who have received a current Team Care Arrangement (MBS item 723) within the previous 24 months 93
Figure 26: Proportion of clients who are diagnosed with type 2 diabetes and had a BP test in the last six months 93
Figure 27: Proportion of clients who are diagnosed with type 2 diabetes and have had one or more HbA1c tests in the last 6 months, or 12 months 94
Figure 28: Percentage of regular clients who had a kidney function test - eGFR, ACR (or other microalbumin test) - who are diagnosed with type 2 diabetes 95
Figure 29: Percentage of regular clients 15 years and over with CVD who had a kidney function test within the previous 12 months 95
Figure 30: Percentage of clients aged 15-49 years who have been immunised against influenza in the last 12 months who are diagnosed with type 2 diabetes 96
Figure 31: Proportion of clients aged 15-49 years who have been immunised against influenza in the last 12 months who are diagnosed with COPD 97
Figure 32: Blood pressure result in type 2 diabetes clients whose BP test in the last six months were ≤130/80mmHg 97
Figure 33: HbA1c result in type 2 diabetes clients who have an HbA1c test recorded 98
Figure 34: Potentially preventable hospitalisations (PPH) for Indigenous people residing in Yarrabah from 2008 (Jul-Dec) to 2017 (Jan-Jun) 99
Figure 35: Emergency department presentations for Indigenous people residing in Yarrabah 100
Figure 36: The comparison before (pre) versus after (post) transition to community control 103
Figure 37: Gurriny operating costs 103
Figure 38: Funding sources 105
Figure 39: Change in Gurriny staff numbers 2013-14 to 2017-18 105
Figure 40: Numbers of Gurriny staff by occupation 2015-16 to 2017-18 106
Figure 41: The cost of PPHs per year 108
Figure 42: Number of documents by year 128
Figure 43: Document Types 129
Figure 44: Outlines the logic and data for deriving the PPH calculations. 132
Figure 45: PPH Indigenous people Yarrabah **AGED under 15** 135
Figure 46: PPH Indigenous people Yarrabah AGED 15-35 136
Figure 47: PPH Indigenous people Yarrabah **AGED 35+** 136
Figure 48: PPHs (Chronic) for Indigenous people residing in Yarrabah from 2008 (Jul-Dec) to 2017 (Jan-Jun) 137
Figure 49: PPH (Acute) for Indigenous people residing in Yarrabah from 2008 (Jul-Dec) to 2017 (Jan-Jun) 138
Figure 50: Emergency department presentations for Indigenous people residing in Yarrabah, Triage 4 and 5 140
Figure 51: Emergency department presentations for Indigenous people residing in Yarrabah, Triage 3 141
Figure 52: Emergency department presentations for Indigenous people residing in Yarrabah, Triage 1-2 141

8.1 Appendix 1: Characteristics of included studies

Table 16: Characteristics of included studies

Author, year: Study design	Setting	Study Aims	Phenomena or key conditions or strategies.	Main outcomes/conclusions
Anonymous, (2001): Descriptive case study	Melville and Bathurst (Tiwi) Islands, 60 kilometres (km) from Darwin. Combined land mass 7769 square km and population 2,400. Bathurst Island township of Nguiu has a large clinic with a staff of 50. Melville Island has two clinics, Pirlangimpi and Milikapiti. Clinics are overseen by the Tiwi Health Board consisting of 20 members with expertise in health, education and community government	To describe health care provided including implementation of Co-ordinated Care Trials (CCTs) which aimed to ascertain if individual health status was improved by a system of greater autonomy & flexibility	Partnerships with government. Pooled funding allocated to providers for autonomy and flexibility of services. Tiwi Health Board commitment to on-going staff training and promoting health careers for youth.	Greater purchasing power meant equal emphasis on primary, preventive and environmental health and a broader range of programs. Within three years death rates from all causes fell by 30%, whilst new dialysis rates reduced by 60%. Children's immunisation rates rose and there were reductions in levels of self-harm and hospitalisation. While the mainstream CCTs did not produce expected results, they were remarkably successful in Aboriginal communities. The extent of cooperation between governments, local Aboriginal communities, health services and organisations was unprecedented. According to the health workers and the Board, success comes from empowerment and the pivotal role of culture – people making decisions about their health through culturally appropriate education and having resources available to them.
Bartlett, (2001): Descriptive case study	Central Australian Aboriginal Congress, (Congress), Northern Territory (NT). Membership of Congress inclusive of all Aboriginal people normally resident in Central Australia. Congress Cabinet elected from membership and meets regularly to set policy.	To describe mechanisms and processes of community control. To describe the development and capacity of community-controlled organisations to respond to their client populations	Establishment of core functions including clinical services, social preventive programs, PHC support and advocacy including negotiating with government. An educator provided training/support to AHWs – clinical skills developed and maintained. Information technology, systems management and staff training.	Health boards established through which community control could be asserted. Delivery of essential sickness services, clinical preventive services, and improved access to PHC for Aboriginal people. ACCHSs resisted being incorporated into mainstream health care delivery. Educationally disadvantaged communities still able to be in control of their service in areas they see as important. Provision of flexibility allowing community member use of organisation's resources to pursue their concerns.

		taking Congress as a case study.		Opportunities for community empowerment to address underlying determinants of health.
Bartlett, (2005): Descriptive case study	ACCHS sector.	To review the advocacy role of Aboriginal community controlled health services in the development of Aboriginal health policy	The impact of government policy changes (including funding and administrative responsibilities) and bureaucratic processes on delivery of health services.	The advocacy role of ACCHSs has been crucial to addressing Aboriginal health disadvantage. A key aspect of advocacy has been the development of collaborative forums for knowledge exchange (e.g. peak Aboriginal health bodies). Inter-sectorial collaboration (e.g. land, housing, infrastructure, economic development) have a major impact on health status.
Brigg, (2017): Descriptive case study	The ACCHS sector. The Institute for Urban Indigenous Health (IUIH): an overarching regional corporation that oversees planning and development of ACCHSs in southeast Queensland. IUIH is governed by representatives from four founding ACCHSs and independent expert directors. Conflict of interest rules exist (e.g. no more than one member from any family can sit on a board).	To review governance challenges in the sector. To describe reforms in ACCHS governance and funding arrangements taking IUIH as a case study	Challenges of excessive attention given to governance resulting in intense regulatory oversight. Carrying Aboriginal values and ways of operating with them. ACCHSs typically give significant weight to kinship, relatedness, and eldership. ACCHSs draw on Indigenous culture and identity for their internal legitimacy. They have necessarily become adept at drawing on settler-culture, values systems and modes of governance. Moves to block-like funding over three year contracts. Eligibility to claim Medicare benefits for PHC (PHC). Greater emphasis on skills-based appointments over full	Governance oversight has enabled a phenomenon termed 'controlled communities' and quasi government-controlled health services, compromising the efficacy of ACCHSs and limiting possibilities for effective health care and innovation informed by Indigenous terms of reference. Relatively high levels of responsiveness to local Aboriginal community aspirations, needs, challenges and events. ACCHSs are expressions of both Indigenous practices as well as those of the liberal state. They may be an expression of Indigenous self-determination; however, they are also 'quintessentially intercultural'. ACCHSs engage with Indigenous communities in ways that mainstream services do not and cannot. Improved funding security and increased flexibility to allow ACCHSs to more effectively plan for health care needs. ACCHSs generating income. In some cases, funding flexibility has enabled the emergence of new business models to support service reforms and innovation.

