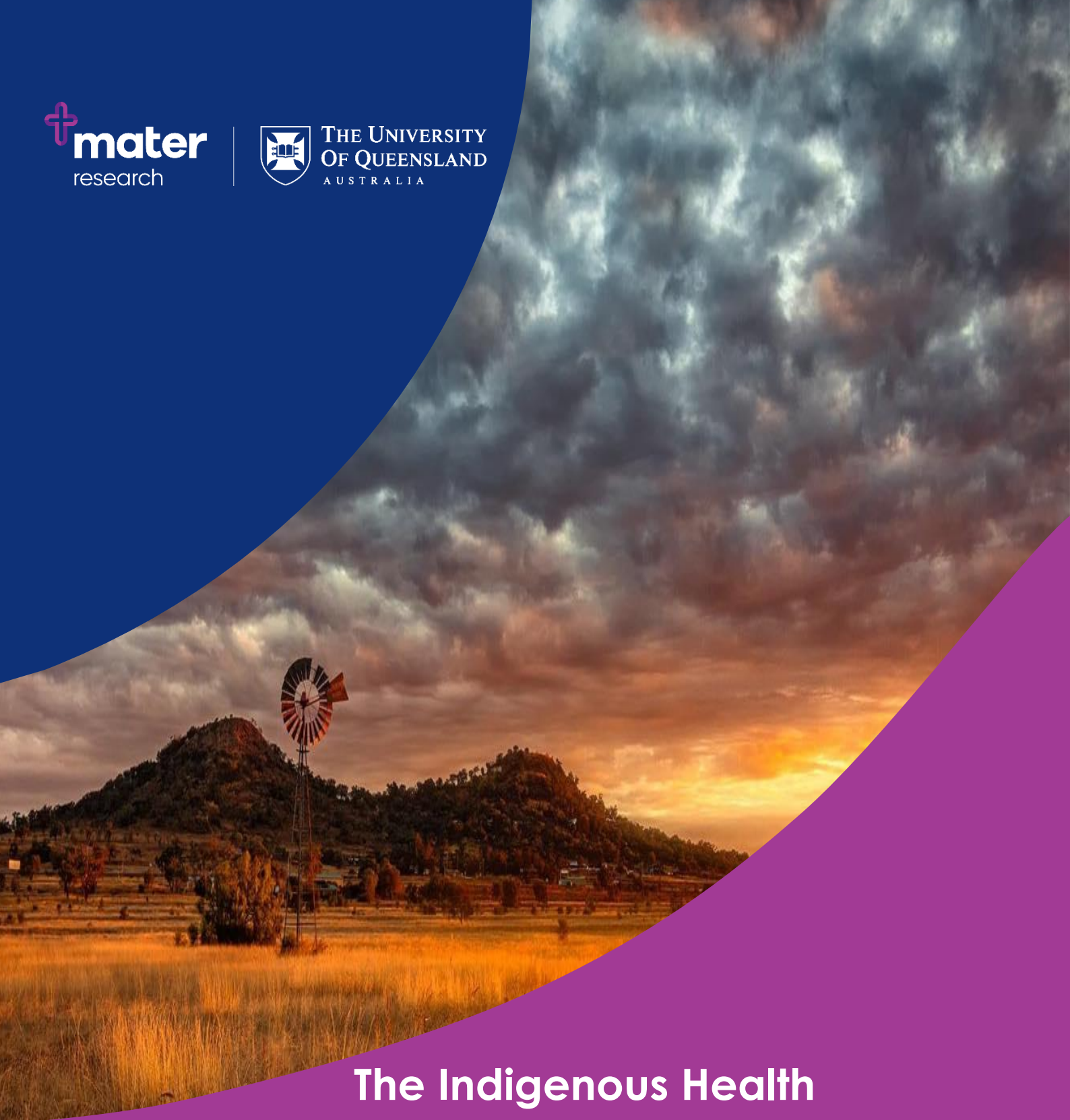




The Indigenous Health Research Priorities Study Report for Carbal Medical Services - Darling Downs 2024

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Mater Research Institute / The University of Queensland
ISBN 978-1-74272-448-5

How to cite this report:

Massi, L, Weatherall, L, Smith, D, Fredericks, B, Toombs, M, and Rae, K M. (2024). *The Indigenous Health Research Priorities Study Report for Carbal Medical Services – Darling Downs 2024*. ISBN 978-1-74272-448-5. Mater Research Institute, South Brisbane, Queensland. DOI: <https://doi.org/10.14264/13aacb2>

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Acknowledgement

We acknowledge the Aboriginal custodians of the land on which we live and work across the greater Brisbane region, and the Aboriginal custodians of the lands where the study was conducted in Darling Downs (Jagera, Giabal, Jarowair and Gidhabal peoples) and pay our respects to their Elders past, present and future.

We are grateful to the participants - women, family members and health professionals who shared their stories, experiences, and aspirations for the health and wellbeing of their communities. This study would not be possible without the support and partnership with the Board of Carbal Medical Service, the Chief Executive Officer, Brian Hewitt, program managers and health services staff of Carbal Medical Services in Toowoomba and Warwick (Kerry Stewart, Jannah De-Bressac, Kim Passante, Tamika Campbell, and Charlie Rowe) and Renee Williams previously from Queensland Aboriginal and Islander Health Council (QAIHC).

We also gratefully acknowledge Ms Caitlin Aust for the assistance provided in the collation of data for this report.

Acknowledgement of Funding

This work would not have been possible without the support of the Mater Foundation; particularly Equity Trustees (ANZ QLD Community Foundation, QCF ANZ Bank Fund, QCF- Thomas George Swallow Trust and the HJ Hinchey Charitable Trust). Professor Bronwyn Fredericks is supported via the Office of the Deputy Vice-Chancellor (Indigenous Engagement), Indigenous Engagement Division, The University of Queensland. Associate Professor Kym Rae was awarded the Outstanding Women Researcher for Mater Research Institute which was used to support this project.

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List of Abbreviations

ACCHS	Aboriginal Community Controlled Health Services
AHW	Aboriginal Health Worker
AMS	Aboriginal Medical Service
DOHaD	Developmental Origins of Health and Disease
IRSAD	Index of Relative Socio-economic Advantage and Disadvantage
MIH	Maternal and Infant Health
PAR	Participatory Action Research
PICF	Participant Information and Consent Form
QAIHC	Queensland Aboriginal and Islander Health Council
SDOH	Social Determinants of Health
SEWB	Social and Emotional Wellbeing

Executive Summary

The Health Research Priorities Study aimed to engage with Aboriginal and Torres Strait Islander (herein respectfully referred as Indigenous) communities in Queensland through a co-designed and collaborative process. The goal of this research study was to work in partnership with local Indigenous community-controlled health services to co-identify health research priorities for families and communities during the perinatal period. It is hoped that these priorities can inform future health programs, services and research projects which have been chosen by communities.

Using a Participatory Action Research (PAR) approach, yarning sessions and a Delphi workshop were held with clients and staff of the Carbal Medical Services in both Toowoomba and Warwick sites from May 2022 to February 2023. While it had been hoped that additional services would be involved at the time of this study, the work in the region was significantly impacted by the COVID-19 pandemic which was particularly active in the Darling Downs region.

Qualitative data collection and thematic analysis was undertaken to identify and report on community and health service research priorities during Phase 1 yarning sessions. These were reported back to each site and the Phase 2 Delphi workshop allowed each participant to prioritise the health issues identified during Phase 1. Each participant voted for their Top 10 health issues for their community and health service. Additionally, participants' demographic information, and a short feedback form with five open-ended questions were collected to gauge reach, views, and satisfaction with the research process.

This report presents findings from the yarning sessions and Delphi workshops, with the Top 10 health research priorities identified for each clinic site, and overall, for the Darling Downs Carbal communities. It also included participant demographic information, feedback on the research process and reactions to participating in the yarning sessions and the Delphi workshops. There was a total of six yarning sessions and three Delphi workshops with a total 47 participants. The qualitative analysis identified at least 120 themes and subthemes based on initial yarning sessions. The themes were considered from a strengths-based perspective, focusing on the resilience and inherent strength of communities amidst the challenges faced. Feedback from study participants, 46 community members and health professionals, has highlighted they appreciated listening to other community members, being heard, felt the study was inclusive and a good way to discuss difficult topics.

Identification of health research priorities will allow each Indigenous community-controlled organisation and region of Queensland to develop research initiatives and the translational outcomes that are a focus for their community members. Recommendations for future directions for this study include revisiting services in the Darling Downs region to ensure more wide-spread engagement with communities, modify some approaches including to hold male-specific focus groups; and reflecting on the strongest and overlapping themes for the region to consider collaboration on future programs, services, and research.



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1. Background

Around the world many of the First Peoples have had traditional teachings and practices that reflect the influence past generations have upon the health of the current generation. The Developmental Origins of Health and Disease (DOHaD), a scientific theory has also shown that the health of parents and grandparents can directly impact on our own health and that of our children (Gillman, 2005). In this way, the DOHaD forms part of the worldview, traditional knowledge, and cultural practices for First Peoples (Martin & Mirraboopu, 2003). In Australia, Aboriginal and Torres Strait Islander (herein respectfully Indigenous) families are strongly bound through kinship and nurturing cultural practices that contribute to effective family functioning and child rearing (Arabena et al., 2016; Emerson et al., 2015; Lohoar et al., 2014). These practices have had positive effects on children and communities across many generations, and include kinship relations, traditional knowledge systems, a collective community focus with respect for Elders contributions, and spirituality (Lohoar et al., 2014).

However, despite these strong community links, the life expectancy of Australian Indigenous peoples is at least ten years lower than non-Indigenous Australians (Carson et al., 2007; Commonwealth of Australia, 2020). This has resulted in significant health disparities, including greater maternal mortality and almost double the rates of infant mortality, higher rates of low birth weight infants being delivered and child hospitalisation when compared to other Australians (Australian Institute of Health and Welfare, 2020; Commonwealth of Australia, 2020). While there has been significant policy attention, including the Closing the Gap campaign, there has been little improvement in health and wellbeing outcomes for Indigenous peoples over many decades (Australian Institute of Health and Welfare, 2015, 2020; Commonwealth of Australia, 2020; Department of Health, 2016; Eades, 2004). Much of this can be attributed to ongoing negative impacts of colonisation and systemic racism experienced by community members. The recent Australian Referendum to provide a Voice to Parliament by Aboriginal and Torres Strait Islanders was resoundingly defeated and highlighted the ongoing systemic racism of the Australian nation. These institutional barriers are felt by many Indigenous families who may require additional support to overcome structural and socio-economic determinants which perpetuate inequalities and adversely affect the health and well-being of families and communities (Arabena et al., 2016; Carson et al., 2007).

Health programs and services that support Indigenous women, babies and their families are a critical investment to impact the life trajectories of Australia's Indigenous peoples (Bowes & Grace, 2014; Commonwealth of Australia, 2020; Mildon & Polimeni, 2012). The importance of support during the first 1,000 days - from conception until two years of age – are well evidenced as a crucial time for laying the foundations for nurturing healthy, thriving children into productive adulthood (Mildon & Polimeni, 2012; Millei & Sumsion, 2011; Pem, 2015). Accordingly, many policies and services supporting Indigenous families focus on interventions during pregnancy and early life stages, also known as the perinatal period (Commonwealth of Australia, 2020; Eades, 2004). The perinatal period encompasses pregnancy through to the end of the first year postpartum (Austin et al., 2007). Research in perinatal and early childhood period for families is an important time of life to focus on as it can potentially identify maternal health risks or negative health outcomes from the outset of a child's life (Austin et al., 2007; Marriott et al., 2019).

The 'Growing Deadly Families' (Aboriginal and Torres Strait Islander Maternity Services Strategy 2019-2025) written in partnership with the Queensland Aboriginal and Islander Health Council (QAIHC) states 'nothing is more important than ensuring our future generations have the best start to life' and have called for Aboriginal and Torres Strait Islander people to be equal partners in 'decision-making, planning, delivery and governance' (Queensland Health, 2019, p. 21). National Indigenous leaders have highlighted that life-course focused research is a valuable mechanism for understanding health for Indigenous peoples. However, it is imperative that research is led by or co-steered with Indigenous

communities to identify local research priorities (Ewen et al., 2019). The National Agreement on Closing the Gap highlights that Indigenous people must be given every opportunity to genuinely self-determine research, and the design and delivery of services that affect them, and as result, better life and health outcomes are achieved for communities (Commonwealth of Australia, 2020).

There is often mistrust of research, government organisations and their policies due to events that are occurring within current events (for example, The Voice Referendum) and the living history of many Indigenous community members. Thus, partnered, and respectful relationships are needed to build sustainable research programs. Participatory Action Research (PAR) is an appropriate research method to use when conducting research with communities (Fredericks et al., 2011; Sharmil et al., 2021; Tuhiwai Smith, 2021), and is “based on reflection, data collection, and action that aims to improve health and reduce health inequities through involving the people who, in turn, take actions to improve their own health” (Baum et al., 2006, pp., p.854). Participatory Action Research (PAR) principles aim to ensure there is authentic involvement and sharing in the way research is conceptualised, practiced, and implemented, and not just the mere participation in collecting data (Fredericks et al., 2011; McTaggart, 1991). This importantly points to joint ownership in the research process and the solutions identified (Fredericks et al., 2011; Walker et al., 2014). McTaggart (1991) suggests that PAR should contribute to improvements in the “understanding, practice and social situations for participants and others involved in the situation described” (p. 169), suggesting the practice will ultimately improve participants’ lives. Likewise, the use of Delphi consensus techniques are appropriate methods for conducting PAR and have been previously used in Indigenous health research studies (Dale et al., 2021; Hart et al., 2009; Stearne et al., 2022; Stoner et al., 2017). The Delphi technique involves guiding group opinion towards a final decision to answer questions through consensus of group generated ideas, analytical techniques and the experience of the researcher (Cantrill et al., 1996). The Delphi is a multistage technique, with each stage building on the previous one, and aims to encourage respondents to think through the complexity of the problem and produce specific, high quality ideas (Cantrill et al., 1996; Stearne et al., 2022). The Delphi consensus method can be considered useful for consulting Indigenous peoples about culturally appropriate best practice across different health services (Dale et al., 2021; Hart et al., 2009; Stearne et al., 2022; Stoner et al., 2017).

1.1 Aim

The Health Research Priorities Study aimed to engage with Indigenous communities in regions across Queensland to identify health and medical research priorities for young families during preconception, pregnancy, post-partum, and childhood.

It sought to determine these priorities with Indigenous women and men and their young family members during the perinatal and early childhood period through a co-designed and collaborative process.

The goal of this research study was to work in partnership with the community-controlled sector and Indigenous communities using Participatory Action Research (PAR) approaches to co-identify research priorities for families and communities during the perinatal period.

To the authors' knowledge, it is the first study of its kind in Queensland. The objective is the successful prioritisation of the health research priorities identified with and for Indigenous Queensland families.

2. Methods

2.1 Inclusion of Aboriginal and Torres Strait Islander People

Making time to consult with Indigenous communities has been embedded at all stages of this study. As a first step, preliminary face-to-face discussions were held with Queensland Aboriginal and Islander Health Council (QAIHC) to determine if their member services would find this proposed study beneficial. In the state of Queensland, QAIHC is the governing body for 31 Indigenous community-controlled health services member organisations. With QAIHC's support, services were identified, and an ongoing and regular series of meetings established to allow for rapport and trust building between the research team and the health services in the lead up to the study commencing. QAIHC assisted by identifying services who weren't currently over-committed in other business or who have an interest in perinatal health. In addition to seeking counsel from QAIHC, Indigenous leadership from two Senior Academics and Research Leaders (Professor Bronwyn Fredericks and Professor Maree Toombs) has ensured that community engagement, the study protocol, data collection and future analysis meets Indigenous cultural protocols and community expectations. Thus, safeguarding Indigenous peoples' involvement at all levels of study governance, research processes, and authorship of publications and reports.