			Indigenous composition of ACCHSs boards. Efforts to develop communication between IUIH ACCHSs and their communities (e.g. social media, events, 'Service Report Cards').	Skills gaps filled by independent directors and good corporate governance crucial for successful operation of ACCHSs. Measures to improve corporate governance and community engagement have brought Indigenous community engagement and participation.
Burns, (1998): Needs assessment study	Maningrida, NT.	To make recommendations for the development of the health service to meet the needs of Aboriginal people in the Maningrida region.	High seasonal mobility between the township and outstations. Consensus that the community wished to be more involved in decision making within the health service. General agreement about overall structure of the health board to manage the service. Each organisation to be represented. Inadequate resident staffing identified as the greatest obstacle to health service delivery. Problems in recruitment and retention of Aboriginal Health Workers (AHW) detrimental to effective service operation: lack of AHW accommodation, long offsite training periods and lack of participation in management. Housing infrastructure costs are a major constraint in	The needs assessment study meant the Maningrida community had a basis from which to enter into dialogue with service providers and funding agencies to consider needs and priorities and bring about change. Complex and often ambiguous nature of funding arrangements for health services allows responsibilities to be denied or diverted. The lack of improvement in Aboriginal health, and uncertainties in federal-state responsibilities contrast with the situation in the United States, where the Indian Health Service has assisted native Americans to achieve substantial improvements in health.

			developing health service for remote communities. Lack of administrative and management support.	
Dwyer, (2014): Comparative descriptive case study	Indigenous PHC organisations in Canada, New Zealand (NZ), and Australia	Analysis of emerging reforms to contracting and accountability for Indigenous PHC organisations.	Government imposed funding constraints had led to Indigenous PHC organisations 'patch (ing) together' many precisely targeted funding programmes – which can undermine responsiveness to communities. The reforms are attempts to address the funding and accountability relationship between government funders and indigenous PHC and social service providers.	While approaches are different in Canada, NZ and Australia, the reforms represent attempts to resolve or reconcile the competing imperatives of Indigenous community-based providers of comprehensive PHC with those of government funders. A major theme is the moves toward more relational (longer-term, integrated) forms of contracting. The fundamental rethink of accountability regimes is a missing element. The cases studies show that reform of accountability requirements is difficult – the concept of reciprocal accountability may provide the basis for redesign in ways that recognise complexities.
Fredericks, (2011): Descriptive case studies	Australian ACCHS sector, Victorian Aboriginal Health Service, Congress, Alice Springs, and Urapuntja Health Service, NT.	To describe the experiences of implementing comprehensive PHC projects at three ACCHSs	Organisational strategies to address problems communities face.	Commitment to quality and efficiency in service delivery is challenging and costly. Community participation is fundamental to the ACCHS model. Medical referral relationships and inter-sectoral collaborations are critical for ACCHSs. Good leadership is essential in Aboriginal and Torres Strait Islander health.
Freeman, (2016): Comparative descriptive case study	Central Australian Aboriginal Congress Aboriginal Corporation, Alice Springs, NT and mainstream PHC services.	What are the strengths of the Aboriginal community controlled service as a comprehensive PHC model for universal health care (UHC)?	An ACCHS (Congress) was evaluated and compared with five mainstream PHC services.	ACCHSs are promising models of comprehensive PHC which outperform mainstream services in "multidisciplinary work, community participation, cultural respect and accessibility strategies, preventive and promotive work, and advocacy and inter-sectorial collaboration on social determinants of health. The community-controlled model suggests a range of benefits for population health over and above what

				a purely primary-medical-care or private-health-insurance-driven vision of UHC may offer.
Gajjar, (2014): Descriptive case study	Regional body IUIH in southeast Queensland.	Examines the use of research evidence by recently established IUIH to prioritise and plan services.	Independent researchers analysed issues covered at a routine quarterly meeting of the IUIH.	The generation and application of research evidence is integral to the work of the IUIH. The integration of evidence and practice has resulted in the emergence of a new service delivery model, in which evidence supports accountability, change management and self-sufficiency, and attempts to redefine community control.
Hill, (2001): Qualitative study	Aboriginal and Torres Strait Islander participation in the management of the Aboriginal health sector.	Examine the experience and practice of health managers. Identify obstacles to recruitment, retention and professional development and strategies to overcome them.	Over the past 30 years there has been recognition of increasing need for Indigenous participation in the management of health services. The proliferation of ACCHSs have significantly contributed to this recognition. Attention has been drawn to difficulties recruiting and retaining appropriately experienced Indigenous managers.	Approach to management by Aboriginal and Torres Strait Islander managers differs from that of their non-Indigenous counterparts, but reflects a commonality of tactics and responses, shaped by their shared cultural experience.
Howard, (2006): Descriptive case study	Two ACCHSs: The remotely located Wurli Wurlinjang Health Service and the urban Katherine West Health Board.	Undertake a detailed examination of cross-cultural management practices in two community-controlled organisations.	Cross-cultural communication issues that affect service delivery and health outcomes that emerge within and associated management processes between Aboriginal and non-Aboriginal health workers and Aboriginal and non-Aboriginal managers.	ACCHSs operate in a complex cross-cultural context. Extensive and intricate social responsibilities within and outside the workplace make management within an ACCHS a complex endeavour. For all managers, it is important that they are proactive in giving positive feedback to Aboriginal staff, to counter negativity from cross cultural difference and past trauma. Non-Aboriginal people working in Aboriginal health need to come to terms with the legacy of history.

Lavoie, (2004): Comparative descriptive case study	The 'fourth' health care sector (the three sectors generally acknowledged are government, the private sector and non-profit, and non-government organisations) in Canada, NZ and Australia: Indigenous PHC services.	To explore the context in which Indigenous health policies emerged and the relationship between policy and implementation in Indigenous PHC services.	Each case study begins by providing some historical context, then exploring issues of jurisdiction, policy and financing as they affect the fourth sector. A detailed analysis of the relationship between health policy objectives and the Indigenous health sector is presented.	Results show that the contractual environment does not necessarily match declared policy objectives, especially where competitive models for accessing funding have been implemented.
McCalman, (2014): Descriptive case study	Gurriny during the time leading up to and through transition to community-control led by a board of 12 local Aboriginal people	Provide a detailed analysis of change process within an Aboriginal community controlled organisation	Transition to a comprehensive primary health-care community controlled service was characterised by a phase of rapid growth in the organisation and high levels of stress, poor morale and productivity among staff. Management responded, in part, by arranging extension of previous participatory action research processes aimed at supporting managers to take greater charge of their processes of organisational change, drawing on the theoretical position of empowerment.	The result was a model of empowerment processes and outcomes to guide organisational change and a range of benefits for the organisation. The study provides an example for other interested in similar processes and identifies some of the key success factors for community control (for example, the 6 Ps of community control for Yarrabah: 1. Priorities 2. Purpose 3. Principles 4. Processes 5. Programs 6. Personal, Organisation and community empowerment outcomes.
Panaretto, (2014): Comparative descriptive case study	Queensland Aboriginal community controlled health sector and mainstream general practice.	What is known about the performance of ACCHSs and mainstream general practice? Why should support for ACCHSs be both	There is now a broad range of PHC data that provides a sound evidence base for comparing the health outcomes for Indigenous people in ACCHSs with those achieved through mainstream services.	ACCHS models of comprehensive PHC are consistent with the patient-centred medical model now suggested as best practice for general practice. ACCHSs' coverage of the Aboriginal population is higher than 60% outside major metropolitan centres.

		continued and enhanced?		ACCHSs are consistently improving performance on best-practice indicators, and outperforming mainstream general practices. ACCHSs play a significant role in training the medical workforce and employing Aboriginal people. ACCHSs have risen to the challenge of delivering best-practice care and there is a case for expanding ACCHSs into new areas. To achieve the best returns, the current mainstream Closing the Gap investment should be shifted to the community controlled sector.
Robinson, (2003): Descriptive case study	Tiwi Islands and the Katherine West region NT, which were the sites of two Aboriginal Coordinated Care Trials (CCTs) between 1997 and 2000.	To present a component of the findings of commissioned local evaluation of the NT CCTs.	This paper focusses on care coordination, and primarily on Aboriginal participation in clinical care mainly through the involvement of locally recruited Aboriginal Health Workers.	The NT CCTs set in place structural arrangements and processes which delivered substantial increases in Aboriginal decision-making about health generally and within direct service delivery. The Boards of the community-based services now employ substantial numbers of community members in prevention and health promotion roles. The CCTs, via Aboriginal Health Boards, have compelled governments to address issues fundamentally bound up with the social determinants of health.
Rosewarne. (2007): Descriptive case study using historical document review and oral testimony	Australian ACCHS sector and Central Australian Aboriginal Congress	To outline the conditions that led to the foundation and subsequent developmental path of the organisation	Local (Central Australia) and national context and the reasons why the Central Australian Aboriginal community established Congress	Organisations such as Congress are a representation of Aboriginal people exercising their right to basic services and living conditions, and to self-determination. The longevity of the organisations, often under difficult circumstances, is testament to their communities' regard for them.
Scrimgeour, (1997): Descriptive case study	Community-controlled Aboriginal health sector in the NT	To describe the development of ACCHSs in the NT	History of ACCHSs in the NT, international experiences and pros and cons of community control	Benefits of ACCHSs include: appropriate and accessible health care services, locally appropriate programmes, empowerment, human rights, Aboriginal definitions of health, advocacy, and employment and training.
Shannon, (2004):	Australian ACCHS sector, Townsville Aboriginal and Islander Health Service	To explore the concepts and issues identified in	Using an 'inputs-processes-outputs-intermediate outcomes-outcomes-	A service with capacity has the following characteristics:

Descriptive case studies	(TAIHS), Qld; South Coast Medical Service Aboriginal Corporation (SCMSAC), NSW; Nganampa Health Council, NT; Unnamed Rural Aboriginal Health Clinic.	relation to governance, service delivery and planning processes.	outcomes' model to measure the impact of a health service. The model acknowledges that outcomes are influenced by a myriad of social-economic and biological pathways and it is difficult to measure the contribution of a specific factor such as a health program.	A clear mission statement or understanding of its role or purpose. A Board and organisational structure that supports the work of the service. A clear delineation of roles and responsibilities within the organisation supported by policy and procedures. A workforce that has the necessary mix of staff to support the work of the organisation. Management structures that provide support for human resource management, and financial management and planning. Ongoing professional development for staff. Information systems that allow the service to review, monitor and evaluate its work and to identify and plan for areas of need. Planning procedures that use data that allow Boards and staff to monitor the service including community involvement health programs. Realistic timeframes to achieve outputs.

8.2 Appendix 2: Interview guide

I'm interested in the transition of the primary health service at Yarrabah in July 2014 from Queensland Health management to community control.

Can you tell me something about yourself and your role in the transition?

- Had you been in that role for long?
- Did transition affect your role? If yes, in what way?

Can you tell me what happened more generally at the time of transition?

- What happened leading up to the transition?

(*ask about what happened to delay the transition so much when there was a plan to transition no later than 2010. Ask what happening in between the signing of the Deed of Commitment in 2005 and the actual transition in 2014)*

- What happened during the transition?
- What happened after the transition?
- Do you think the transition to community control worked well? Why/why not?

What were the processes that enabled the transition to happen?

- What were the processes in Gurriny that enabled transition?
- What were the processes in Queensland Health that supported transition?
- What were the processes in the Yarrabah community that supported transition?
- Were there any other enablers of transition?
- Was there anything that helped you or made it easier for you to participate?

Were there any barriers to transition?

- What were the barriers in Gurriny that hindered a smooth transition?
- What were the barriers in Queensland Health that hindered a smooth transition?
- Were there any other barriers to a smooth transition? If yes, what?
- Did you experience any barriers to your participation in the transition? If yes, what?

(If not already discussed, ask directly about the relations/dynamics between Gurriny and QH as both a potential barrier and enabler)

What do you think have been the impacts of transition?

- What were the impacts on healthcare service provision to Yarrabah people?
- Have there been any impacts on Yarrabah people's health outcomes?
- What other impacts have you noticed for Yarrabah (e.g. employment of local people; leadership)?
- What impacts did the transition have on Queensland Health?
- Any other broader impacts?

How do you think the control of primary healthcare services could still be improved?

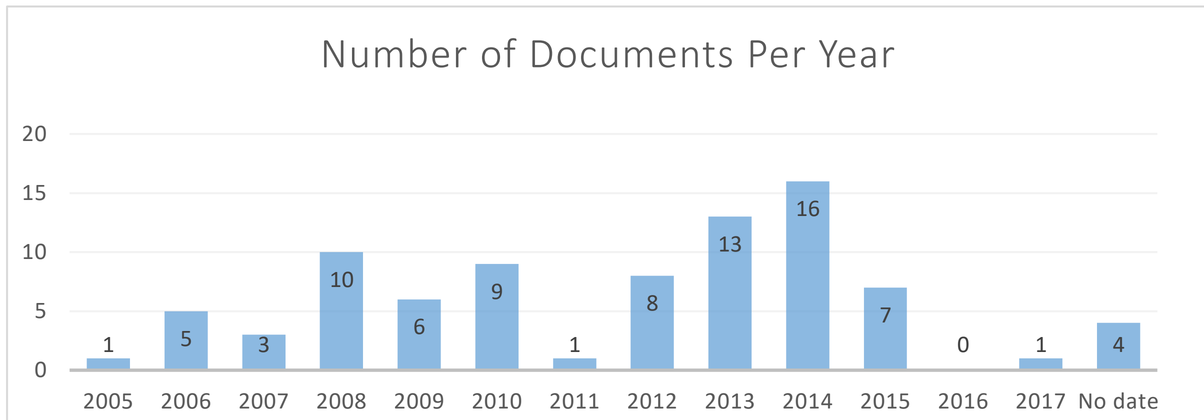
- What could Gurriny still do to improve their control of healthcare services?
- What could Queensland Health still do to improve their support for community controlled healthcare services in Yarrabah?
- What else could be done to continue to improve the community controlled delivery of primary healthcare services in Yarrabah?

Is there anything else about your and others' participation in the transition that you'd like to mention? Anything I haven't asked you about?

8.3 Appendix 3: Process evaluation document overview

A total of 84 documents created or published 2005-2017 were reviewed. The dates of analysed documents as shown in figure 1, indicates that a bulk of the activity towards progressing the transition occurred between 2008 and 2010, and then again between 2012 and 2015.

Figure 42: Number of documents by year



The most common type of document were progress or status reports (n=19, 23%) which outlined the various steps and actions taken by Gurriny to progress the transition process. Published or internal reports also contributed a significant portion of documents (n=10, 12%), as well as plans (n=10, 12%) and communication briefs (n=9, 11%). A range of other document types were also reviewed (see Figure 2).