All research team members have been involved in determining research aims, study design and data analysis. Research partnerships have been established with eight Indigenous community-controlled health services, Chief Executive Officers and Deputies (to date), who have also been involved in study design. Each service has been integral to the planning and implementation of the study. Relationship building and on-going communication with Indigenous community-controlled health services has been key for the work to occur and to manage the challenges that have occurred as waves of the COVID-19 pandemic have been experienced during the study period. In publications and reports. Further information on the Research Team, characteristics and reflexivity is provided in section 2.4.

2.2 Collaboration with services

In the Darling Downs region, following a discussion with the Board of Carbal Medical Services in April 2021, approval to undertake the study with service occurred. The study team then met with key staff from services in both Toowoomba and Warwick sites who were supporting Aboriginal and Torres Strait Islander young families. All meetings were conducted face-to-face to allow for growth in rapport between partners and to highlight to services the commitment of the team in travelling to the local regions.

2.3 Study design with services

Relationship building and on-going communication with Indigenous community-controlled health services have been key to enable planning and processes to occur and to manage the challenges that have occurred as waves of the COVID-19 pandemic were experienced. During initial face-to-face discussions with the services, the team discussed study approaches that they thought might be appropriate for the Carbal Medical Services and sought advice about the suitability of this for each site.

Various models of how the study could occur were also discussed between the service staff and members of the research project team. The team met with each service up to four times prior to the start of the study to continue to discuss methods and approaches and ensure that both the service and the research team had a clear understanding of expectations for both parties and discussed each stage with the research team. During this entire process the research team sought further counsel from QAIHC, and the two Senior Academics and Research team members ensured that community engagement, the study protocol, data collection and future analysis would meet any additional Indigenous cultural protocols and community expectations that the team needed to be aware of and utilised when and where appropriate.

2.4 Research team

This research team includes both Indigenous and non-Indigenous researchers.



Professor Bronwyn Fredericks is a Murri woman and Pro-Vice Chancellor of Indigenous Engagement and a Senior Indigenous Academic with a strong interest in women's health.



Professor Maree Toombs is a Euahlayi/Kooma woman and who also has a strong Indigenous research background, particularly in qualitative and translational research.



Ms Loretta Weatherall is a Gamilaraay woman who has been involved in research with Aboriginal women during pregnancy and early childhood for many years. Prior to this project she was primarily involved in recruitment retention and Indigenous governance rather than data analysis.

Ms Davina Smith is a Gooreng Gooreng and South Sea Islander woman, with a rewarding career spanning 18 years across various settings including education and health care. Davina is Senior Indigenous Research Assistant at Mater Research Institute, and brings leadership and expertise in working collaboratively, with a focus on Indigenous communities' strengths and resilience, and providing cultural mentorship.



Dr Luciana Massi is a qualitative researcher and teaching academic with 17 years' experience in public health, focusing on evaluating strengths-based programs to improve health, well-being and birthing outcomes for Aboriginal and Torres Strait Islander mothers and babies. Luciana was born in El Salvador and has lived in Australia for 35 years.

Associate Professor Kym Rae is a non-Indigenous woman who has been undertaking work with Aboriginal communities for over 10 years. Her background is in co-designing research with communities and has been predominantly in maternal infant health.



2.4.1 Researcher characteristics and reflexivity

On the ground research for this project was led by three women - one Indigenous Researcher (LW*) and two non-Indigenous Researchers (KMR and LM). Each researcher has experience conducting qualitative interviews with Indigenous people and have over 15 - 20 years' experience in various research studies. Researchers worked closely throughout this project in all stages of data collection, analysis, and writing. Reflexivity in the research approach enabled flexible methods of generation, interpretation and analysis of data (Braun & Clarke, 2006). Indigenous research team members (LW*, DS*, MT* and BF*) ensured the voices of all Indigenous community members were privileged, confirmed the data analysis, and made sure reporting was trustworthy.

Lead researcher (KMR) had established relationships with health service managers, which contributed to providing a welcoming environment to conduct the research. Both LM and LW have training, expertise and qualifications in both qualitative and Indigenous methods, which meant researchers were able to have more in-depth conversations with participants (Kennedy et al., 2022). LM has led and worked across seven qualitative Indigenous research studies through several universities and institutions since 2007. LW* is a Gamilaraay woman who was the Senior Aboriginal Research Officer and has worked in a longitudinal cohort study for Indigenous mothers and babies for 10 years and New South Wales and currently in Queensland, and ensures the approach taken has a cultural lens and centres Indigenous voices in the research processes. Similarly, DS*, as new Senior Aboriginal Research Officer familiarised herself with the data and assisted with the analysis and writing of this final report.

The senior research team have significant higher education, biomedical and research knowledge and included one non-Indigenous Associate Professor (KMR) with experience conducting longitudinal cohort studies with Indigenous mothers and babies, and two Senior Indigenous Professors dedicated to Indigenous health and education programs and evaluations (MT* and BF*). The research team met regularly to discuss and reflect on researcher assumptions, with cultural mentorship provided by MT* and BF*.

2.5 Study design

This qualitative research study design, using yarning methodology for focus groups and workshops has been undertaken in regions of Queensland, Australia. Yarning methodology is a culturally appropriate way of collecting data with Indigenous community members and staff (Bessarab & Ng'Andu, 2010, 2018; Kennedy et al., 2022). Yarning methodology involves "a semi-structured interview in an informal and relaxed discussion through which both the researcher and participant journey together visiting places and topics of interest relevant to the research study; yarning is a process that requires the researcher to develop and build a relationship that is accountable to Indigenous people participating in the research, and elicits participants 'stories about their lived experiences, feelings, thoughts and ideas on the research topic'" (Bessarab & Ng'Andu, 2010, p. 38; 2018; Fredericks et al., 2011; Wain et al., 2016). Different types of yarns can be used in research, and encompass social, research and collaborative yarns (Kennedy et al., 2022). A yarn can be considered both "a process and an exchange", encompassing "elements of respect, protocol and engagement in individuals' relationships with each other" (p 13) (Fredericks et al., 2011).

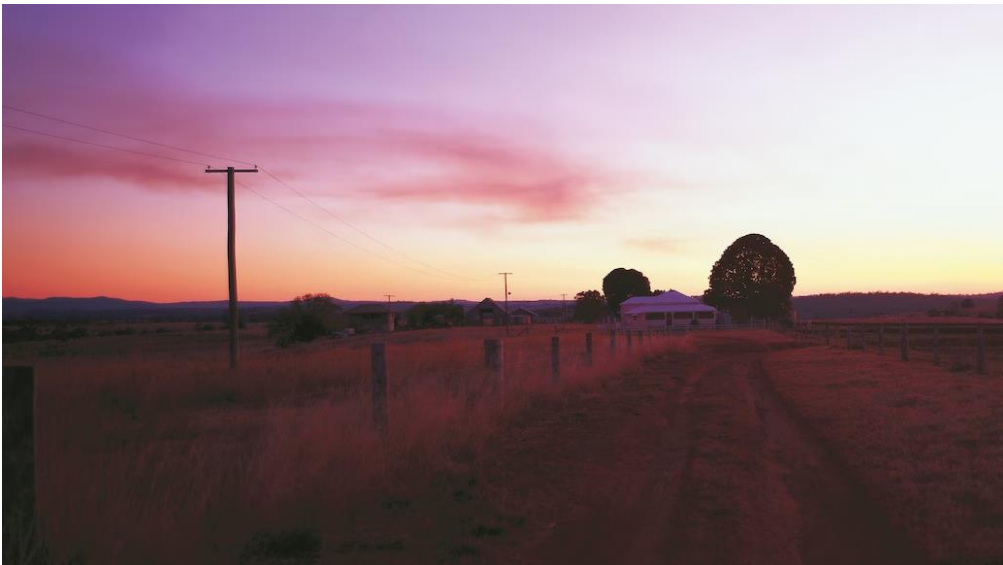
The study has occurred in two phases with Phase 1 being a series of yarning sessions, followed by thematic analysis. Development of research priority themes identified from the data were shared with participants during Phase 2 which was a Delphi workshop. This participatory action research (PAR) study was conceptualised in 2019 as a scoping exercise and research needs assessment for Indigenous communities in Queensland. The study entailed a partnership approach for consultation, data collection, and confirmation of results with communities using a PAR approach.

2.6 Study setting

2.6.1 Darling Downs sites

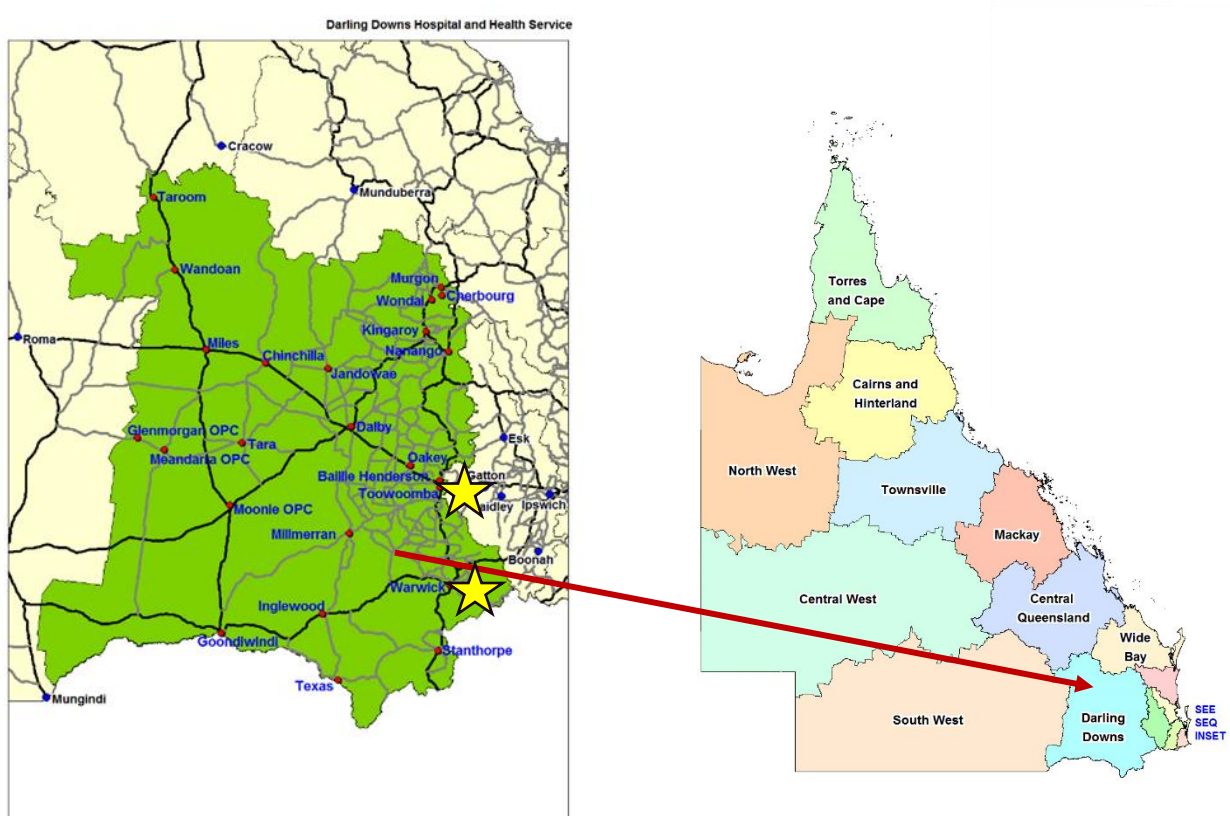
In 2022, the Darling Downs region became a further site for the Indigenous Research Priorities study, following on from Far North Queensland. In the Darling Downs. This work focused on Carbal Medical Service who has clinics in both Toowoomba and Warwick (see Figure 1, map of region). Carbal Medical Service was established in 2002 to improve access to a culturally appropriate and community-controlled responsive medical service across Toowoomba and Warwick, which offer parenting programs including "New Directions: Mums & Bubs program", "Strong Mothers" and "Strong Fathers, Strong Families" programs (Carbal Aboriginal Medical Service, 2022).

Toowoomba is a large regional centre, with a population of 162,059, with Aboriginal and/or Torres Strait Islander people making up 4.8% of the population (Australian Bureau of Statistics, 2021a). Toowoomba and surrounds has a strong agricultural industry, and it is considered in the third quintile in the Index of Relative Socio-Economic Advantage and Disadvantage (ISRAD) (Australian Bureau of Statistics, 2016).



Source: [expedia.com](https://www.expedia.com)

Warwick is a smaller regional town one hour south of Toowoomba, with a population of 12,294 in the 2021 Census, however the Aboriginal and/or Torres Strait Islander population is close to double that of Toowoomba, making up 8% of the population (Australian Bureau of Statistics, 2021b).



Source: [alchetron.com](https://www.alchetron.com) and [qld.gov.au](https://www.qld.gov.au)

Figure 1 Toowoomba and Warwick, in QLD Health map of region for Darling Downs Hospital and Health Service, and its location in Queensland

2.6.2 How this study fits with wider QLD sites.

This study (Darling Downs) fits into a program of work across several Queensland sites. These are Far North Queensland, Townsville and Palm Island, Rockhampton, and Woorabinda. The outcomes report from Far North Queensland is now available (Rae, 2023).

Far North Queensland sites

Three Aboriginal and Torres Strait Islander community-controlled health services in Far North Queensland are partnered as sites for the study: two in Cairns and one in Mareeba. The partnering organisations are: Wuchopperen Health Service (Cairns), Mulungu Aboriginal Corporation Primary Health Care Service (Mareeba), and Mookai Rosie Bi-Bayan (Cairns).



The Cairns area encompasses 1687 km² of land along the coast between the Great Dividing Range and the Coral Sea. The region is a world-renowned tourist destination, and has World Heritage listed Wet Tropics rainforest to the west and north and the Coral Sea and World Heritage listed Great Barrier Reef Marine Park to the east (Cairns Regional Council, 2022). Cairns has a population of 253,748 people counted in the 2021 Census with 10.6% identifying as Aboriginal and/or Torres Strait Islander (Australian Bureau of Statistics, 2022). In the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) many areas of Cairns are considered in the third quintile (Australian Bureau of Statistics, 2016). Wuchopperen Health Service is the largest community-controlled health service in Cairns and delivers culturally appropriate, comprehensive primary health care which includes medical and social and emotional wellbeing services for Aboriginal and Torres Strait Islander peoples

(Wuchopperen Health Service, 2022). Wuchopperen offers continuity of care at the ante- and post-natal stages, including referrals and liaising with other health agencies and services around the Cairns region, and offers the Australian Nurse Family Partnership Program for first time mothers (Wuchopperen Health Service, 2022). Wuchopperen has around 190 staff with approximately 60% identifying as Aboriginal and/or Torres Strait Islander.