Figure 43: Document Types

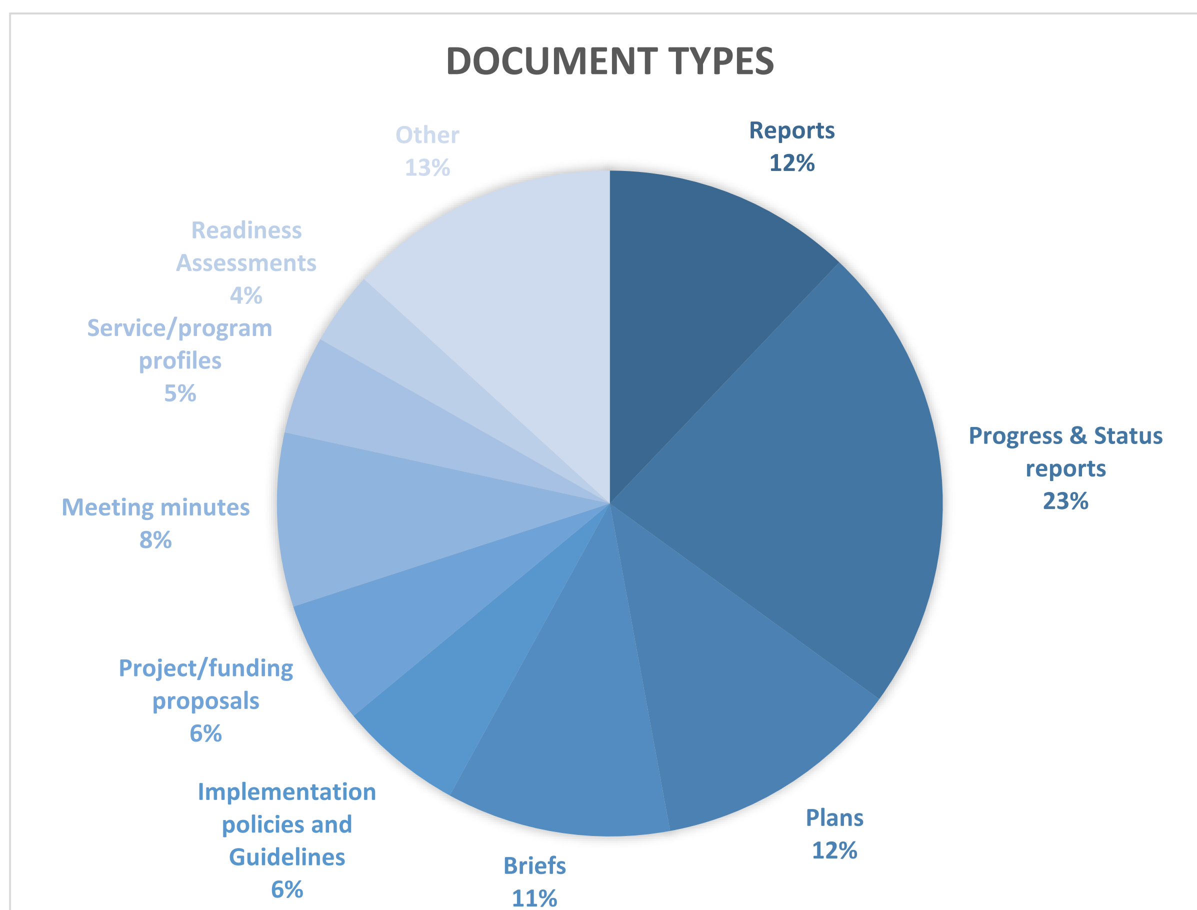


Table 17: Document details

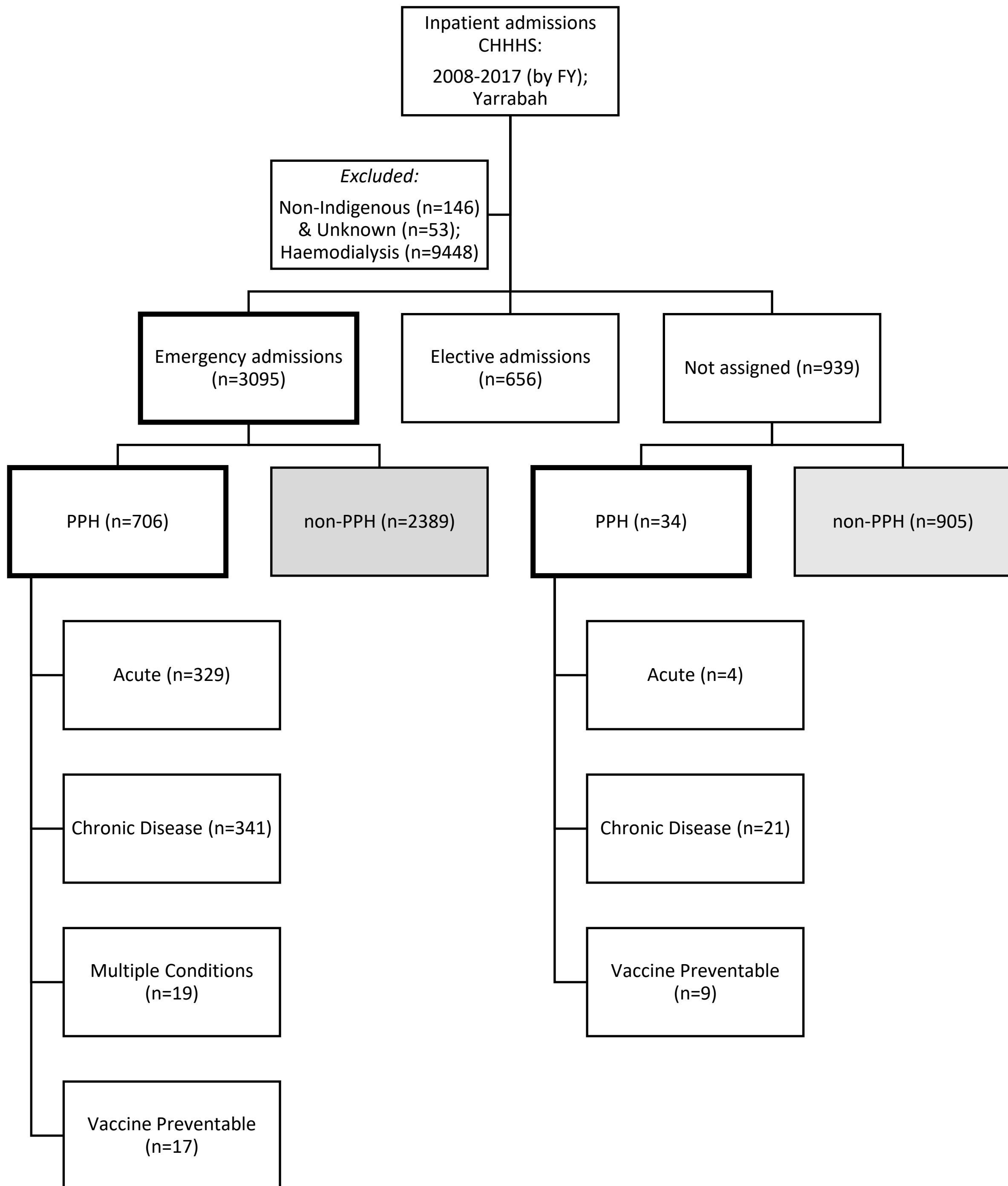
Document Type	Document Name	# Documents
Report	• The Practice Health Atlas (PHA) Gurriny Yealamucka Health Service (2013) • The Practice Health Atlas (PHA) Gurriny Yealamucka Health Service (2012) • Eagar K and Gordon R (2008). Access and equity - the funding required to close the gap in Aboriginal and Islander health in Far North Queensland. Centre for Health Service Development, University of Wollongong • Bentleys (2014). Organisational Capacity Review Report (draft) • Bentleys (2015). Organisational Capacity Review Report (final) • Yarrabah Health Reform Project: Progress report on the project implementation from September 2006-July 2008. Ross Andrews, Transition Manager (2008) • Belbin (2007). Gurriny Yealamucka Transition Project Talent Management	Total = 10, 11.9% By year 2007 = I 2008 = III 2010 = I 2012 = I 2013 = I 2014 = I 2015 = II

	• McCalman, J., & Jones, G. (2015) Gurriny Yealamucka Health Service Evaluation Report 2014-15. Cairns: The Cairns Institute, James Cook University. • Report – Pathways to Community Control, 2008 • Gurriny internal report, discussion paper on model of care, 2010	
Plan	• Risk management action plan (Bentleys), 2014 • Specifications for the Transition Implementation Plan, 2006 • Readiness Tool Action Plan, 2014 • Final transition action plan (2013 – Isn't this a progress report though?) • Transition plan draft, 2012 • Strategic Plan 2011-2013 • Annual performance and accountability Strategic Operational Plan 2010-2011 • Transition Plan, 2008 • Plan for PHC model and transition implementation, 2010 • QH/Gurriny Communication and Consultation strategy, 2010 ???	Total = 10, 11.9% By year 2006 = I 2008 = I 2010 = III 2011 = I 2012 = I 2013 = I 2014 = II
Brief	• Transition brief, 2015 • High level transition brief, 2014 • Reporting brief, readiness tool, 2012 (x2) • Transition brief to board of directors, 2009 • Brief – Status Report for Partnership, 2009 (x2) • Brief – Status Report for Partnership, 2010 • Brief from CHHHS and Gurriny CEO's to QH Director General, 2009	Total = 9, 10.7% By year 2009 = IIII 2010 = I 2012 – II 2014 = I 2015 = I
Progress Report	• Transition unit report, May 2013 • Transition unit report, June 2013 • Transition unit report, Sept 2013 • Transition unit report, Dec 2013 & Jan 2014 • Transition unit report, Feb & March 2014 • Transition unit report, Feb & April 2014 • Transition unit report, May 2014 • Gap Analysis, Progress Report, 2013 (x2 or just repeat?)	Total = 8, 9.5% By year 2013 = IIII 2014 = IIII
Performance Framework	• Performance framework table - Jan – Jun 2013 - Jan – Mar 2014 - April – June 2014 - Jul – Sep 2014 - Oct – Dec 2014 - Jan – Mar 2015 - Apr – Jun 2015 • Reporting deliverables for transition project, June to July 2015	Total = 8, 9.5% By year 2013 = I 2014 = IIII 2015 = III
Meeting Minutes	• High Level T2CC Committee Meeting (x3), 2014, 2014, 2015	Total = 7, 8.3% By year