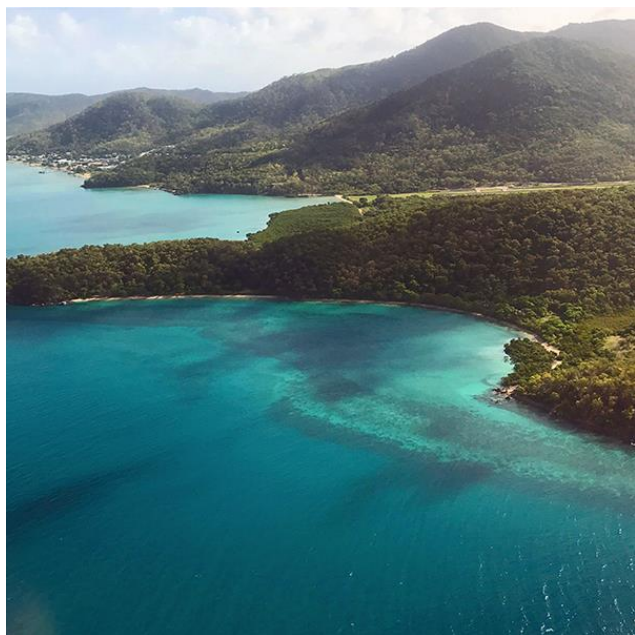
Mookai Rosie Bi-bayan is a friendly, comfortable, and culturally appropriate residential health care facility for women travelling from the Torres Strait Islands and Cape York Peninsula during pregnancy and for birthing their baby in Cairns. Women can stay during pre- and post-natal periods and can also be accommodated for other health care needs across the lifespan. Mookai Rose Bi-bayan can accommodate up to 24 clients, and is located in the outskirts of Cairns, providing a “home away from home... where women can feel safe and secure while they are spending those special days bonding with their new baby or recovering from medical treatment” (Mookai Rosie Bi-bayan, 2020). Transport, meals, weekend outings for shopping and other activities such as fishing, arts, crafts, and attending cultural events are also offered. Mookai Rosie Bi-bayan is a community-controlled organisation, with a majority of Indigenous staff members including health professionals, catering staff, receptionists, program and administrative staff, and transport drivers. It provides a place where women can see themselves reflected in the staff, space, and services (Fredericks, 2009). The Cape York Peninsula has a population of 7,803, with 47.7% female and 47.1% of the communities of these regions identifying as Aboriginal and/or Torres Strait Islander (Australia Bureau of Statistics, 2021). Due to its small population, there is no indication on the ABS website of where the region sits in the Index of Socio-Economic Advantage and Disadvantage (IRSAD), however due to its remoteness it is considered to be in the lower quintiles of social disadvantage (Australia Bureau of Statistics, 2021).

Mareeba Shire is located on the Atherton Tablelands in Far North Queensland, 64 km southwest of Cairns, and has varied landscapes including World Heritage rainforest, waterfalls, agricultural farms, and cattle properties. The Shire's estimated population is just over 22,000, with over 14% identifying as Indigenous compared with 4.6% in all of Queensland (ABS 2021 Census). Mareeba Shire is considered to be in the second most disadvantaged quintile in the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) (Australian Bureau of Statistics, 2016). Mulungu Aboriginal Primary Health Care Service (Mareeba) provides community-controlled and culturally appropriate primary health care across the life course, including clinical and social support to Indigenous families (Mulungu Aboriginal Corporation Primary Health Care Service, 2022). Mulungu has 80 staff with 95% identifying as Aboriginal and Torres Strait Islander (Mulungu Aboriginal Corporation Primary Health Care Service, 2022).

Townsville and Palm Island

As of 2021, Townsville was a community of 192,768 people and has had been steadily increasing in size over time (Informed Decisions (.id) for City of Townsville, 2021). In the same year, 16, 271 (8.4%) community members identified they were of Aboriginal and Torres Strait Islander heritage which is well above what is expected in regional areas of Queensland (6.1% expected). The Townsville city community had the highest level of economic advantage with a SEIFA index score of 1065.1 and Bohle Plains area had the lowest with a score of 1076.3 for Townsville communities. A SEIFA score is the Socio-Economic Indexes for Areas. Within Townsville this project has partnered with Townsville Aboriginal and Islander Health Service (TAIHS) and the Townsville University Hospital. TAIHS was established in 1974 and is a large community-controlled health service that provides health, youth and child and family support services. It is a partner with the Deadly Choice program and provides accommodation services. The Townsville University Hospital is part of the Townsville Hospital and Health service and is a tertiary level hospital. This hospital and health service provides services to 21 facilities, 19 hospital and two residential aged care facilities in the region (Queensland Government, 2023).

Offshore from Townsville is the beautiful Palm Island community. This is a small island community of approximately 12 islands with just over 2,000 people (Australian Bureau of Statistics (ABS), 2021). Most of the community live on Greater Palm Island. There is high mobility of residents between Palm Island



and the mainland. The Palm Island community is predominantly Aboriginal and/or Torres Strait Islander families that make up 91.4% of the population. The Palm Island community experiences profound disadvantage with a SEIFA index of 533.8 (Informed Decisions (.id) for Regional Development Australia, 2021). Palm Island Community Company is an Indigenous community-controlled service and provides a range of health services, community enterprises, haven services, social and emotional wellbeing support. On Palm Island, the study has partnered with Palm Island Community Corporation (PICC). The Townsville Hospital and Health service also provides health services to the Joyce Palmer Health Service and the Palm Island Care Centre on Palm Island. These services are available for all

emergencies and provides hospital level care for non-critically ill patients of the islands.

Source: ican.org.au

Rockhampton and Woorabinda



Rockhampton is part of the Central Queensland region and lies upon the Fitzroy River and sits 42 kms inland from the east coast of Australia. As of the 2022 census the population was 83,723 (Informed Decisions (.id) for Rockhampton Regional Council, 2022) with 8.7% identifying as having Aboriginal and/or Torres Strait Islander heritage (Informed Decisions (.id) for Rockhampton Regional Council, 2021a), significantly higher than the that of regional QLD. Rockhampton has a SEIFA index of 949 indicating that it is slightly below the national economic indexes (Informed Decisions (.id) for Rockhampton Regional Council, 2021b),

however like all larger towns there are pockets of both extreme disadvantage and affluence. Bidgerdii Community Health Service is community-controlled and provides primary health and social and emotional wellbeing services to Aboriginal and Torres Strait Islander peoples in Rockhampton and Mount Morgan. The Rockhampton Children and Family Centre, run by Bidgerdii, focuses on programs and services in the First 1,000 Days initiative (Arabena, 2014; Arabena et al., 2016), and have partnered with our research team to undertake this study in 2023.

Sitting approximately 170 km away from Rockhampton the city is the small community of Woorabinda. Woorabinda has a population of 962 and 94.7% of the community identify as having Aboriginal and/or Torres Strait Islander heritage (Australian Bureau of Statistics (ABS), 2016). Woorabinda is a very young community with 33.2% of the community aged under 14 years of age. According to the SEIFA 2021, Woorabinda is one of the most disadvantaged communities in the country (SEIFA 659) for its size. Central Queensland Hospital and Health Service services the region and Rockhampton hospital is the largest of their facilities. Both the Central Queensland Hospital and Health service and Yoonthalla Services provide services to the Woorabinda community. The Woorabinda Multipurpose Health Service includes acute inpatient and outpatient care and provision of visiting specialists. In the Rockhampton region this study has partnered with Central Queensland Hospital and Health Service, Bidgerdii Community Health Service and Yoonthalla Services Woorabinda.

2.7 Participants and recruitment

2.7.1 Participant characteristics

As this study has focused on families during the perinatal period it was important to include: 1) Indigenous community members, especially pregnant women, mothers, fathers, family members, kinship carers and Elders; and 2) health care professionals who work in maternal and infant, and early childhood health in roles that support families during this time of life. Each service identified that their health service staff were often Aboriginal and Torres Strait Islander people and/or they had significant experience in the areas of health research needs for their communities.

We respectfully acknowledge that many Indigenous health professionals are also active community members and bring both their personal stories and professional perspectives to this study. With input from our partner organisations, we included participation from other health workers from different areas of a health service who would like to be involved in any aspect of the study, as we understand they are also community members and may want to share their insight on health priorities in their communities.

2.7.2 Recruitment and consent

Working with our partnered Indigenous community-controlled health services, we identified a study champion at each service to assist planning of the study visits with the research team. The Participant Information and Consent Form (PICF) was sent to the study champion prior to focus groups to familiarise themselves with the study. All participants (health professionals and community members) received information about the study prior to attending on the day. Key health service contacts were encouraged to promote the yarning groups around their services via promotional flyers provided by the research team. Each site chose to hold separate focus groups for i) health service staff and ii) community members. The study champion arranged the timing of yarning groups with staff members to ensure that key service contacts were available to attend. At some sites, these yarning groups were organised during staff meeting times, so it did not interrupt routine health service delivery. Community members were invited to participate by the health services, and this particularly included mothers and babies or family groups and Elders/Grandmothers groups.

At the start of the sessions, the research team spent time explaining the study, data management, and consent. Participants were informed that participation was voluntary, and that they could withdraw at any time without affecting their care, their relationship with staff, or the services they were accessing. The groups were advised that sessions would be audio recorded, and be de-identified at time of analysis, writing, and dissemination of results. Field notes would be taken by facilitators/researchers throughout the yarning session to aid in analysis. It was also explained that future data could be kept by community/service as the data custodians/owners. Participants could select this option when completing their consent. Written informed consent was obtained prior to the start of the focus group session.

2.8 Data processing and storage

Focus/yarning groups were audio-recorded and transcribed verbatim. Transcripts and audio files were de-identified and saved as password protected files on a shared drive only accessible to the research team. Transcripts were imported into NVivo 12 software for analysis (QSR International, Melbourne, 2012).

2.9 Data ownership

Data, including surveys and voice recordings arising directly from participants remains the property of the participant however analysis from the data is owned by the research team. The data generated from the research study is managed according to ethics approvals and the University's Research Data Management Policy. This policy was developed to ensure that research data is

properly managed according to recommendations made in The Australian Code for the Responsible Conduct of Research and applicable legislation.

2.10 Ethics

This study and its methods were designed to meet the ethical guidance from the Australian Institute for Aboriginal and Torres Strait Islander Studies (2020) (Australian Institute of Aboriginal and Torres Strait Islander Studies, 2020). The study was approved by a Hospital Human Research Ethics Committee (HREC/MML/72562 (V3)) and ratified by one university Human Research Ethics Committees (2022/HEO01885).

Participants (including health service staff) were reimbursed with an AU\$30 gift voucher from a department store for their time and contribution. A range of different options had been discussed with partner services prior to study start and gift vouchers for a local department store were identified as being highly valued by participants.

2.11 Data collection

Data for this study was collected in two different phases (Phase 1 and 2).

2.11.1 Phase 1: Focus groups/yarning sessions

After signing consent forms, participants completed a short survey of demographic information such as age, number of children, education, employment status and income. The survey was designed with site champions in a prior health services visit, and suggested changes from key health care staff were made to ensure greater understanding of questions. Upon arrival, participants were offered hospitality by the team, including a choice of drinks and food. These initial surveys were completed by participants as they enjoyed food and drink, whilst engaging in informal, friendly conversation with researchers and other participants in the room. The research team discussed casual topics such as recent news and events, weather, and asked about local sites. Yarning was conducted face-to-face in meeting or training rooms at Indigenous community-controlled health services.

The yarning session was commenced by an Acknowledgement of Country¹ (University of Queensland, 2023) delivered by Aboriginal researcher (LW). On occasion, if an Elder was in attendance, then they were asked if they would like to do this as a mark of respect for their cultural seniority. Using a social yarning approach, each researcher/facilitator gave a short self-introduction (LW, LM, KMR). Attending researchers discussed their non-research backgrounds, such as where they grew up, any connections to the community, their own families and why they are interested in this work. By utilising a social yarn in the beginning, researchers were able to establish rapport, and

¹"An Acknowledgement of Country is an opportunity for anyone to show respect for Australia's Traditional Custodians, and the continuing connection that Aboriginal and Torres Strait Islander peoples have to the land, sea, sky, and waterways. An Acknowledgement of Country can be performed by an Aboriginal, Torres Strait Islander or non-Indigenous person, and is generally offered at the beginning of a meeting, speech, or formal occasion." (2)

helped ensure participants felt comfortable to share their own stories in the following open discussion (Bessarab & Ng'andu, 2010).

Following the initial introductions and social yarn, the session progressed towards the research yarn with a brief overview of the background and rationale for the study (Kennedy et al., 2022). A yarning tool was used to help lead participants towards discussion and providing a visual aspect to the yarning topics (see Figure 2). Provision of a yarning tool as visual prompts has been used effectively in other qualitative studies involving yarning sessions with women and community members (Kennedy et al., 2022; Massi, Hickey, et al., 2023). Thus, the tool used in this study outlined the topics to be covered during the yarn, including young family's health needs, health issues affecting families/communities and services available. These tools were printed, distributed around the room, and introduced by researchers to allow participants to engage in yarns about the outlined topics when they were ready (Massi, Weatherall, et al., 2023). As the yarning session began, researchers could refer to semi-structured questions as a prompt to lead discussion or get discussion back on track if required, whilst also ensuring all topics were covered. The yarns progressively flowed between research, topic focused and more casual, social yarning as participants felt more comfortable sharing their experiences and stories (Kennedy et al., 2022).



Figure 2 Yarning tool used in Phase 1

2.11.2 Phase 2: Delphi study

During Phase 2, the research team used a PAR approach that both returned the findings to communities, and allowed community members to participate in a workshop to reach consensus on priorities through a Delphi study (Keeley et al., 2016). Three-hour workshops with health care staff and community members were organised through the services. It was not necessary for the same participants who took part in the initial focus groups to attend these workshops, although it was encouraged. This workshop could be undertaken with health service and community members simultaneously, although the research team left this arrangement to the discretion of the health

service team. Where there were new participants joining the study for Phase 2, the recruitment and consent processes outlined in Phase 1 were undertaken.

The thematic analysis from Phase 1 yielded strong themes, sub-themes and at times sub-sub themes, which were included as part of the Delphi workshops. Workshops began by the research team presenting the identified themes from Phase 1 through digital or printed slides to the community, and ensured each participant had clear understanding of what each named theme meant. Community members had time to ask questions and make comments about the themes during this part of the session.

The Delphi component of the workshop occurred in several rounds. Aiming to encourage engagement and discussion, participants were seated around tables with themes presented on cards, similar to playing cards. Each individual participant had their own set of 'theme playing cards' in front of them. In Round 1, the research team aimed to have participants halve their playing cards by categorising them as either 'yes' (important to me) or 'no' (not important to me). For example, if there were 100 playing cards at the start of Round 1, participants would be asked to reduce this to 50 themes that were important to them.

The 'yes' votes for each theme were then tallied up by researchers on a white board or butcher's paper for all to view, and the top two-thirds of themes were then used again in Round 2. The final score of each theme is the sum of scores of all participants. The bottom third of themes were discarded with a researcher moving around the room and ensuring that each participant only has the agreed theme cards in front of them for the next round. Delphi studies are undertaken in multiple rounds and can have between four to six rounds or until sufficient consensus has been reached (Cantrill et al., 1996). For this study, due to time limitations, there were two to three rounds conducted during the Phase 2 workshops with the goal to be to reach their Top 10 priority areas.

2.11.3 Feedback forms: assessment of acceptability and feasibility of study approach

To assess participant satisfaction with the research process, the research team created a feedback form that was distributed at the end of both Phase 1 and Phase 2. This determined participants' satisfaction with their involvement in the research focus/yarning group, including feedback on their experience with the topics covered during the yarning session and Delphi study. The feedback form constituted five open-ended questions, which asked about the best aspects of the yarning sessions, what feelings came to mind about taking part, suggested improvements, and other comments. A simple analysis was undertaken using Wordcloud. In this approach, all survey question responses were loaded into the appropriate software (Nvivo 12 QSR International, Melbourne, 2012) and a Wordcloud was generated for each survey question. Words that were seen more frequently in the survey responses appear larger and bolder while words appearing infrequently are smaller and occasionally absent in particularly rare uses.

Questions asked were:

1. Name the things you enjoyed the most about taking part in today's session (either yarning session or Delphi workshop)?
2. Were the topics covered today relevant to you?
3. What words or feelings come to mind when you think about what we've talked about today?
4. Is there anything we haven't touched on today that you would like us to know?
5. Is there anything we could change or improve about today's session?