	• Transition Plan Briefing Notes (progress report) (2006) • Transition Committee meeting minutes, 2008 • Transition Committee meeting minutes, 2009 (x2)	2006 = I 2008 = I 2009 = II 2014 = II 2015 = I
Implementation policies and Guidelines	• Evaluation Guidelines, 2013 • Readiness Assessment Framework, 2013 • Information Management Guidelines, 2013 • Industrial Relations Guidelines, 2013 • Funding Guidelines, 2013	Total = 5, 5.9% All 2013
Status Report	• Weekly status report - Nov 2006 - Dec 2006-Jan 2007 - Feb 2007	Total = 3, 3.5% 2006 = I 2007= II
Service/Program Profile	• Service Provision map for Gurriny, no date • Gurriny program profile, 2006 • Proposed service delivery framework, no date • Workforce structure document, phases 1 & 3, 2010	Total = 4, 4.7% By year 2006 = I 2010 = I No date = II
Project proposal/funding requests	• Project proposal for transition officer position (x2), 2008 • Support letter for proposal, 2008 • Funding request, 2010 • Support letter from MP, 2008	Total = 5, 5.9% By year 2008 = IIII 2010 = I
Readiness Assessment	• Readiness Assessment DRAFT GAP ANALYSIS – YARRABAH, 2013 • DRAFT READINESS ASSESSMENT (X2), 2012	Total = 3, 3.5% 2012 = II 2013 = I
OTHER	• Deed of Commitment, 2005 • Yarrabah budget table, 2012 • Service data doc, 2008 • Health indicators to measure, no date (around 2006-2008) • Transition of Primary Health Care Services to Gurriny PRESENTATION, 2012 • Presentation - Community Controlled PHC In Cape York - Summary Of “Funds Pooling” Work-Stream: Yarrabah Supplement. December 2006 • Document around QH using Gurriny records, 2010 (fleshing out issues and options) • QH document for QH staff on options re staff transition, 2014 • Transition Committee Terms of Reference, no date • Gurriny Annual Report, 2017-2018 • Transition position, 2010 (reporting on issues with QH)	Total = 11, 13% By year 2005 = I 2006 = I 2008 = I 2010 = II 2012 = II 2014 = I 2017 = I No date = II

8.4 Appendix 4: Economic sensitivity analyses of PPH by age and admission type

Figure 44: Outlines the logic and data for deriving the PPH calculations.



While there was an increase in the number of PPH admissions over time (Table 19), there was also an increase in the number of people being admitted, which resulted in a slight reduction in the number of PPH admissions per person for females, particularly for those aged over 35 years, from 1.9/ person before transition to 1.5/person after transition (Table 18).

Table 18: Total PPH admissions (total) (A)

Hospital activity	**Total PPH admissions**			**Difference (After – Before)**	**Higher ↑ or lower ↓ compared to before**
	Before (Jan12–Jun14) 28 months	During (Jul14-Dec14) 6 months	After (Jan15-Jun17) 28 months		
FEMALE	106	114	114	8	↑
<15	17	21	17	0	-
15-35	25	25	27	2	↑
>35	64	68	70	6	↑
MALE	76	87	97	21	↑
<15	28	26	27	-1	↓
15-35	10	10	12	2	↑
>35	38	51	58	20	↑
PERSON	182	57	280	98	↑
<15	45	11	57	12	↑
15-35	35	8	47	12	↑
>35	102	38	176	74	↑

Table 19: Number of people with PPH admissions (B)

Hospital activity	**Number of people with PPH admissions**			**Difference (After – Before)**	**Higher or lower compared to before**
	Before (Jan12–Jun14) 28 months	During (Jul14-Dec14) 6 months	After (Jan15-Jun17) 28 months		
FEMALE	71	24	103	71	↑
<15	16	6	27	16	↑
15-35	21	6	19	21	↑
>35	34	12	57	34	↑
MALE	59	22	76	59	↑
<15	21	3	20	21	↑
15-35	10	2	14	10	↑
>35	28	17	42	28	↑
PERSON	130	46	179	49	↑
<15	37	9	47	10	↑
15-35	31	8	33	2	↑
>35	62	29	99	37	↑

Table 20: Average PPH admission per person (A/B)

Hospital activity	Average PPH admission per person			Difference (After – Before)	Higher or lower compared to before
	Before (Jan12–Jun14) 28 months	During (Jul14-Dec14) 6 months	After (Jan15-Jun17) 28 months		
FEMALE	1.5	1.2	1.4	-0.1	↓
<15	1.1	1.0	1.1	0.0	-
15-35	1.2	1.0	1.4	0.2	↑
>35	1.9	1.3	1.5	-0.3	↓
MALE	1.3	1.3	1.8	0.5	↑
<15	1.3	1.7	1.4	0.1	↑
15-35	1.0	1.0	1.4	0.4	↑
>35	1.4	1.3	2.1	0.7	↑
PERSON	1.4	1.2	1.6	0.2	↑
<15	1.2	1.2	1.2	0.0	-
15-35	1.1	1.0	1.4	0.3	↑
>35	1.6	1.3	1.8	0.1	↑

There was an increase in average length of stay per PPH admission for adults aged >15 years. There was a reduction in the average length of stay per PPH admission for males under the age of 15 years from 5.6 days before transition to 4.3 days after transition.

Table 21: Average length of stay per PPH admission

Hospital activity	Average length of stay per PPH admission			Difference (After – Before)	Higher or lower compared to before
	Before (Jan12–Jun14) 30 months	During (Jul14-Dec14) 6 months	After (Jan15-Jun17) 30 months		
FEMALE	3.2	2.5	3.7	0.5	↑
<15	1.8	2.5	2.6	0.7	↑
15-35	2.1	1.3	2.0	0.0	↑
>35	4.0	3.0	4.6	0.6	↑
MALE	4.4	4.6	4.8	0.4	↑
<15	5.6	6.4	4.3	-1.4	↓
15-35	3.0	4.1	5.5	2.6	↑
>35	3.9	4.2	4.8	0.9	↑
PERSON	3.7	3.5	4.2	0.5	↑
<15	4.2	4.2	3.4	-0.8	↓
15-35	2.3	2.0	3.5	1.2	↑
>35	4.0	3.7	4.7	0.7	↑

The difference in total cost of PPH pre- to post-transition increased by $1,186,418 when compared to before, except for males aged under 15, where the total cost slightly dropped by $3,618.