2.12 Data analysis - Phases 1 & 2

2.12.1 Identification of health research priorities list

Following transcription, the research team reviewed audio recordings and transcripts to ensure accuracy. Two researchers (LM, LW*) including an Aboriginal researcher (*) conducted an initial thematic analysis, reading and then re-reading of the focus group transcripts, using open coding to identify broad themes directly from the data (Massi, Weatherall, et al., 2023). Main themes and subthemes were identified through inductive coding, and then discussed, refined, and confirmed with Senior Indigenous researchers (BF*, MT*) who read a selection of the transcripts. NVivo 12 software (QSR International, Melbourne, 2012) was used to sort the data, in addition to the generation of coding trees throughout various stages of analysis.

Data coding and analysis were conducted using a six-step process: 1) immersion in the data, including a review of transcripts and audio recordings for accuracy and editing as needed; repeated active reading/viewing); 2) generation of initial codes; 3) searching for themes; 4) collaboratively reviewing themes; 5) collaboratively defining and naming themes; and 6) producing the report including data extracts (Braun & Clarke, 2006).

Harnessing the voices of women, families, and staff about health research priorities in communities was central to the thematic analysis of focus/yarning group transcripts. Thematic analysis generated a cross section of themes based on data collected during yarning sessions, with the aim being to identify health research priorities for young families in communities. However, there were other themes identified that fell outside of this aim. Health research topics which were beyond the scope of this study were included in the prioritisation exercise, and a connection will be facilitated between participating health services and other research teams focusing on these research topics as requested by services.

In preparation for Phase 2, a second review was undertaken by all research team members collaboratively as themes were extracted from the data, which assisted in forming the basis for a list of health research priorities to be used in the Delphi study. The reasons for this, were to consolidate the health research priorities identified, making sure that the theme names were extremely clear, there weren't themes that were overlapped and to finalise these for Phase 2. An essential part of the preparation for Phase 2 was to ensure that these all had clear and simple names with an unambiguous definition attached.

2.12.2 Analysis from Delphi workshops

Once the Delphi workshop data were obtained from all sites, the research priorities from each site were considered to determine any differences between sites in each region, or between regions. For example, this could be between Warwick and Toowoomba and when all the regions have been completed it could be between, for example, Far North Queensland and Darling Downs. It is envisaged that sites within regions may have the same research priorities, however, we acknowledge that each community has its own unique identity and is likely to have areas of importance that are unique to their own community, which will require equal weighting in future research protocols.

3. Results

The study was conducted in Darling Downs regions and services between October 2022 and February 2023, with three visits each to Warwick and Toowoomba. A final meeting with executive team and Board members of Carbal Medical Services sites was also held in August 2023. During this time, six Phase 1 yarning sessions with a total of 31 participants and three Phase 2 Delphi workshops with a total of 16 participants were held. In some cases, a participant attended both Phase 1 and Phase 2 (See Appendix 1, Diagram 5 of study visits).

Engagement of participants and promotion of the study were undertaken by a few different staff members at each site, and the research team are grateful for the time spent by all sites to support this study. Each site encouraged its own staff to attend the workshops and the input of staff was highly valued. The passion and dedication demonstrated by staff for their own communities and clients was commendable.

3.1 Demographic of participants

As shown in Table 1, participants of Phase 1 were predominantly female (90.3%), less than 50 years of age (48.3%), and close to 54.8% identified as Aboriginal and 9.7% identified as Torres Strait Islander. A large proportion of participants were single or separated (48.4%), with 32.3% of participants having between 3-5 children and 16.2% of participants caring for non-biological children. A large proportion (61.3%) had post-school education. Income was widely distributed with participants reporting income levels that ranged from \$0 to approximately \$124,000 per year. Sixteen participants identified themselves as being a community member, 15 identified as health professionals and five as workers in organisations. Some participants identified themselves as both a community member and a health professional. In Phase 2, we again had participants who were more likely to be female than male (93.8%) and come from the age group of 50 - 59 years (26.7%), including representation from an Elders group attending both sessions and staff participants (Table 1). Participants identified as Aboriginal (80%), Torres Strait Islander (6.7%) or other cultural groups (13.3%). Post school education was lower than in Phase 1 (43.8%). A higher proportion of participants (53.3%) had 3 – 5 children, and only 6.3% of participants were caring for non-biological children.

As outlined in Table 1, a wide cross-section of community representatives were included within the participant group, however it is acknowledged that there were limited numbers of male attendees (n=4 for Phase 1 and 2).

Table 1 Participant characteristics

Demographic characteristics (n=47)		Phase 1		Phase 2	
		n=31	%	n=16	%
Age range (years)	20 – 29 years	4	12.9	3	18.8
	30 – 39 years	7	22.5	3	18.8
	40 – 49 years	4	12.9	3	18.8
	50 – 59 years	12	38.7	4	26.7
	60 – 69 years	2	6.5	3	18.8
	70 – 79 years	0	0	0	0
	Missing	2	6.5	0	0
Identity	Aboriginal	17	54.8	12	80
	Torres Strait Islander	3	9.7	1	6.7
	Aboriginal and Torres Strait Islander	0	0	0	0
	Other	11	35.5	2	13.3
	Missing	0	0	1	6.3
Gender	Female	28	90.3	15	93.8
	Male	3	9.7	1	6.3
	Missing	0	0	0	0
Marital Status	Single	13	41.9	8	53.3
	Married	10	32.3	4	26.7
	De facto	5	16.1	2	13.3
	Separated	2	6.5	1	6.7
	Widowed	1	3.2	0	0
	Divorced	0	0	0	0
	Missing	0	0	1	6.3
Number of children	Nil	6	19.4	3	18.8
	1 – 2	11	35.4	4	26.7
	3 – 5	10	32.3	8	53.3
	>5	4	12.9	0	0
	Missing	0	0	0	0
Number of dependants who are not biological children	Nil	26	83.8	15	93.7
	1 – 2	3	9.7	0	0
	3 – 5	2	6.5	1	6.3
	6 – 10	0	0	0	0
	Missing	0	0	0	0
Education	Less than high school	8	25.8	4	25
	Completed high school	4	12.9	5	31.3

	Some post-school education (TAFE, apprenticeship, university)	19	61.3	7	43.8
	Missing	0	0	0	0
Employment	Unemployed	2	6.5	3	18.8
	Employed	19	61.3	7	43.8
	Stay at home parent	4	12.9	3	18.8
	Retired	2	6.5	3	18.8
	Disability	4	12.9	0	0
	Missing	0	0	0	0
Role/s in community	Community member	10	32.3	6	46.2
	Health care professional	13	41.9	2	15.4
	Worker in organisations	2	6.5	3	23.1
	Worker in policy and practice	0	0	0	0
	Other	6	19.4	2	15.4
	Missing	0	0	3	18.8
Household income (annual)	\$0	2	6.5	0	0
	< \$28,050	1	3.2	2	15.4
	\$28,051 - \$49,900	4	12.9	1	7.7
	\$49,901 - \$81,450	9	29	2	15.4
	\$81,451 – \$124,600	5	16.1	1	7.7
	>= \$124,601	0	0	0	0
	Social assistance	6	19.4	6	46.2
	Don't know	1	3.2	1	7.7
	Prefer not to say	3	9.7	0	0
	No answer	0	0	3	18.8

3.2 Acceptability and feasibility of study approach

Participant feedback responses checked the acceptability of the study were reviewed immediately by the research team following the yarning sessions, to determine if the research methods were considered suitable, and to gauge satisfaction with the research process. Word clouds were generated from the open-ended questions on the feedback form using Nvivo 12 software (QSR Melbourne, 2021).

Of the 47 workshop participants during Phase 1 and 2, 46 participants completed feedback forms. Responses indicated that overall participation in the focus groups/yarning sessions was positive for most participants. Figure 3 highlights that when asked what they enjoyed most about the focus

"Everything still feels like a big gap when we are trying to close it."
Toowoomba participant



"It makes me think more about what the community of Warwick needs."
Warwick participant

Figure 4: Wordcloud generated from acceptability survey question: 'What feelings or words come to mind when you think about what we have talked about today?'

3.3 Qualitative Results for the combined Darling Downs Region

At the end of Phase 1 focus groups, close to 100 themes and sub-themes were identified during data analysis. The full list of themes and sub-themes are shown in Appendix 2. These figures highlight how the themes come from the aim of the study and its primary question 'What is important to Aboriginal and Torres Strait Islander families in Darling Downs' and show how the sub-themes are connected to each key theme. These figures particularly show the breadth and depth of the discussions held.

Themes and sub-themes were returned to each site and used as the basis for the Phase 2 Delphi workshop. Each individual service undertook the Phase 2 Delphi study to prioritise these accordingly for their particular service and community. Each Delphi workshop was conducted over several rounds to reduce the larger number of themes down to the Top 10 priorities for the service. Data from the individual services will be reported from Section 3.4 to 3.6.

In these results, the language chosen reflects the language used, and we recognise that different language may have been used for similar themes chosen by both services. An example is the Social Determinants of Health (SDOH). Warwick groups used the SDOH overall in their language. While Toowoomba used separate themes which sit under the term of SDOH, for example 'housing', 'finance', etc.

Once each service had completed their Delphi study the research team met with the group of Chief Executive Officers, Managers and Board members from both Warwick and Toowoomba together. This group also undertook a Delphi study to consider the priorities from a leadership perspective. Where there was consensus on these themes, they are reported as priorities for that region. The table below indicates the priority theme, the number of services that identified it, and whether it was also deemed a priority by the leadership group. Mental health for adults, alcohol and other drug use, Child Safety and youth programs were some of the main themes consistently agreed upon by all services and executives as being important priorities.

Table 2 Priorities identified for the Darling Downs Region

THEME identified	Number of services in agreement (# if a theme identified by leadership group)
Mental Health – adults	2 #
Alcohol & Other Drug Use	2 #
Child Safety	2 #
Youth Programs	2 #
Family & Domestic Violence	2 #
Grief & Loss – Mother without their babies	2
Elders	T #
Housing (lack of/overcrowding)	T
Finance (cost of living)	T
Awareness & access to health services	T #
Parenting Programs	W
Social determinants of health	W
Cultural Programs	W #
Men's Health Business	W
Culturally safe health care	#
Health Education	#

Full details of these themes are explored in the following sections for each service.

It is worth being aware that there is considerable overlap between comments from participants from the focus groups, so we have included the comment that best expresses a theme, feeling or idea. For example, a participant may talk about accessing dental checks for kids and how that is an important parental responsibility. Therefore, this comment could be relevant in a discussion about parenting but also in the theme of accessing services.

Please note that comments have been attributed to:

1. Aboriginal health professionals (abbreviated to AHW)
2. Community members

We acknowledge that Aboriginal health professionals are also members of the local community. Many of these staff have generously shared their personal stories as much as they have shared their professional knowledge. Where we could recognise the staff member on the audio recordings, and knew their cultural identity, we were able to attribute their work position. While there were a few non-Indigenous health professionals attending focus groups, we could not always identify these with accuracy from the audio recordings.

3.4 Themes identified as a priority for Carbal participants of both Toowoomba and Warwick

Continuing from Phase 1, the themes identified were shared with participants at both Warwick and Toowoomba during a Delphi workshop (Phase 2). During Phase 2, participants identified their top ten priorities. Despite undertaking this on separate sites, there were overlapping themes prioritised by both Warwick and Toowoomba participants. In no specific order these are:

Mental Health Adults, Youth Programs, Family and Domestic Violence, Grief and Loss – Mothers without their babies, Child Safety, Alcohol and other Drug Use

3.4.1 Mental health - Adults

Mental health, which both Toowoomba and Warwick communities managed, was described by participants as one of the most salient health issues. Mental health issues described included depression, anxiety and uncertainty stemming from financial stresses and cost of living pressures. Further factors which continually affected mental health adversely included: a breakdown in support systems for young people and families; online and in-person bullying; withdrawing from connections with others, including family and community members; past trauma; and suicide.

I didn't realise how big it [mental health] was until I actually worked here... Especially with mob because there could be past traumas in the family. (Aboriginal Health Worker (AHW), Carbal Toowoomba, 20 Oct 22)

Mental health, just again, living in a big household with some family conflict. When they have a young baby, that's pretty hard. (Staff member, Carbal Toowoomba, 20 Oct 22)

Participants identified that for mothers who were inclined to look after their children rather than themselves, improving mental health required personal motivation and self-care.

You just get that down, you just don't care about anything. And especially when you have children, I think it becomes very hard to then think about, you know, caring for them properly and caring, ... although you probably, you would care for them... before you care for yourself. So again, you sort of get pushed backwards and – yeah. First time mums and things like that. I think too, when you're trying to work out exactly what's going on with your baby, ... you can be so consumed that you're doing the wrong thing... But remembering to - to give yourself time to rest, I think is a big thing. (Staff member, Carbal Toowoomba, 20 Oct 22)

Identifying life stressors which could lead to mental health issues in the perinatal period for women was mentioned as an important role of health and social services program staff.

Especially, ... with mums and bubs and the stress of that too. We need to be aware of post-natal depression and things like that. And ... people's mental health before they give birth. And are they coping with everything at home with other kids? Financial issues, maybe relationship problems, everything all together at the same time? It's a lot... Just even being pregnant and not feeling well ... (Staff member, Carbal Warwick, 2 Feb 23)

Women's groups, including mothers' groups, were a positive influence on mental health. Alongside attending mums and bubs groups, staff participants recognised that encouraging social connections and a healthy lifestyle for mums was needed to mitigate mental ill-health, including making healthier food choices, and increasing physical activity and exercise.

P1: We've all been proud.

P2: And our girls just are so much more comfortable, aren't they? Coming to a service where they know that ... they're going to have Aboriginal Health Workers and they've got, ... the stuff downstairs, we've got the pictures and everything. And you - you just know that we seem to get more girls, ... Indigenous mums coming in to see us because it's a safe place...

P1: Sometimes they bring their babies back when you - - -

P2: Exactly. And they know all the girls, ..., and they go and we're all, ... into the babies and all this and - and it's like a family. So, and all of us work together really well. So I think they just know, ... it's just a really nice environment.

P1: Safe place. (Staff members, Carbal Toowoomba, 20 Oct 22)

While mental health services were recognised as being available, the waiting lists to accessing them served as a barrier for community members in addressing mental health issues.

No point doing it just to tick a box. So, ... yeah, that's what we do... which is good. I think, and ... it's amazing just by asking those questions and then if - if they do talk about their mental health, then... we can say, 'Well, you know, have you thought about having a mental health care plan?' And that sort of thing. So, it concerns me the number of kids we've got on mental health care plans. (Staff member, Carbal Warwick, 2 Feb 23)

Youth mental health issues were high in the list of priorities, with boredom named as one of the contributing factors.

I suppose the biggest concern for me would be around mental health rather than [say]... I don't see my 18-year-old facing diabetes or heart problems, but I see her facing a few mental health issues in the near future. And it's everywhere now, every second person. (Community member, Carbal Warwick, 28 Oct 22).

3.4.2 Youth programs

There were many issues concerning youth, which participants raised in both Toowoomba and Warwick. The need for youth programs was central to this. Children and young people needed to be able to access activities through schools, community health centres, Parents & Citizens Youth Clubs (PCYC), or gyms. It was reported that the use of social media was causing issues for young people in community, particularly through online bullying and harassment.

I think too, as these days as is social media, there's a lot more online bullying. I have seen a lot of it. And ... some of it is absolutely disgusting what people are saying to each other and they would, there's no way they'd say it to each other on the street. But... I've actually seen people crying out for help wanting... 'Can you come and visit me? I'm really distressed.' Nobody's offered, 'hey mate, just wait there, I'll be around, have a cup of tea or whatever ... with you.' And a lot of it, ... I think the society of social ... online, ... is things like that [are] really subtle. (Staff member, Carbal Warwick, 2 Feb 23).

School health checks, particularly the 715 health checks, were mentioned as a positive initiative by Carbal Medical Services. Furthermore, the provision of youth sexual health education, including access to contraception and abortion at this early school age period was also highlighted as an important initiative by Carbal AMS, in collaboration with primary schools.

We actually send out more vans up there for the 715 checks. So, we do the [year five] boys and ... girls, every year. We do three schools here in Toowoomba and one day in Warwick. So, it's getting the education, then progress, getting them in a routine. Early detection, early intervention. Especially the young males. Well, if any of our kids don't get diagnosed with any chronic disease or any, ... health [issues], well, we send our Aboriginal health worker back out and use those five EPC [Enhanced Primary Care] referrals for education around sexual health - - - healthy lifestyles, ... all that sort of stuff. So, they're ... giving the education. (Staff member, Carbal Toowoomba, 20 Feb 23)

It was identified that young people needed to trust adults and Elders in community to be able to confide in them about their lives and troubles. This could be facilitated through innovative youth programs, or programs with Elders.

They've got a boys' [school program] and they pick up a couple days, trainings, they have a fantastic school. That's a fantastic program. She had seven Indigenous boys graduate Year 12 this year, which is the largest amount. So, it's awesome. And some of them had pulled out school and they helped them catch up, to graduate this year. And I think if you get them at that youth in the schools, like with the extra — like the boys, they take them on camps, there's funding for that. They pick them up in the morning, they cook them up at big barbie brekky and they do training, in the morning and after school they do community events as well. (Community member, Carbal Warwick, 28 Oct 22)

Elders highlighted their passion for helping youth in a range of ways including mention of ways to support young people in juvenile prison.

You've also got ... all these professional people that are there, right? But you've also got us [Elders] over here that want to help too. So, some way to bringing us into the mix. Okay. We don't have the degrees and everything that these guys all have... But you've got education on your side. We've got life — we've got life... And I do — and I respect everything that you guys do, right? You are all professional people, and you use all the talking about like this, but at the same time, I wish there was some way that you guys could integrate us... That want to help.

We're sitting here, across here, we've got... other women also that would want to help even just the girls. If that's all you want us for. We — I am quite willing to go to the jail. I've thought long and hard about this. I've spoken to [Carbal staff member] about going to the jail and as [he] said to me, keep their trust. If they tell you something, you keep it. And they will test you. They will test you to see what you will do, right? And I've thought long and hard about this and I think that if we just — I do realise we can't help everybody, I understand that, but even if we just help one kid turn their life around, I think I've done a good job. (Elder community member, Carbal Toowoomba, 20 Feb 23)

3.4.3 Family and Domestic violence

Relationship safety was mentioned as a key priority theme within families across both Warwick and Toowoomba services. There were Family and Domestic Violence (FDV) programs for both women and men offered through Carbal AMS, as it was recognised as being a crucial area of support to clients. Some exacerbating factors that could trigger FDV were shared, including being disconnected from family or having family living away, which was reported as leaving women and children in a vulnerable situation to FDV.

It's a hard one DV because just to break away from that though, isn't it? And try so many times, especially if they're disconnected from their families, sometimes through that DV relationship they become disconnected from their own families and their own mothers. And that's part of, I guess if you call an illness, it's part of what happens and then they, it leaves them so vulnerable because - They're reliant on that person. ... that's so scary. And ... then they come to us and I - it's hard sometimes what we offer can't possibly be what a family could offer them. You know, you can't really, for people, nothing that we provide can be the same as what a good family system around them can provide really. (Staff member, Carbal Toowoomba, 20 Oct 22)

Staff attending focus groups reported that understandably, it was not always a topic freely shared by clients, and perhaps some staff still feel hesitant to screen for FDV.

Yeah. I think people on the whole are not forthcoming with - about family violence and drug and alcohol issues. It's interesting. People will openly talk about mental health now and that's fantastic. And I think that we've become very comfortable asking people, you know, most people are having screening. I ask them how their mental health is and you know, they'll say, 'Well it's great at the moment.' Or it's, 'Oh, it's not so good. I have ups and downs,' ... so I think we are being a lot more proactive about asking people about mental health, but we are not so proactive about family violence issues. It's interesting. Still is a taboo, isn't it? (Staff member, Carbal Warwick, 2 Feb 23)

Also, violence in the community was mentioned as having increased and a real concern.

And the rate of violence is increasing and not just here everywhere I think too, isn't it? It's like everything on, ... Violence. I mean, never years ago would never have to lock my door in the daytime and worry, but now you do. (Staff member, Carbal Warwick, 2 Feb 23)

3.4.4 Grief and Loss – Mothers without their babies

Grief and loss are considered a period of sadness experienced when receiving news of severe illness, after someone's passing, divorce, family or community members experiencing significant losses. It was a poignant theme discussed in various contexts within communities. It ranked among the Top 10 themes in both locations particularly concerning mothers who were without their babies due to miscarriage, stillbirth or losing custody of their child/children through the Child Protection system. Child Safety was one of the salient themes relevant in both sites and is discussed in the following section. There was a real need for programs and groups to help new mothers suffering significant loss.

P1: I found that like I had to go to Toowoomba to give birth to my baby, which I knew wasn't going to be alive. So, ... when I went to Toowoomba, they put me in the maternity ward. So, like I had — that's what I mean, I didn't have a really great experience because like I knew I was going to give birth and I didn't have my baby...

P2: I've heard a lot of mums have to go through that and like, that's — that's so traumatic. (Community members, Carbal Warwick 28 Oct 22)

So, I felt that my body as a woman was pretty useless [after a traumatic birth]. Yeah. So, I mean that – that obviously led to that postnatal depression and all that, you know, thing that went on. (Staff members, Carbal Toowoomba, 20 Oct 22)

Mums' groups were mentioned as an enabler to seeking health and social care for new mothers, regardless of whether they had their children or had tragically lost them. Promotion of programs and services were deemed necessary. Staff respondents reported clients may be unaware of the existence of support groups existing, leading to non-attendance of those available. Participants mentioned that many new mothers usually self-referred to groups, which was seen as positive self-determining behaviour towards looking after their own health.

Yeah, I think the mothers' groups like, ... they seem, we've had some over the years and some have worked really well and - you know ... you've got the 'Strong Mothers' that you go to on Fridays. But I think getting the mums together and having, you know, the groups ... where they can talk about their - their issues and know that they're all similar, they're all going through the same sort of thing and ... just have someone something, ... every week or every second week, ... to actually do, to look forward to and to get them out of the house. Yeah, so I think those groups, those mothers' groups [are valuable]. (Staff member, Carbal Toowoomba, 20 Oct 22)

Some participants who had personal or family experience of loss and grief mentioned they had been able to access whatever support was available. However, it was noted there was a need for a support worker, who would provide continued support and care during this time of bereavement. It was noted that services were understaffed in this important area of health and social care. Finally, there was mention of the need to be supported with travel, and accommodation expenses in urban or larger regional centres, to access hospitals during such a vulnerable time of loss for women and their families.

With Toowoomba I felt like it was kind of like 'have [the] baby', I got baby cremated so he could be with me all the time sort of thing. And like then you're on your way practically. But like, I don't know. I found like I got support. [Carbal Warwick staff], where [staff member] was working out, they were like so much support for me. Like [staff member] went and got me a little ... birth certificate for my baby and like, ..., [it] just it made me feel nice. And... you'd think that being in Toowoomba because it is a bigger place, you would've gotten more support, but I honestly got more support here [in Warwick]. (Community member, Carbal Warwick, 28 Oct 22)

3.4.5 Child Safety

Dealings with Child Safety were a reality for many people, including young parents in communities. Participants spoke about being in 'the system' (Child Safety or Child Protection system) as children themselves, and the fear that that would continue for their own children. These impacts were reported across different age groups of communities with members of the Stolen Generation² and caused their families to be impacted by intergenerational trauma. Topics such as children living with other family members and fostering was often mentioned in the context of young families in both communities. In general, parents did not want any government agencies' involvement and feared this would risk their children being taken.

Because my son got taken from me because of my like mental health and homelessness. My homelessness, nobody — everybody that I asked refused to help me. And then because I asked for help, my son got taken. So, like, it was a — it was a combination of stuff, like with the homelessness and stuff like that. But like my great grandfather got taken from his family in New South Wales and was never allowed to acknowledge his Indigenous heritage. And I'm the first generation of our family that's openly acknowledged. (Community member, Carbal Toowoomba, 20 Feb 23)

And then they worry about child service - Child Safety coming into it, you know, and that's a lot with a lot of families. They're more worried about child services coming into the picture. If they can't afford rent and can't afford food, then they stay, you know, stay hidden so they don't - child services don't get involved, so. (Staff members, Carbal Toowoomba, 20 Oct 22)

P1: Yeah. But at the same time, they were previously had been known to Child Safety for numerous for several years prior.

P2: Yeah. Child Safety is a whole 'nother; you know?

P1: The whole other.

P2: Different five and a half years and they ruin my life.

P1: I saw it. I witnessed it four years for child safety and everything like that.... (Community members, Carbal Warwick, 28 Oct 22)

² Stolen Generation refers to the forced removal of Aboriginal children from their families due to colonisation since the beginning of the 20th Century. (63)

3.4.6 Alcohol and other drug use

Alcohol, tobacco, and drug use was reported as a consistent problem for different age groups in the community. The repercussions of this included Fetal Alcohol Spectrum Disorder (FASD), which was at times misdiagnosed, and therefore early intervention and support was not offered. Community identified a need to break the cycle of alcohol, drugs and tobacco use within families and peer groups. There was also acknowledgment about the difficulty to find motivation to change behaviours whilst in the grip of addiction and/or using substances as a coping mechanism, and for the purposes of self-medication.

... Alcohol, every single person. I think 80% of our patients probably - - - They're either drinkers or they've stopped drinking. Or marijuana... so that's a very, very common thing we are talking about with them. It's nearly - nearly every patient. (Staff member, Carbal Toowoomba, 20 Oct 22)

The danger and prevalence of vaping was also reported as a problem, especially with young people in the community.

The biggest thing that worries me is that a lot of people are swapping smoking for vaping. And you can't tell me vaping's not as bad, if not worse.

I think a lot of drugs and alcohol, because some of these - some of them are heavy drink[ers]. A lot of them actually now I've - when I screen have cut down their cigarettes, which is good. I noticed there's been a decrease, but there's, yeah... because, well some of them said they're not vaping, but I still have my suspicion a lot of them want to get off it. They had said they want to improve their health. (Staff member, Carbal Warwick, 2 Feb 2023)

One of the problems of alcohol identified was the easy accessibility and the limited campaigns outlining how alcohol adversely affects health.

[There are] Alcohol issues. Alcohol is like, "okay", it's legal. As much as you want it, you can run down to the shop and get it whenever you want. Nobody's going to pull you up unless you're under 18. As long as you do it inside your home. You can be frigging drink[ing] as much as you like and just get trashed. And there's no — now if we got negative drink driving campaigns, but there's not really anything about, ... oh, I don't know, like drinking every day, ruins your liver, kidneys, everything like that. Your fine motor skills, your behaviour towards others, your own behaviour within yourself. ... Like how it affects your children in utero. How those behaviours, when kids are little, like alcohol is just like cool for everyone and it's the worst drug ever invented, ever. I think it's just as bad as meth. (Community member, Carbal Toowoomba, 20 Feb 23)

3.5 Results unique to Toowoomba

Overall, three focus groups were held at Carbal Medical Service in Toowoomba and one Delphi Workshop. A total of 25 participants attended these with 15 staff, including others such as those working in policy and practice, and 10 community members. As highlighted above there were areas that were similar between the Warwick and Toowoomba communities. The following section will discuss the themes that were unique to Toowoomba region.

3.5.1 Housing (lack of/overcrowding)

Housing is one of the social determinants of health, and a key issue discussed by participants in the yarning sessions. Homelessness was a reality and threat for many in the community.

P1: And a lot of our girls are on... pension or Centrelink benefits and they just can't, you know, well, they just, they can't afford it. Plus, ... the rental agencies don't want, ... landlords don't want someone who's on a pension.

P2: Mmhm and they don't want children either.

P1: Yeah. So, there's a lot of that around as well.

P2: And we had one young family that had to pay six months of rent... and they accepted them in the end ...

P1: Six months.

P3: Six months. That's a lot, isn't it?

P2: I think the grandpa put the money up because they were never going to get anything.

P1: Like they [real estate agents] do because they can and there's a shortage. Yeah. And they just put it [rent] up. (Staff members, Carbal Toowoomba, 20 Oct 22)

[They] just had a baby bubs four months now though. But ... he quit his job and she's not working. They've got three other kids, and you know, trying to keep food on the table for them. Trying to make sure they're paying the rent because if they don't pay their rent or, ... the house is not up to, and the people come round to inspect, they could be homeless. So that's always a lot of stress. (Staff member, Carbal Toowoomba, 20 Oct 22)

There was mention of parents helping their adult children, and some with young families having to move back home with family. Parents deemed being good role models and creating a safe home environment for their children as crucial priorities for themselves.

P2: In Toowoomba, I would say housing is, I know it's not health, but it's, yeah, housing is the biggest issue here at the moment for our families, a lot of our families that we see, that I see anyway.

P1: Yeah. A lot of them have to move back home because the rent's too expensive... well, you've got a roof over your head. So that's good. (Staff members, Carbal Toowoomba, 20 Oct 22)

P1: Because as a mum you give up everything for your kids.

P2: Yeah, you don't want them to be struggling... And I said that to him [my son], look, me and dad struggled, me and your father struggled. I said, we and I don't want this for you. Like I want to make it, even though ..., people might think we are just babying you or whatever. It's not that. There's - you can't just sit there and do nothing about... because you

get that too, I suppose. You think like, oh I can't keep doing this and I can't keep helping you, but there's this other thing that says, well nobody else is going to help your child.

So you really have to do it. And especially when it comes [to] your grandkids as well, you think like can't just stand there and watch this just rollercoaster downhill and do nothing. As a parent and a grandparent, you've got to do something. But then at the same time they won't mature unless they experience it, even though it's hard to watch them struggle.

P1: And not everyone has good family support and those good role models that we need. (Staff and community members, Carbal Toowoomba, 20 Feb 23)

3.5.2 Finance (cost of living)

As part of social determinants of health, financial hardship was often mentioned as a prevalent challenge among community members. The ongoing cost-of-living crisis had ramifications including food insecurity and as previously mentioned, housing pressures including high rents. This often led to shame and embarrassment for people to have to admit they were struggling to make ends meet.

I think finances play a big piece – part in people's mental health... being able to cover their expenses and – and things like that... Especially for people with – you know, who've just had children or the elderly, ... it's all ... 'I don't want to get kicked out of my home'... (Staff member, Carbal Toowoomba, 20 Oct 22)

There was discussion by Elders that felt some women were choosing to have babies, and it was driven by eligibility to access government benefits, including parenting payments and unemployment benefits when required.

P2: Like, it's the young girls that are getting pregnant, they don't listen to — to the mothers. The mothers can tell them, "Look, don't do this. If you want to have sex, I'll put you on a pill." Oh no, we can't take — they don't want to take the pill. They don't want to do anything. They get pregnant and they cry wolf a lot of them. And that they don't want the babies. They can be adopted out. That's good for some of them. But then some of them are babies bringing babies up. And the government is keeping them, so they don't have to go to school. They give them everything and take it off everybody else. Like a single mum gets some a thousand dollars a fortnight with one child. You know, that's more than what I get on a pension a fortnight.

You know, sometimes I think I'd be better off being a single mum, going back and having four kids.

P3: I know a girl that just has every time one goes to school, she's pregnant, pregnant, pregnant.

P2: That is now they have to go out and find out work.

P3: As soon as one turns about four, she's up the duff again or she's insane.

Q1: Is it because she doesn't want to go for a job, or... doesn't want to work?

P3: Yeah. Yeah. It's much easier. Although I don't know what's easier about being in a house of six kids. [laughter] (Elder community members, Carbal Toowoomba, 20 Feb 23)

3.5.3 Elders

During the community yarning sessions and Delphi study in Toowoomba, an Elders group attended both and were vocal on how they see their roles within the community, particularly emphasising their potential to assist young parents and families. Some Elders shared that their personal history meant that they had no knowledge of their Aboriginal heritage growing up, but they fully embraced it later in life and wanted to actively contribute and be part of their community.