Table 22: Total difference in PPH cost pre- and post-transition

Hospital activity	Total cost ($)			Difference (After – Before)	Higher or lower compared to before
	Before (Jan12–Jun14) 30 months	During (Jul14-Dec14) 6 months	After (Jan15-Jun17) 30 months		
FEMALE	487,328	98,542	979,093	491,765	↑
<15	46,718	22,618	138,202	91,484	↑
15-35	86,167	17,757	139,012	52,845	↑
>35	354,444	58,167	701,879	347,435	↑
MALE	447,273	199,803	1,141,925	694,652	↑
<15	192,143	37,842	188,525	-3,618	↓
15-35	39,759	26,103	176,075	136,316	↑
>35	215,371	135,858	777,325	561,954	↑
PERSON	934,601	298,345	2,121,018	1,186,418	↑
<15	238,860	60,460	326,727	87,867	↑
15-35	125,926	43,860	315,087	189,161	↑
>35	569,814	194,025	1,479,204	909,390	↑

Sensitivity analyses of trends in PPH by admissions by type: Acute, Chronic Disease, Multiple Conditions, and Vaccine Preventable conditions found the total cost was higher after transition to community control than before for all acute, chronic and elective admissions (See Appendix 4).

8.5 Appendix 5: Summary by age group (under 15, 15-35 and over 35) and gender

Figure 45: PPH Indigenous people Yarrabah **AGED under 15**

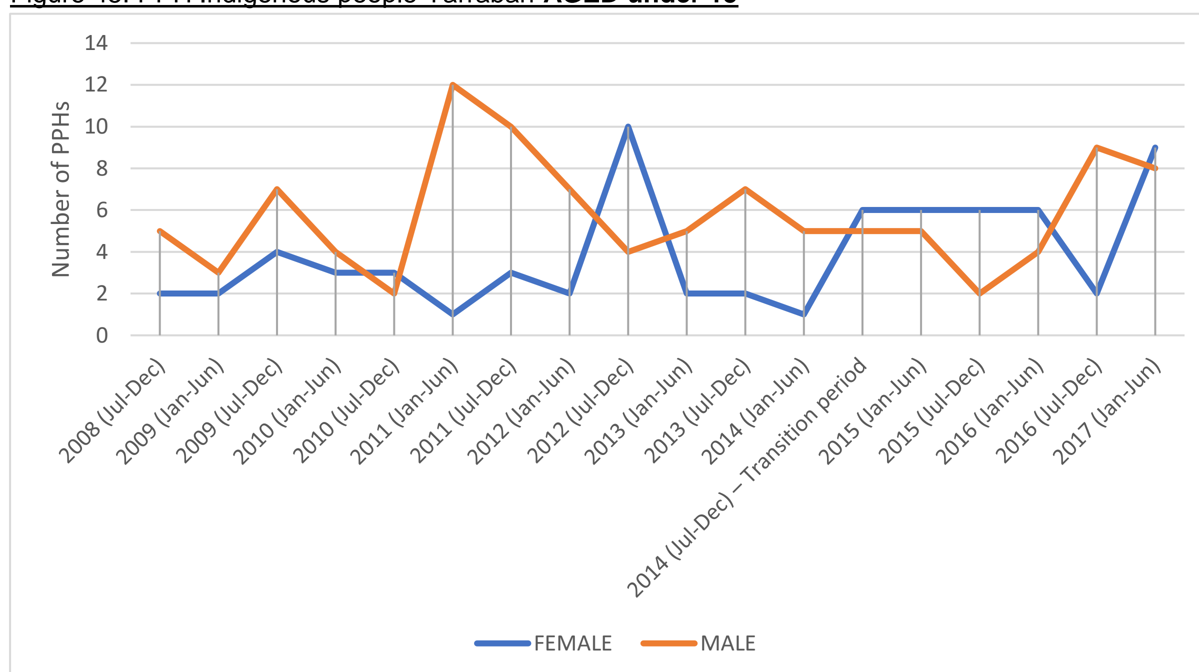


Figure 46: PPH Indigenous people Yarrabah AGED 15-35

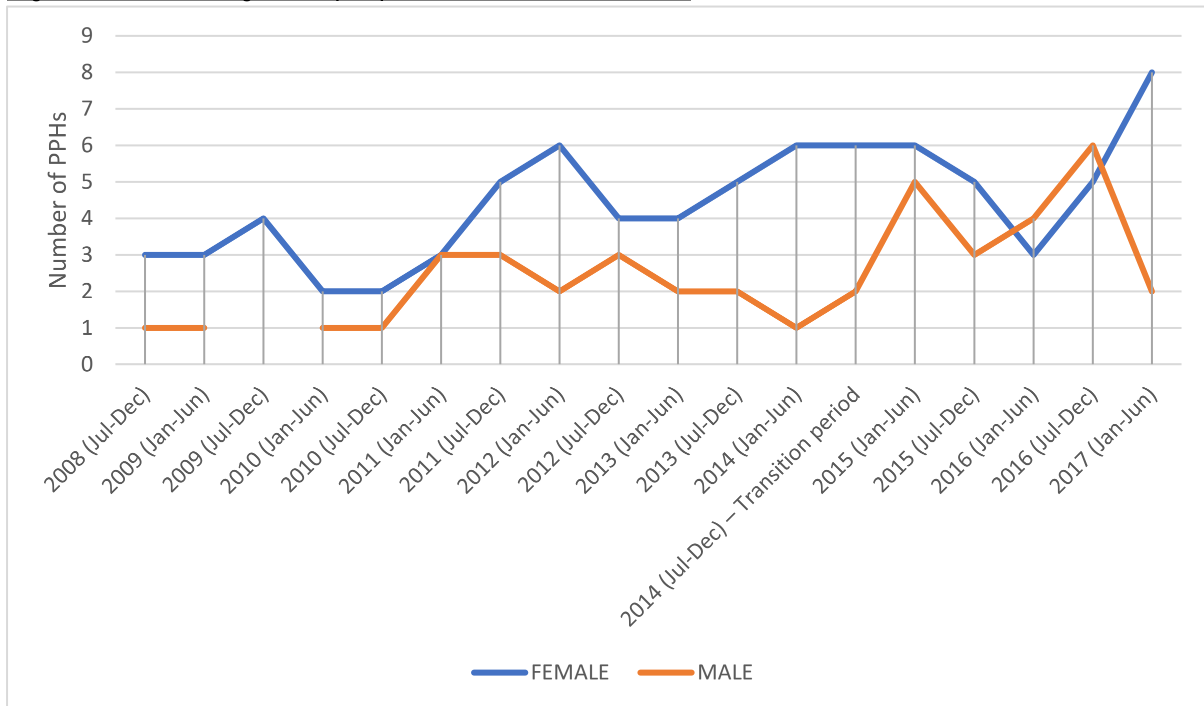
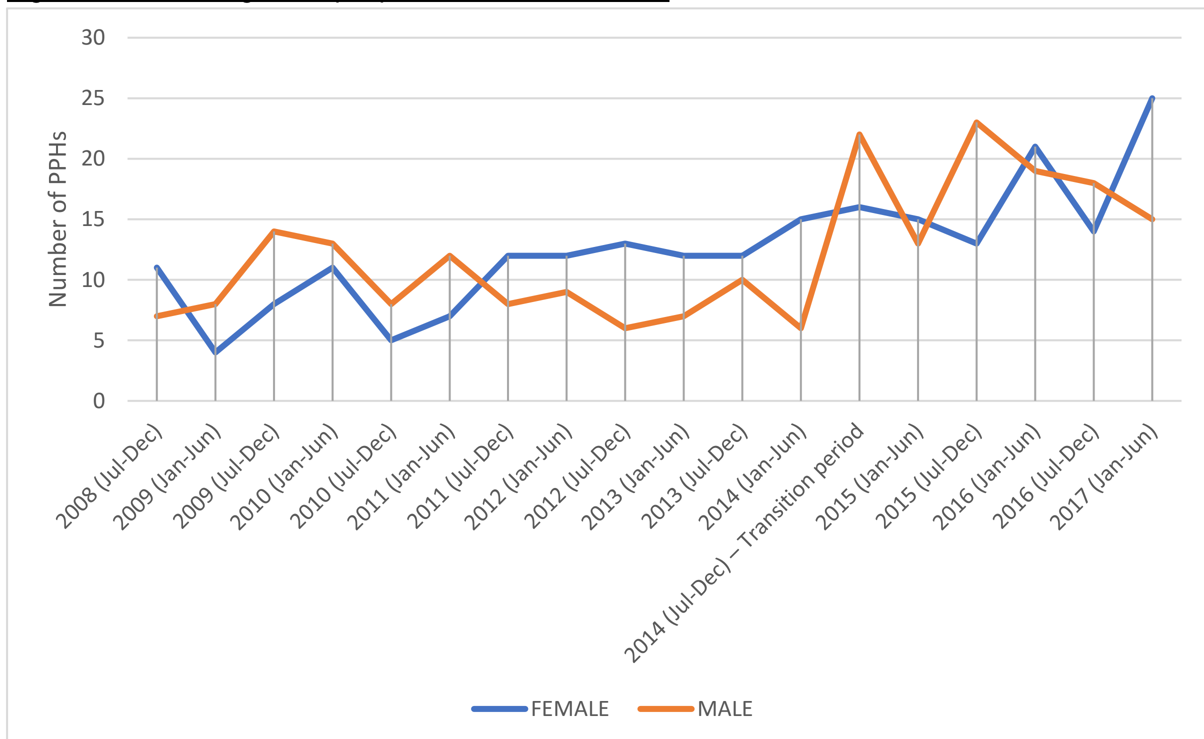