Both sites shared the importance of looking after Elders and the ageing community, however in Toowoomba they were a key identified priority. There were general health issues such as dementia, chronic illness, mobility issues and accidents; and social issues such as isolation, and Elder abuse.

And we've had some Elders haven't we, that we've had to call in to get away from their family. They're being, ... abused and we've had to, they've met the police here and we've had to remove them and things like that. So yeah. (Staff member, Carbal Toowoomba, 20 Oct 22)

To counteract some of these challenges, Elders programs rated high on the list of needs, as well as recognition that Elders supported each other through programs, and coming together to connect in community.

We talk about our family lives, and we've got one lady that comes, ... her [family member] has got cancer and she's [overseas]. And like we always ask every week, how's your [family member] going? All this. Like, if someone has a problem, we talk about it and how we can help. Don't we? (Elder community member, Carbal Toowoomba, 20 Feb 23)

Also as mentioned under the Youth Programs theme, Elders supporting the younger generations was an area of particular interest to these participants.

If they tell you something, you keep it. And they [young people] will test you. They will test you to see what you will do, right? And I've thought long and hard about this and I think that if we just — I do realise we can't help everybody, I understand that, but even if we just help one kid turn their life around, I think I've done a good job. (Elder community member, Carbal Toowoomba, 20 Feb 23)

Finally, Elders were interested in research processes and particularly interested to know what happened to the data collected for the study, interested in how the information would be used and the ways it would give back to the community.

P5: So, I suppose even a question for myself is, once we do this [research study], where does it go from [here]? Does it — I know it's going to come back and you're going to give us an update, but does it go anywhere higher in the government agencies to say, 'Okay, Toowoomba community has spoken, this is what they've spoken about. What are we going to do about it?'

P1: And we are really trying to help it. Is that what you are trying to say? (Community members, Carbal Toowoomba, 20 Feb 23)

3.5.4 Awareness & access to health services available

There were many concerns raised about access to, awareness of and issues with health services. Some of the barriers mentioned around accessing health care included: being comfortable and able to talk to health professionals; doctor shortages, i.e. doctors not working all the time and having

to see different doctors for the same health issue; feeling of shame or not knowing how to seek help; need for increased awareness and promotion of available health services; overall not having enough health care staff to support client base, in particular Aboriginal Health workers.

An enabler to health care usage was the largely free or subsidised health care. The Carbal Medical Service provides services to non-Indigenous clients as well, which was regarded as a positive factor as it was inclusive of the mixed community, especially in regional and rural areas.

And I think we just need to get it out because like with my family, we didn't know about Carbal until my sister started working here and then that's how we found out. So, I think we just need to like let people know... they can go to places that they can afford. Because that's a lot of issues is money [for people]. Yeah. That's why we're opening a dentist surgery in Toowoomba Carbal. So, it's going to be for Aboriginal Torres Strait Islander people. So, it's hopefully, but still is being going to be bulk billed. (Staff member, Carbal Toowoomba, 20 Oct 22)

Some participants mentioned there were competing priorities with health care issues for clients, at times, which made it difficult to resolve any single issue. Furthermore, it also contributed to increased waiting times due to the prioritisation given by the hospital and health services, which may differ from the client's perspective:

I suppose being able to get your – your healthcare quicker. Like there's such long wait times for anything that anybody needs these days... Being able to ... if you've got – I mean, if you've got heart disease and cancer, you seem to get..., picked up pretty quick. But if your knees are bad or, ... you've got a shoulder problem or your eyes, ... even hearing it can take a long time before you can get those things done. And sometimes by the time those things are done, maybe there's, ... the damage is already done.

Why do people need to go through four years of pain before they can have their surgery, you know? Just because it's not a level one pain? It might be a level three pain. Why do they have to wait for it to get that bad, you know? (Staff member, Carbal AMS Toowoomba, 20 Oct 22)

Linking to other health and social services was highlighted as an important and valuable aspect of attending Carbal Medical Service. Outreach services were available and valued by community, especially home care services which were helpful to young families and Elders in particular. Staff were also aware of other services available which were not health services but aimed to address the social determinants of health through assistance with food insecurity and isolation. This included charity organisations which provided food hampers to those in need and transport to organised excursions to places of cultural significance, e.g. Bunya Mountain. Accessing transportation only became an issue during COVID-19 when rules mandated that individuals without vaccination could not use transport services. Overall, participants reported there was respectful service delivery from Carbal AMS in both locations.

3.6 Results unique to Warwick

Overall, there were three focus groups held at Carbal Medical Service in Warwick and one Delphi Workshop. A total of 22 participants attended these with 10 health care and other staff working in organisations, and 12 community members.

Following on from Phase 1, the themes identified during Phase 1 were shared with participants during a Delphi workshop (Phase 2). During Phase 2, participants identified their top ten priorities. In no specific order these are:

Social Determinants of Health, Parenting Programs, Cultural Programs,
Men's Health Business

3.6.1 Social determinants of health

Social determinants are social and environmental conditions that affect health, functioning, and quality-of-life. Social determinants include but are not limited to education, financial security, employment, housing, and racism. Financial hardship was a common theme community-wide, resulting in food insecurity, shame, and embarrassment at the struggle with making ends meet for themselves and their families. Employment was also reported as affecting health, both negatively and positively. Across the board, the difficulty of making ends meet was shared, whether they were working, or receiving unemployment benefits while actively seeking employment.

P1: But employment, like my partner has a lot of trouble getting employment. Again, that's probably because he's too lazy to actually go and do any study.... There's nothing. But then again, there's not much study around here either unless you go online.

P2: And a lot of people just don't do [that] they get distracted... There's TVs, there's phones, — they get too distracted and don't actually sit there and do it.... And you got to buy the computer.

P1: Well, that's it. And that's expensive.

Q: And then would the jobs be available if people definitely up-skilled and [had the qualifications]?

P1: It depends on what there is around at the time. Like at the moment there's not much farming because farming is going on at the moment when the season ends and then restarts, there's going to be so many farming jobs. But winter is the off season for some. That's what my partner does. He works on the farms. (Community Member, Carbal Warwick, 28 Oct 22)

In the context of parenthood, there was also mention of both parents having to work, and therefore children spending much time on their own.

School holidays, there's nothing to [do] ... and this is, I think this is part why these young crime rates, kids are bored and ... both parents working so they can't keep an eye on their kids because they've got to work for – because the mortgages and the keep the food on the table because of the price rises and stuff. So it's just sort of one vicious circle. (Staff member, Carbal Warwick, 2nd Feb 23)

There's just families that ... don't have the resources and don't have - they need to be picked out [that] they need some support. Especially with some of these kids with challenging behaviours. And like I said, I've worked in aged care and I've come here and the mind boggling when I see young kids having mental issues and things like that. And there's

nowhere. And a lot of that comes down, I think is boredom. They've got nothing. The parent - both parents have got to work to get somewhere. Not like it used to where you had one parent stay and one parent work. Everything's so expensive. (Staff member, Carbal Warwick, 2nd Feb 23)

Carbal staff and community members spoke about education as a key theme in improving health and wellbeing of families and community members. Health literacy was noted as a potential barrier to achieving better outcomes.

I could probably say education, especially with younger girls being pregnant. I know outreach service had a 14-year-old, never went to any antenatal appointments, didn't see a doctor or anything until achieving birth. So you know that education around, ... looking after yourself if you are pregnant, looking after yourself or say stuff like that. There's no education, there's not enough education out there. (Staff member, Carbal Warwick, 28 Oct 22)

I think education is - is ... really important too. Especially ... being a first-time mum and coming out and we think, oh, nobody told me that the baby does this, and you know... even lack of sleep and things like that sometimes. I know when I brought my first baby home, I thought like I never knew her to be like this. Somebody had told me. But my mum always used to say, 'no labour's, you're going to be fine'. And then, ... never told me about all the things that ... I'm thinking like, 'Mum, why did you tell me that? Like this - this is really not what it's like, you know? And [laughs]. (Community member, Carbal Warwick, 28 Oct 22)

Racism and institutional racism were alluded to by some community members, and for example for Indigenous families birthing in regional hospitals.

Year 7, Year 8, dealing with adult racial problems that they shouldn't have to come across until later time in life. (Community member, Carbal Warwick, 28 Oct 22)

However, some staff members noted that the health service was culturally safe and inclusive of all community members, not just Indigenous clients.

Well, we - we have got a mixed community, but I don't think we have any issues [with racism]. Not that I - of what - not that I've seen. Even when people come in here, ... if there's no - if anything I think everyone help - helps out around here. I don't think there's any - I've never seen any sort of [racism]. (Staff member, Carbal Warwick, 28 Oct 22)

There were mentions that bullying was an issue in schools, and hence a deterrent to children attending school.

P4: Oh, I just think the school is, again, it's a government issue. Like the hospitals, school's needs — needs to be done something about, ... barriers with, ... Indigenous students just hate — hate to have it that way. For example, ... we had a run in with a special ed student that thought it was okay to constantly repeat, ... racist words and whatnot. So, I called the Board and go above the principal, ask for some sort of procedure to be changed because the only punishment was to have like a detention...

P2: Then that's nothing.

P4: Yeah. Detention ... was it, again and write an apology or as she was supposed to apologise to. Yeah, she was supposed to apologise and she was meant to have like a... educational things. But she had the educational thing like heaps of times and stuff...

P2: She['s] just ignorant.

P4: ... To teach them about cultural things, but they still, yeah, exactly ignorant. And then at the end of the — day, her father worked at the school. So, I said, well maybe he needs to be looked at because if you're giving her so many educational sessions and she's still repeating racial slurs, then - - -

P2: Yeah. What are they talking about at home as well?

A: So, I mean, no barrier breakdowns at school too, you know? (Community Members, Carbal Warwick, 28 Oct 22)

Housing and homelessness were a reality for many community members, and for some young people and families. There were many parents helping their adult children with housing, and the need to move back home with family. This was seen as an opportunity by some participants in having some good role models for young children, with more adult family members around.

P2: It's affecting everyone.

P1: Oh yeah. Yeah. Yeah ... you see it a lot, there's a huge problem with housing. That's a big issue as well. A lot of patients come in and they say, oh, got to be out in two months. You know, where am I going to live? And yeah, it's terrible. The stress of [it].

P2: And no one's going to care about their health if they don't have their basic needs met (Staff members, Carbal Warwick, 02 Feb 23)

Yeah. Like to [staff member] they were saying that, ... all the young ones moved out of their parents' house, but within a couple of months they had to move back home because it was just - and - and my youngest daughter is looking to move out because you know, she wanted, because she's got a boyfriend and I think they want - she wanted in-laws to come up and I was like, I don't want you to move out as much as I do want them to get away from me, I don't want them to move because it's too expensive. (Staff member, Carbal Warwick, 02 Feb 23)

3.6.2 Parenting Programs

Parenting programs are designed to encourage parents with managing everyday needs such as social, financial, emotional, mental, and cultural health in a holistic setting. Discussions around the needs of families during the perinatal period highlighted the need for: parenting education (pre- and post-natal); support for carers; and access to midwifery group practices (MGP's) for ante-natal, birthing and post-birth care and support. Parenting courses for both mothers and fathers were seen as crucial, especially for first time parents.

It's really good because, ... general will link people in when they're pregnant. Like we've had them start when they're pregnant, so that when they have the baby, they - yeah. Particularly if they're a first-time mum without - with minimal support. ... And we try, but it doesn't always happen. I think education sessions, we have a lot of young mums, you know, we've got one that's only 16, ... coming through at the moment. So I think any sort of parenting, ... courses that can help them with just the basics (Staff member, Carbal Warwick, 02 Feb 23)

I think too, everything's focused on the mother when you're having babies. And I do honestly think that - that fathers need education and support as well. Because their lives completely change too. (Staff member, Carbal Warwick, 02 Feb 23)

It made sense too to be - to have a father's support group too, because, you know, you don't know what's going to happen with the mum during labour. So, if, ... the baby's born mum, not [there] then the father's left. You know, how come no one told me how to make a bottle or how to change a nappy. (Staff member, Carbal Warwick, 02 Feb 23)

A pregnancy and post-natal app were suggested as an accessible tool which could encompass many of these topics. Post-natal depression was also reported as an ongoing mental health concern. First time mothers and the pressures of caring for a newborn, also warranted the need for programs and services, for all single parent households lacking support. Another area of concern was that many young mothers had not seen a doctor for their ante-natal care, nor did they have a choice of which doctor to see for their pregnancy care.

Yeah. Support. I think, ... our mums and bubs programs really good for giving support and, you know, ... it's - it would be great if more people would access that service. And I - I really don't understand why they don't, because there shouldn't be any barriers. We can organise transport and ... that sort of thing. (Staff member, Carbal Warwick, 02 Feb 23)

Community members identified the need for shared care, through an MGP, which offered home visits and could provide support when women were away for birthing. For example, if needing to travel to birth, if birthing in Toowoomba, was deemed an essential service need.

Would you — I don't know; would you say this is probably the most they would have for active side of things. Like there's not really much to get up and go out and go do unless you are doing it yourself. Like get the ball and go down to the park or something. So, um, programs that encourage families to get out and do the activities would be. (Community member, Carbal Warwick, 28 Oct 22)

There were concerns for parents needing extra support to help with children with challenging behaviour, and whether there were any services in place for this. Supporting parents to be positive role models was also mentioned as a priority.

And parents, get so tired of trying to help with no support, no system. So, what do they do? Take a seat — backseat and put their feet up and now look at the kids today, stealing cars and killing themselves and then you got another kid that's seen it but you go and jump in a car, didn't you not just see that. (Community member, Carbal Warwick, 28 Oct 22)

3.6.3 Cultural Programs

Engaging with cultural ways was a theme that community wanted to see more within services and was a priority for Warwick community. As part of the Top 10 themes, this theme included ways to strengthen and provide cultural knowledge with younger generations, keeping culture alive and relevant. The yarns encompassed the importance of being Indigenous, and how it was a protective factor to emotional, mental, and physical health. Elders and staff members spoke about the need for cultural healing, importance of cultural practices and programs, and connection to Country.

We have an Elder that can sometimes come down from Toowoomba... and he's very good when, ..., especially people, ... especially youngsters, going through some hard times. He's very good at sitting down and working with them and he's a very spiritual man... A lot of ... cultural that he, ... provides education and things like that. He does smoking as well. And ... yeah, that's really good when a couple of young men have, ... been interacting with him in the past, which have helped... them. (Staff member, Carbal Warwick, 02 Feb 23)

Participants in Warwick spoke about the need for representation and acceptance. They suggested that the sight of Aboriginal kids working in shops would go a long way for young people and contribute to their sense of belonging within the society and broader community.

Q: So, is there many young, ... Aboriginal kids working like in shop[s] around [town]?

P1: Yeah, yeah, yeah. There's a - there's quite a few of them with the jobs, yeah, that's - I used to have a baby wear shop when I had a lady that she was Aboriginal, she had all the - the kids and I've never seen so many kids. So well dressed. (Staff member, Carbal Warwick, 02 Feb 23)

Community members shared that changes in society meant there were less children playing outside, and instead spending more and more time using technology and on devices, including using social media which was regarded as a negative influence on health. Feeling culturally safe was important, not just in health services but in their communities.

There's [not] necessarily anything here ... which is a bit sad because I think it should be in schools and everything really. Well, it's a cultural thing at my kids' school... for kids who are doing well, ... no, at the primary school there's a program online for Indigenous culture and stuff. So they're - my - the older kids are doing that. The high school boys have a contact program, ... the girls don't have anything at the moment. (Staff member, Carbal Warwick, 02 Feb 23)

3.6.4 Men's Health Business

Men's health and wellbeing was a high concern represented among community members.

Yeah, [men's health is] just as important. Cause if, you know, you don't have a happy dad, then, ... the family often is affected by that as well. (Staff member, Carbal Warwick, 28 Oct 22)

Men's health business included conducting family business, looking after their health and wellbeing, and participating with cultural ceremonial activities. The continuation of roles to take care of sacred sites and cultural practices through language, song, dance, art, and storytelling; passing on cultural knowledge and holding it in high regard to younger generations were considered to be beneficial contributors to the health and wellbeing of community.

Strong fathers that we have as well, that's really good for, especially the fathers that are, you know, not sure and how to treat the family in order to, how to treat their kids. Like they go through all that and [staff member] talks to them about, you know, how communication starts with the baby in the womb and all that kind of stuff. So they start, ... and how to talk to, if they have to go through child services, how to talk to them, all that kind of stuff. So, and they're not funded. Yes, they're actually not funded that we fund that... outreach. He has a group, so it goes for eight weeks and he's usually got groups nearly ready to go straight after one after the other. (Staff member, Carbal Warwick, 28 Oct 22)

4. Discussion

This project has undertaken a systematic approach to identifying research priorities which were driven by Indigenous communities and will support the future of co-designed research with health care services. We envisage that key health research themes identified may guide adjustments to service delivery, while others may facilitate future perinatal research or health program focus areas for the Darling Downs region. Findings highlighted there were common health research areas of need amongst the two Carbal locations, which could benefit from additional synergistic opportunities for collaboration in both service delivery and research. These include mental health and youth programs. Addressing alcohol and other drug use, could have implications on family and domestic violence experiences, Child Safety concerns, and ultimately grief and loss for families and communities. Furthermore, the research team acknowledges that the wording of some of the individual themes identified in each location, may in fact encompass the same topics or be overlapping in part. For example, groups in Warwick identified the social determinants of health (SDOH) as a key theme, and in Toowoomba, groups identified housing, finance, and access to health services separately but as key themes. These themes are in fact all core aspects of the SDOH, and initiatives around these topic areas could also be developed for both regions. It may also reflect how people understand and use SDOH terminology, and the limited application of SDOH elements at times to complex community situations.

The importance of listening and learning from Indigenous community members, the experts on their own health and wellbeing (Ewen et al., 2019) was paramount in designing and conducting this research study. Following thematic analysis of Phase 1 yarning session data, the research team, and Indigenous Academic and Research leads (LW*, DS*, BF* and MT*) distilled these to research priority areas, with the research team then revisiting the same communities to conduct Phase 2, the Delphi part of the study. The Delphi workshops were designed to prioritise health research needs, with the process ensuring the individual voices of Indigenous communities were prioritised and guaranteed in research (National Health and Medical Research Council, 2018). For the most part, participants reported they enjoyed taking part in the Delphi workshops, although at times the process initiated challenging topics for discussion through participant yarning to research team members. Some participants felt some of the themes were very similar, and it was difficult to narrow community priorities to only ten, when so many seemed to be important. Also, research team members, the process was quite new and needed to be explained numerous times. Over time, the team has improved their explanations so that this has improved for other groups. They also had to spend some time with assisting with cards for Phase 2 Delphi study throughout the process. Furthermore, as the research teams learning grew with additional Delphi workshops conducted, they identified seating arrangements in the rooms worked well in a U-shape, which was conducive to working together but independently, and not necessarily following the lead of any one group member.

Whilst the study aim was directed at the perinatal period rather than all life stages and health areas, a few of the themes that emerged included health and social issues for youth and Elders. Therefore, a further benefit of the study was the opportunity to connect community-controlled services to other research groups if there was a health need identified by communities which was beyond the scope of this perinatal research group. As mentioned in Section 3.2, some participants highlighted in their feedback forms that considering and discussing other topics would be beneficial to communities. Exploring potential expansion in future to consider other life stages has been noted by the research team.

Participation was honest and open, and communities suggests that future work in these areas will have a likelihood of successful implementation across community and geographic contexts. This detailed report has been prepared for health services and encompasses regional data, which

presents the health research priorities as highlighted, workshopped, and decided on by local community members, including health services staff at the time of publishing. While this report ultimately presents research findings, it is envisaged it could facilitate the strategic focus areas and future programs which are relevant to health services and communities.

4.1 Strengths and limitations

One of the key strengths of the study has included the ongoing engagement with services. This study is a testament to the strong partnerships established, an imperative for conducting co-design research approaches. The time taken to meet face-to-face and discuss the research study at length during the planning stages was beneficial in establishing relationships with Carbal and to ensure their staff were fully supportive. These meetings gave everyone multiple opportunities to discuss when, where, why, and how the research should be undertaken for their community and service. Minimal disruption to health service delivery and their staff role requirements was managed by these pre-planning and implementation stages. Furthermore, this study has set a foundation for future co-designed research opportunities be considered with partnership organisations.

Another strength of the study included providing capacity building skills and opportunities across partner organisations for increased participation in research. This has been highlighted by a few studies implemented in Indigenous community-controlled health services in the past (Eades et al., 2018; Ewen et al., 2019). Study champions and key staff contacts were identified in each participating service; study champions were also able to participate in the initial yarning sessions and showed continued involvement in the study phases. The opportunity of further upskilling in research through more involved participation in Phase 2 (the Delphi study) if time and work priorities permitted, was given to staff members.

Despite the high level of engagement with the Carbal teams, the timing of this study during the peak period of the COVID-19 pandemic created challenges. In Phase 1 of the study, communities were still affected by the COVID lockdown phases, with many community groups, programs and services not being reinstated yet. Some communities were also trying to manage the ongoing impacts of the lockdowns, coupled with staffing shortages, and the increase in the cost of living and food insecurity, along with general community business, and issues (Fredericks & Bradfield, 2021). In most services, getting community members involved in the initial yarning sessions was at times challenging, as reported through other research studies conducted in Indigenous community-controlled health services (Couzos et al., 2005; Kennedy et al., 2022). As mentioned, during the work with Carbal Medical Services, community participation was limited as it was at the during and just following the pandemic. Many community groups run by Carbal, such as Mums & Bubs groups were not being run or re-established at the time when we were visiting communities. However, as many staff participants also identified as Aboriginal and or Torres Strait Islander community members, we envisaged that having a community lens and representation was somewhat counteracted. Carbal staff shared their personal as well as professional experiences, with health worker participants in particular sharing their personal stories with a frankness that we were privileged to hear. Furthermore, staff offered their professional opinions with great insight aided by their community membership. A further limitation identified was the reduced number of males involved in discussions, as highlighted in Table 1 (see page 26). We identified the higher age bracket of participants, with less of the younger age groups represented.

Finally, a noted limitation of this report is that while the team aimed to develop a broad understanding of the Aboriginal and Torres Strait Islander communities of the Darling Downs, it was only possible to undertake this work with Carbal Medical Service in Warwick and Toowoomba.

4.2 Future directions and recommendations

As there were several strong and overlapping themes, we recommend that your teams and executives reflect on these and consider opportunities to collaborate across your region for future programs, services, and research. With so much of the health environment driven by the funding that can be obtained to implement new services and approaches. As highlighted in Section 2.6 we have continued this work at new sites during 2023 and 2024. This includes Rockhampton, Townsville, Palm Island and Woorabinda where the research team is actively engaging with men's groups to undertake focus groups for Phase 1 to ensure that we get increased representation of men. Further we are engaging with young women's and men's groups to ensure we have greater numbers of young community representatives. This work has been led by a male facilitator to ensure cultural appropriateness of processes and discussions for men's groups.

If your service would like to see greater representation of i) male-specific focus groups and ii) younger persons group included, then we can collaborate into the future to conduct as appropriate and relevant. Where possible and going forward at other sites, we have liaised with services to target young mother's and young father's groups, play groups and community centres, to broaden the scope of the participants in terms of age and gender. The research team is continuing to liaise with maternal and infant health, and family wellbeing workers in other participating services to attend Mums and Bubs sessions, or playgroups, to facilitate and increase the chances of community members taking part in the research.

5. Conclusion

Closing the gap to end Indigenous health inequalities continues to be paramount for health professionals in Australia in 2024, as it has been since the start of the Closing the Gap social justice initiative in 2007 (Australian Indigenous Health Infonet, 2022). This study aimed to contribute to prioritising community ownership of research through the process of identifying health research priorities with, by and for communities using Participatory Action Research principles. This report will assist health care services, (ACCHO's, government health departments and non-government organisations) in the regions of Queensland who participated in this project in planning future programs, services, and research. The study findings have identified health research needs as prioritised by Aboriginal and Torres Strait Islanders from Carbal Medical Service in the Darling Downs more clearly for young families across key Queensland Indigenous communities. These self-determined priorities focus on making a difference at a time when it counts the most – the first 1000 days of life.

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7. Appendices

Appendix 1. Study site visits diagram

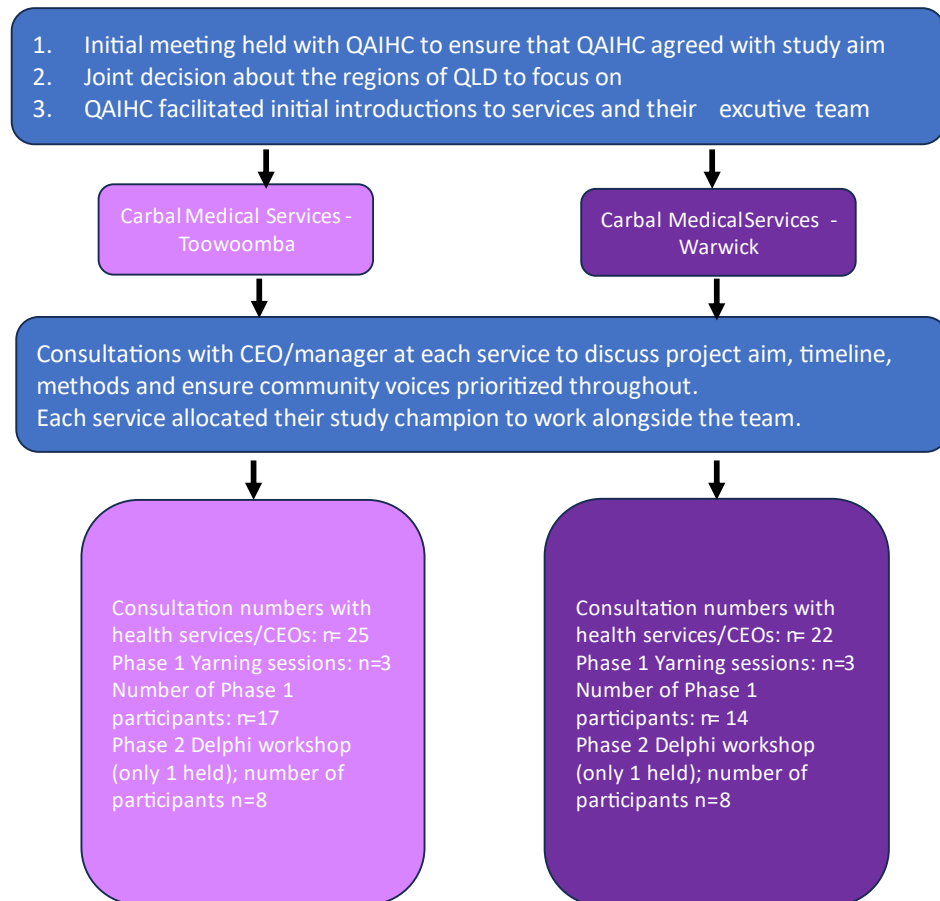


Figure 5 Process of engagement and study visits for Darling Downs

Appendix 2. Coding framework

This appendix provides the full coding frameworks used in the analysis of this study. We felt it was important to share all the areas that were identified by participants in these focus groups and how the communities represented the information to the research team.

Instructions to interpret these appropriately:

The circle of the darkest colour with text CAPITALISED is the main THEME identified in focus groups.

The first level of circles coming from the theme are called SUB-THEMES, these will have a lighter coloured circle. These were mentioned as part of discussions around the theme.

The circles attached to the sub-themes are lighter again in colour and are the SUB-SUB-THEMES. These were still mentioned as part of discussions that related to a particular them but as we get further away from the main THEME it indicates that an area was mentioned less often by participants in focus groups.

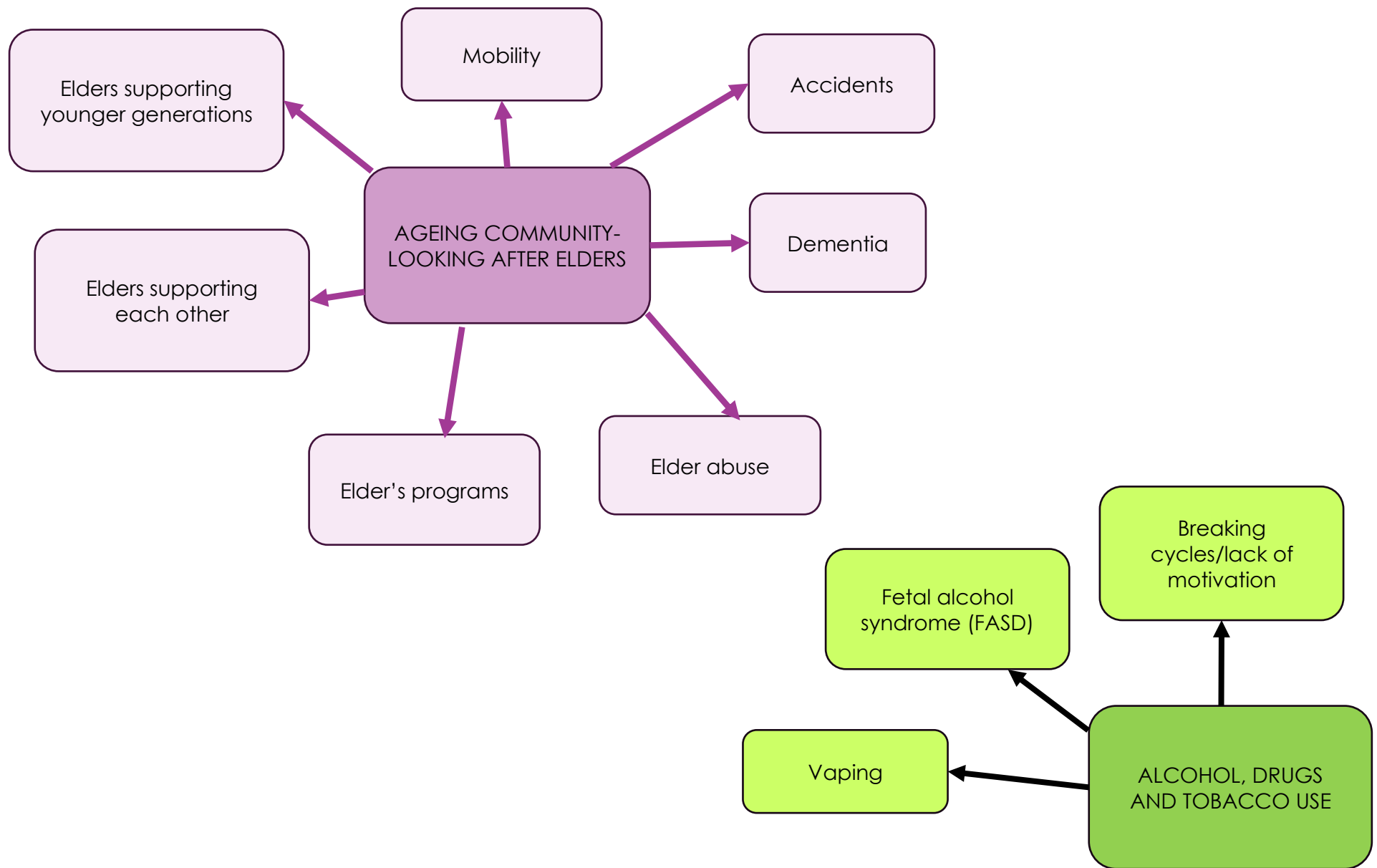


Figure 6 a) Coding framework related to the themes AGEING COMMUNITY – LOOKING AFTER ELDERS and b) ALCOHOL, DRUGS AND TOBACCO USE