Figure 47: PPH Indigenous people Yarrabah **AGED 35+**



Sensitivity analyses of trends in PPH by admissions by type: Acute, Chronic Disease, Multiple Conditions, and Vaccine Preventable conditions found the total cost was higher after transition to community control than before for all acute, chronic and elective admissions.

Table 24: Trends by admissions by type: Acute, Chronic Disease, Multiple Conditions, Vaccine Preventable

Period	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	Total
PPH	29	21	37	34	21	38	41	38	40	32	38	34	57	50	52	57	54	67	740
Acute	11	9	16	11	12	16	29	26	16	17	16	14	20	26	20	19	22	33	333
Chronic Disease	18	12	18	23	9	21	12	12	20	15	20	16	30	21	28	34	27	26	362
Multiple Conditions			2			1			1		1	1	2		3	2	3	3	19
Vaccine Preventable Conditions			1						3		1	3	5	3	1	2	2	5	26

Figure 48: PPHs (Chronic) for Indigenous people residing in Yarrabah from 2008 (Jul-Dec) to 2017 (Jan-Jun)

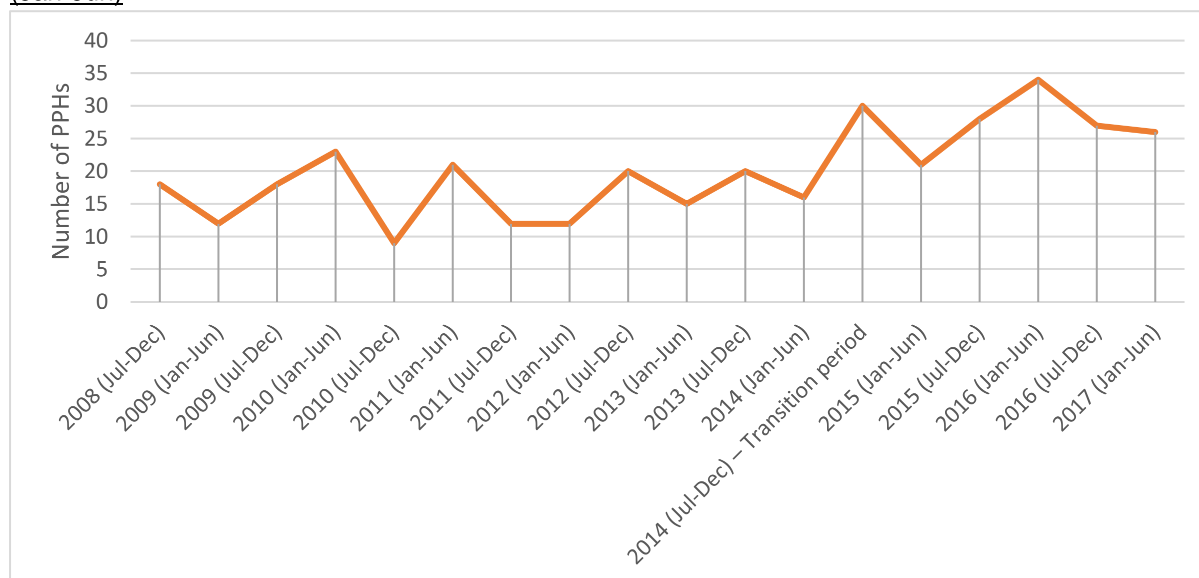


Figure 49: PPH (Acute) for Indigenous people residing in Yarrabah from 2008 (Jul-Dec) to 2017 (Jan-Jun)

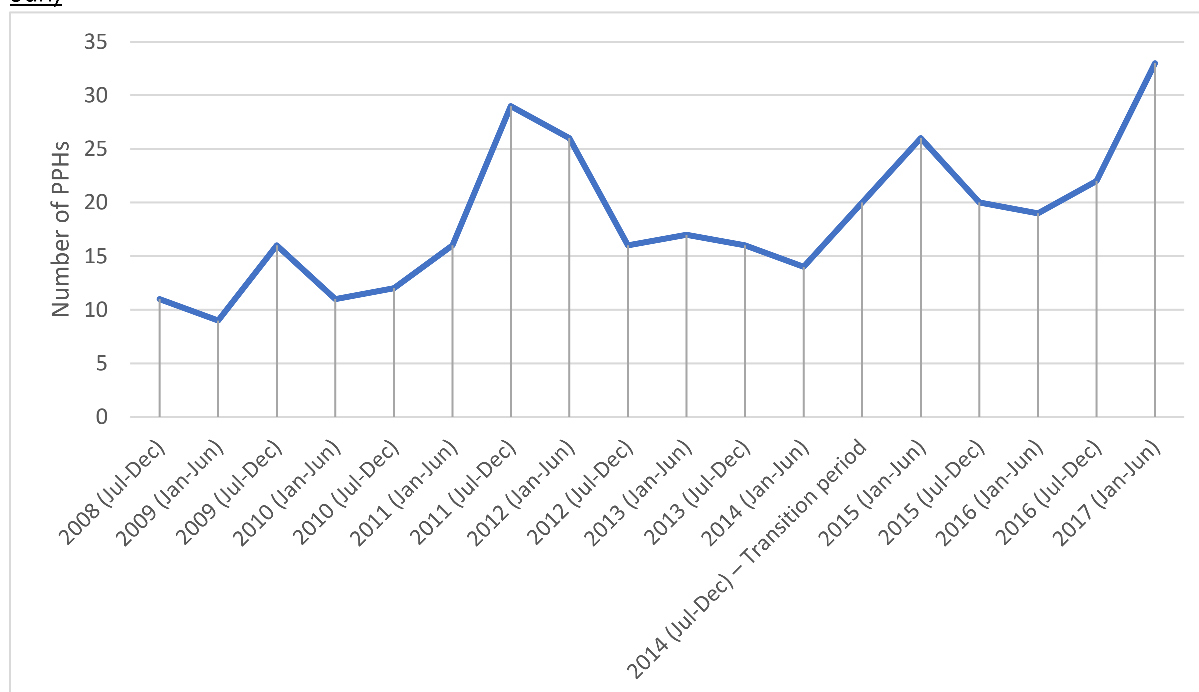


Table 25: Total hospital activity (episode)

Hospital activity	**Total attendance**			**Difference (Before-After)**	**Higher or lower compared to before**
	Before (Jan12–Jun14) 30 months	During (Jul14-Dec14) 6 months	After (Jan15-Jun17) 30 months		
Emergency admissions (Total)	864	191	1017	153	Higher
PPH	182	57	280	98	Higher
Acute (p)	89 (49%)	20 (35%)	120 (43%)	31	Higher
Chronic Disease (p)	83 (46%)	30 (53%)	136 (49%)	53	Higher
Elective admissions	178	32	170	-8	Lower

p – proportion of PPH; * - Indigenous, excluding Haemodialysis

Table 26: Number of patients

Hospital activity	Total attendance			Difference (Before-After)	Higher or lower compared to before
	Before (Jan12–Jun14) 30 months	During (Jul14-Dec14) 6 months	After (Jan15-Jun17) 30 months		
Emergency admissions (Total)	532	149	630	98	Higher
PPH	135	46	179	44	Higher
Acute	83	19	107	24	Higher
Chronic Disease	53	23	71	18	Higher
Elective admissions	143	27	147	4	Higher

Table 27: Per person hospital activity

Hospital activity	Total attendance			Difference (Before-After)	Higher or lower compared to before
	Before (Jan12–Jun14) 30 months	During (Jul14-Dec14) 6 months	After (Jan15-Jun17) 30 months		
Emergency admissions (Total)	1.6	1.3	1.6	0.0	No change
PPH	1.3	1.2	1.6	0.2	Higher
Acute	1.1	1.1	1.1	0.0	No change
Chronic Disease	1.6	1.3	1.9	0.3	Higher
Elective admissions	1.2	1.2	1.2	0.0	No change

Comparison of ALOS (before-after)

Table 28: Average ALOS (days)

Hospital activity	Total attendance			Difference (Before-After)	Higher or lower compared to before
	Before (Jan12–Jun14) 30 months	During (Jul14-Dec14) 6 months	After (Jan15-Jun17) 30 months		
Emergency admissions (Total)	3.3	3.0	3.3	0.0	No change
PPH	3.7	3.5	4.3	0.6	Higher
Acute (p)	2.6	3.2	3.0	0.5	Higher
Chronic Disease (p)	5.3	4.1	5.5	0.3	Higher
Elective admissions	1.0	1.9	1.1	0.0	No change

* - Indigenous, excluding Haemodialysis

The total cost was higher after transition to community control than before for emergency admissions (total) and for PPH related to acute, chronic and elective admissions.

Comparison of cost (before-after)

Table 29: Total cost by hospital activity

Hospital activity	Total attendance			Difference (Before-After)	Higher or lower compared to before
	Before (Jan12–Jun14) 30 months	During (Jul14-Dec14) 6 months	After (Jan15-Jun17) 30 months		
Emergency admissions (Total)	4,454,816	903,286	6,587,393	2,132,577	Higher
PPH	934,601	298,345	2,121,018	1,186,418	Higher
Acute (p)	331,859	87,516	691,799	359,940	Higher
Chronic Disease (p)	563,319	165,304	1,241,988	678,669	Higher
Elective admissions	728,384	177,600	812,822	84,438	Higher

Emergency Presentation (Triage 4 and 5)

Figure 50 shows a decrease from 2017 for those presentations of triage rating 4 and 5. It is too soon to say whether this is a trend effect.

Figure 50: Emergency department presentations for Indigenous people residing in Yarrabah, Triage 4 and 5

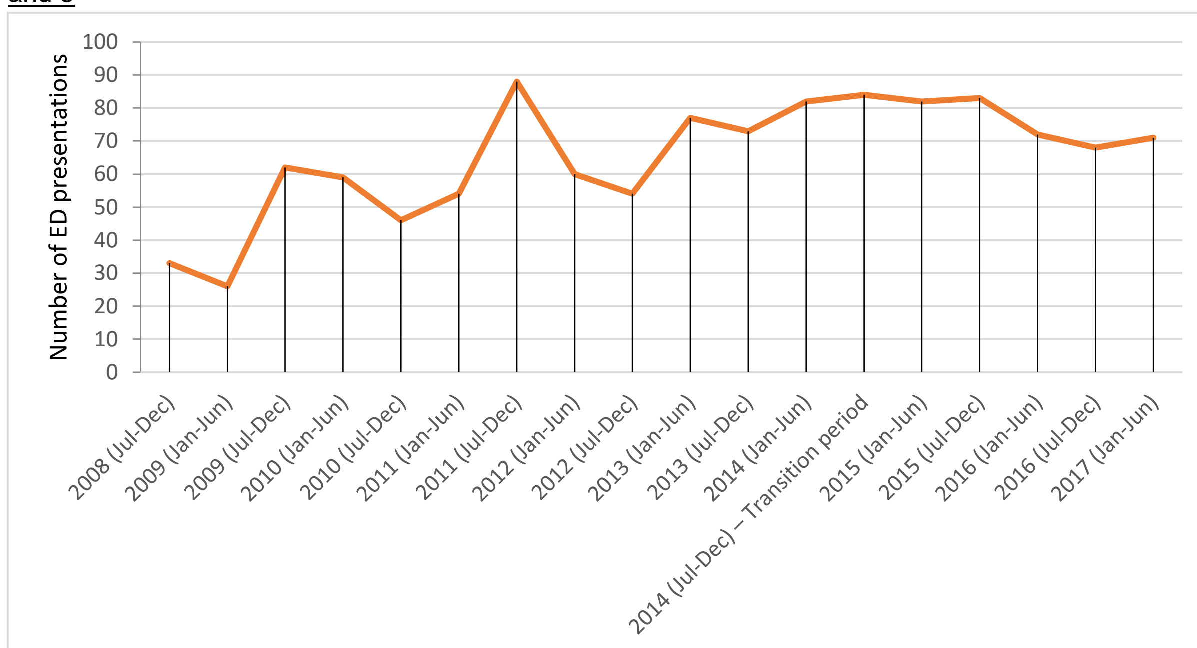


Figure 51: Emergency department presentations for Indigenous people residing in Yarrabah, Triage 3

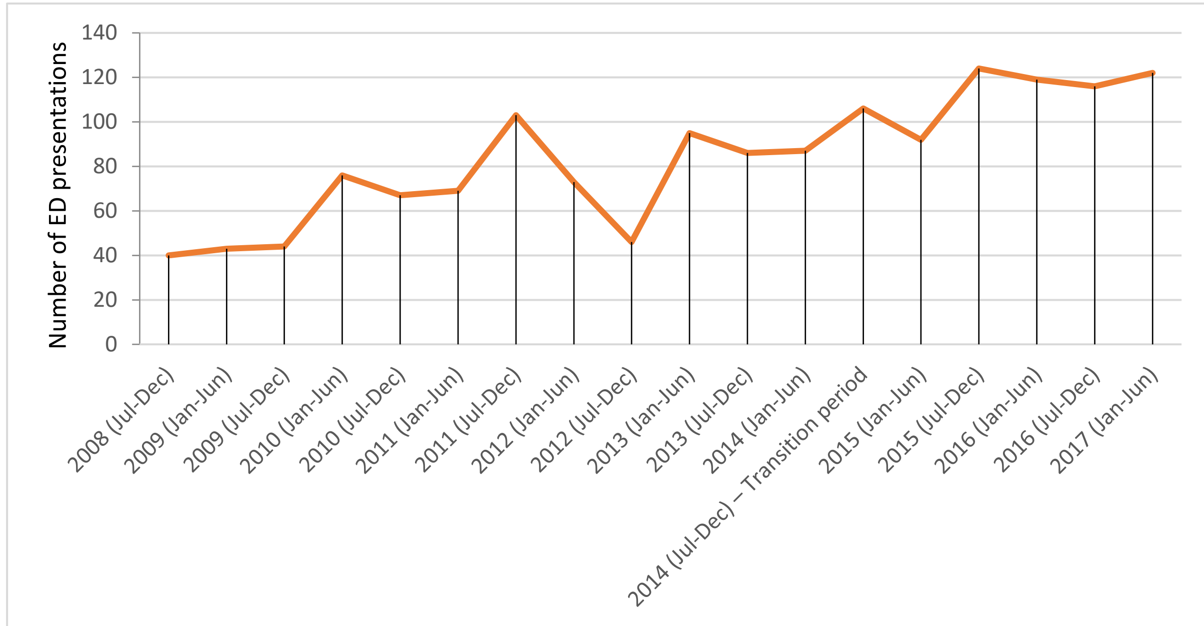


Figure 52: Emergency department presentations for Indigenous people residing in Yarrabah, Triage 1-2