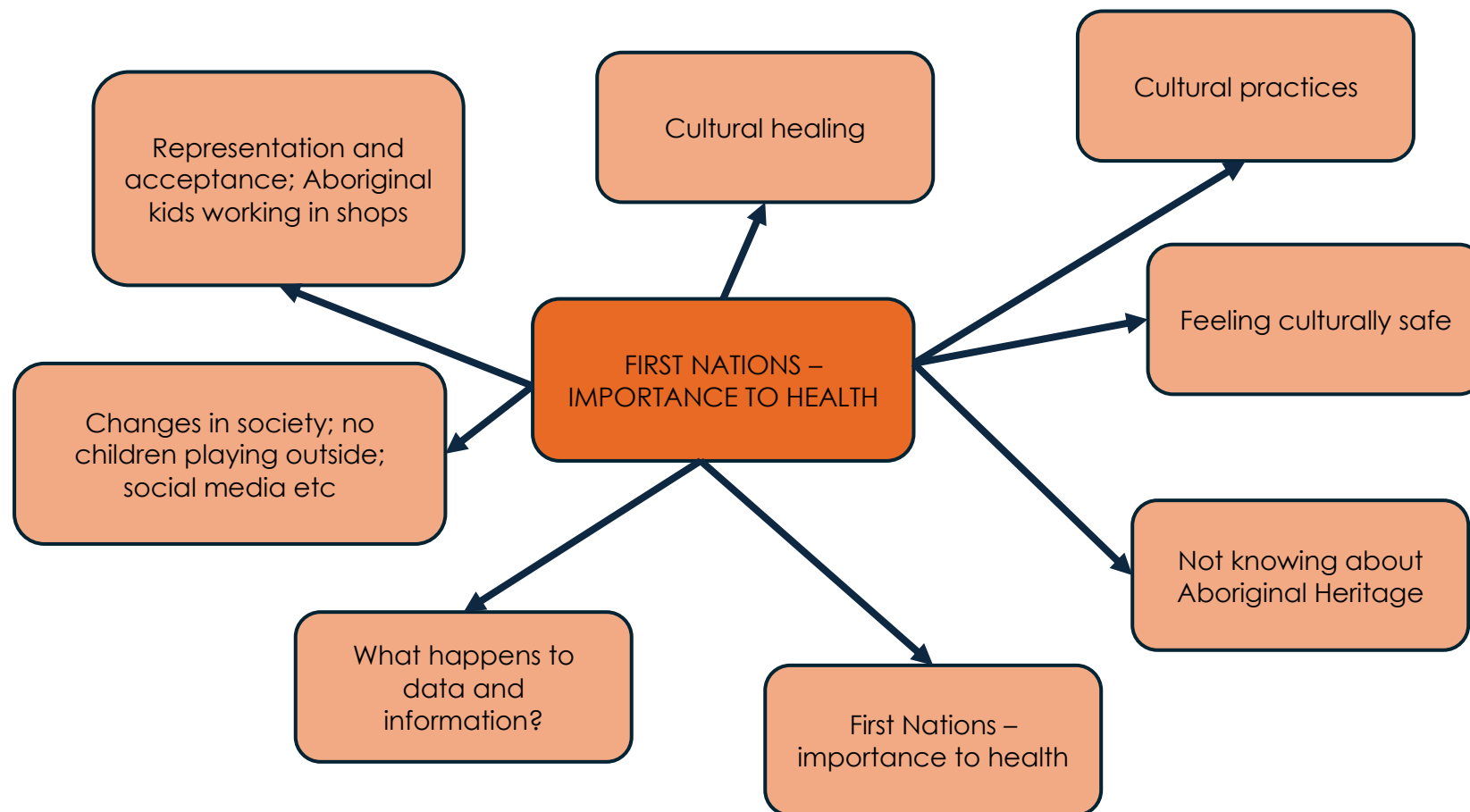


Figure 7 Coding framework related to the theme FIRST NATIONS – IMPORTANCE TO HEALTH

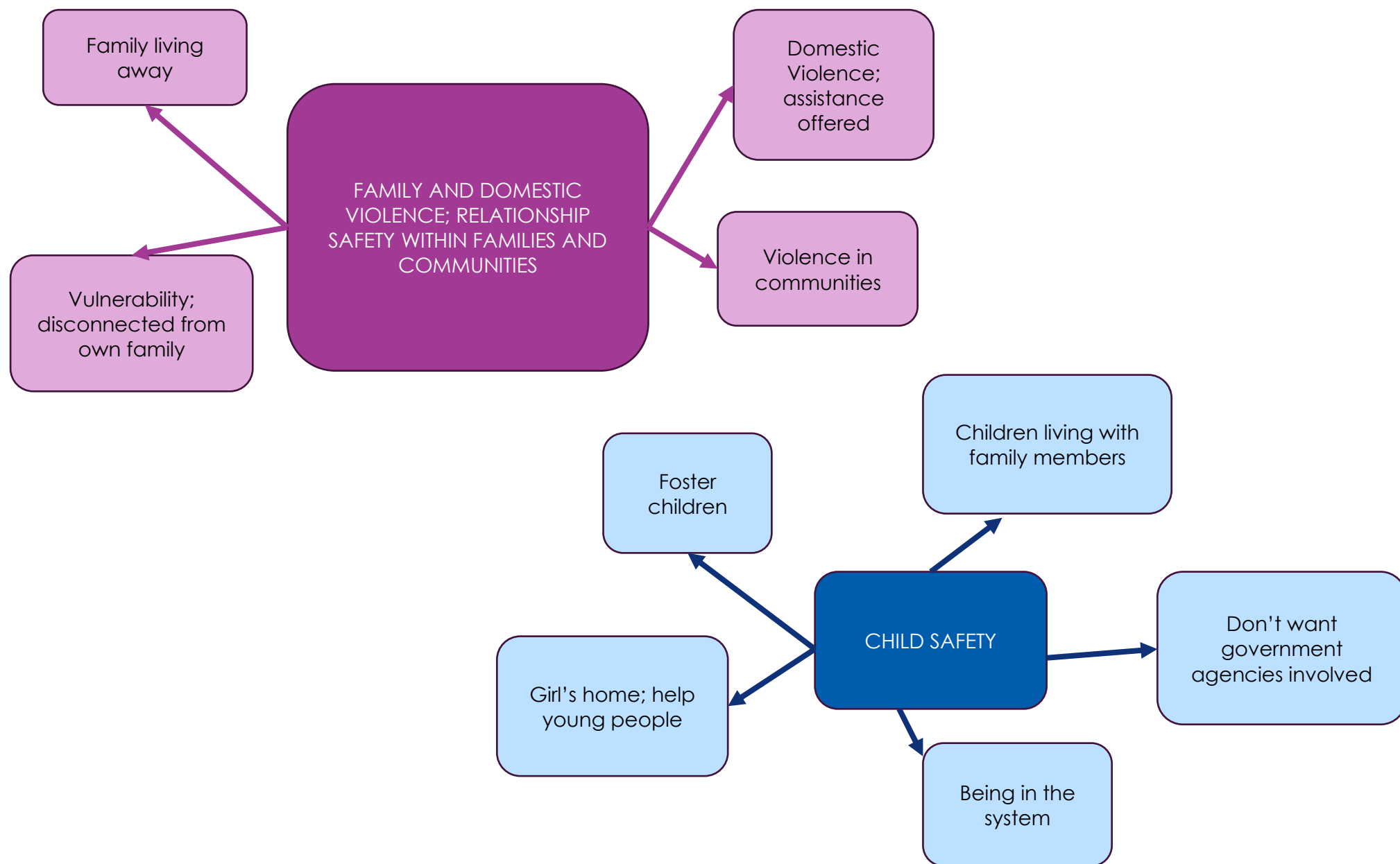


Figure 8 Coding framework related to theme a) FAMILY AND DOMESTIC VIOLENCE; SAFETY WITHIN FAMILIES AND COMMUNITIES and b) CHILD SAFETY

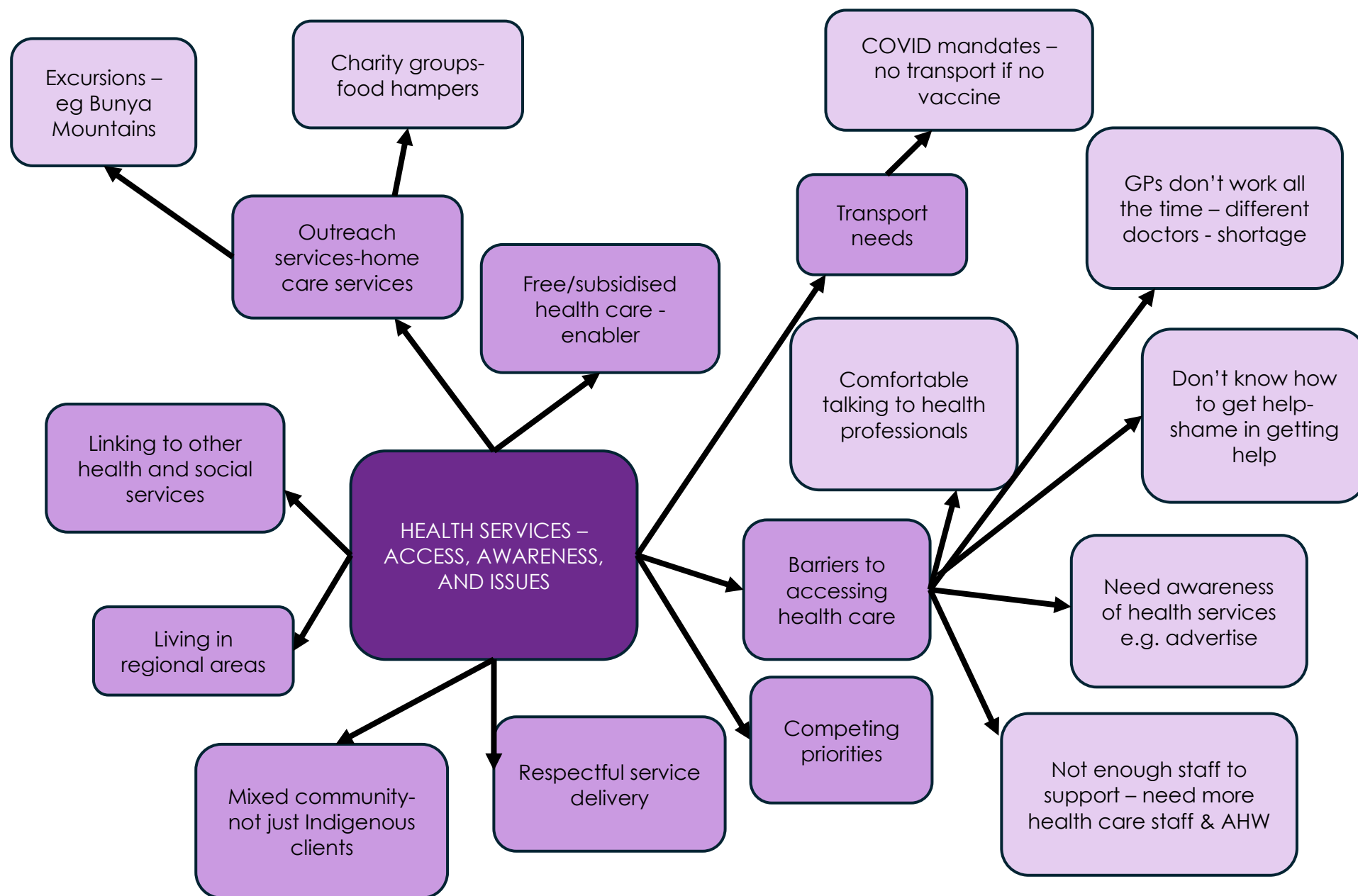


Figure 9 Coding framework related to theme HEALTH SERVICES – ACCESS, AWARENESS AND ISSUES

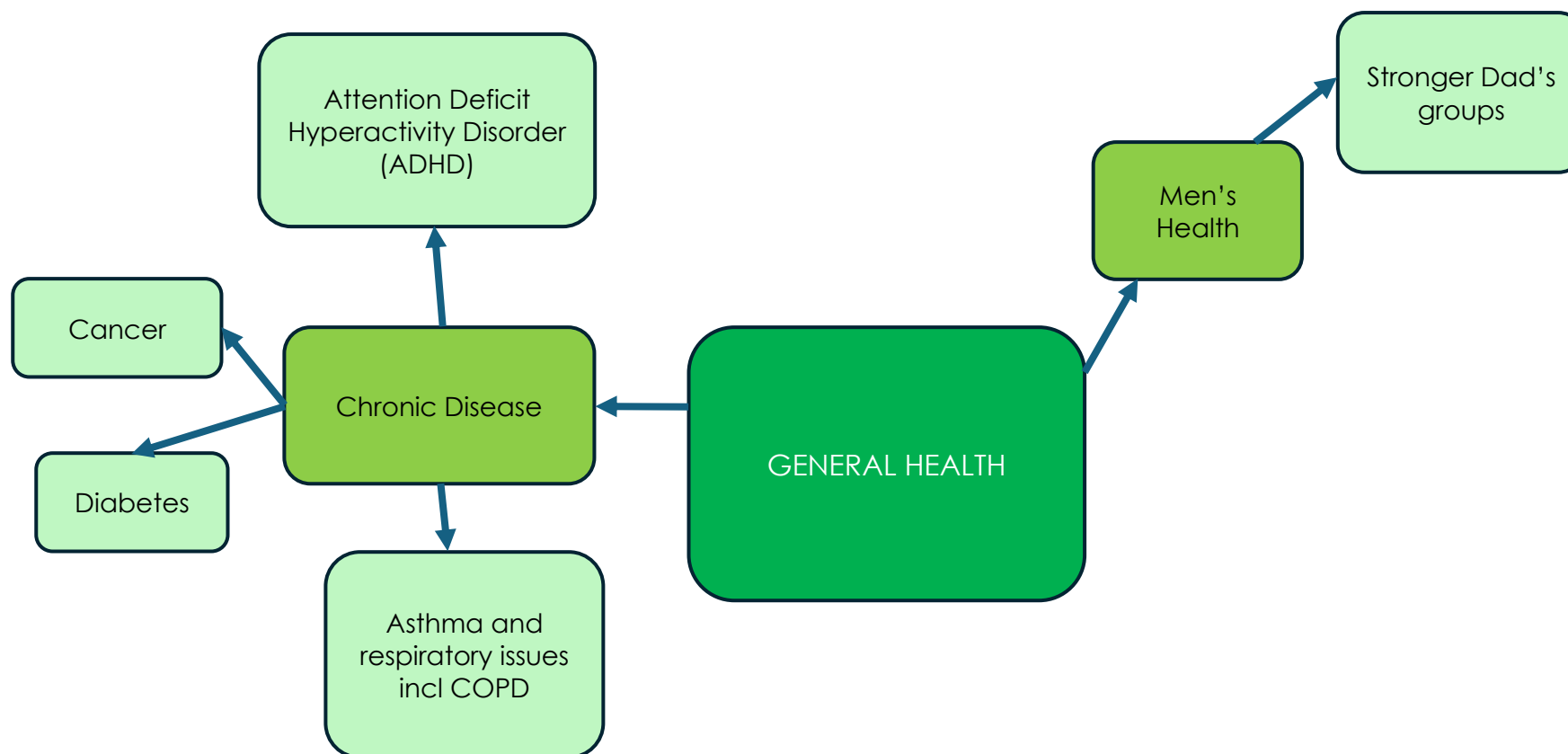


Figure 10 Coding framework related to theme GENERAL HEALTH

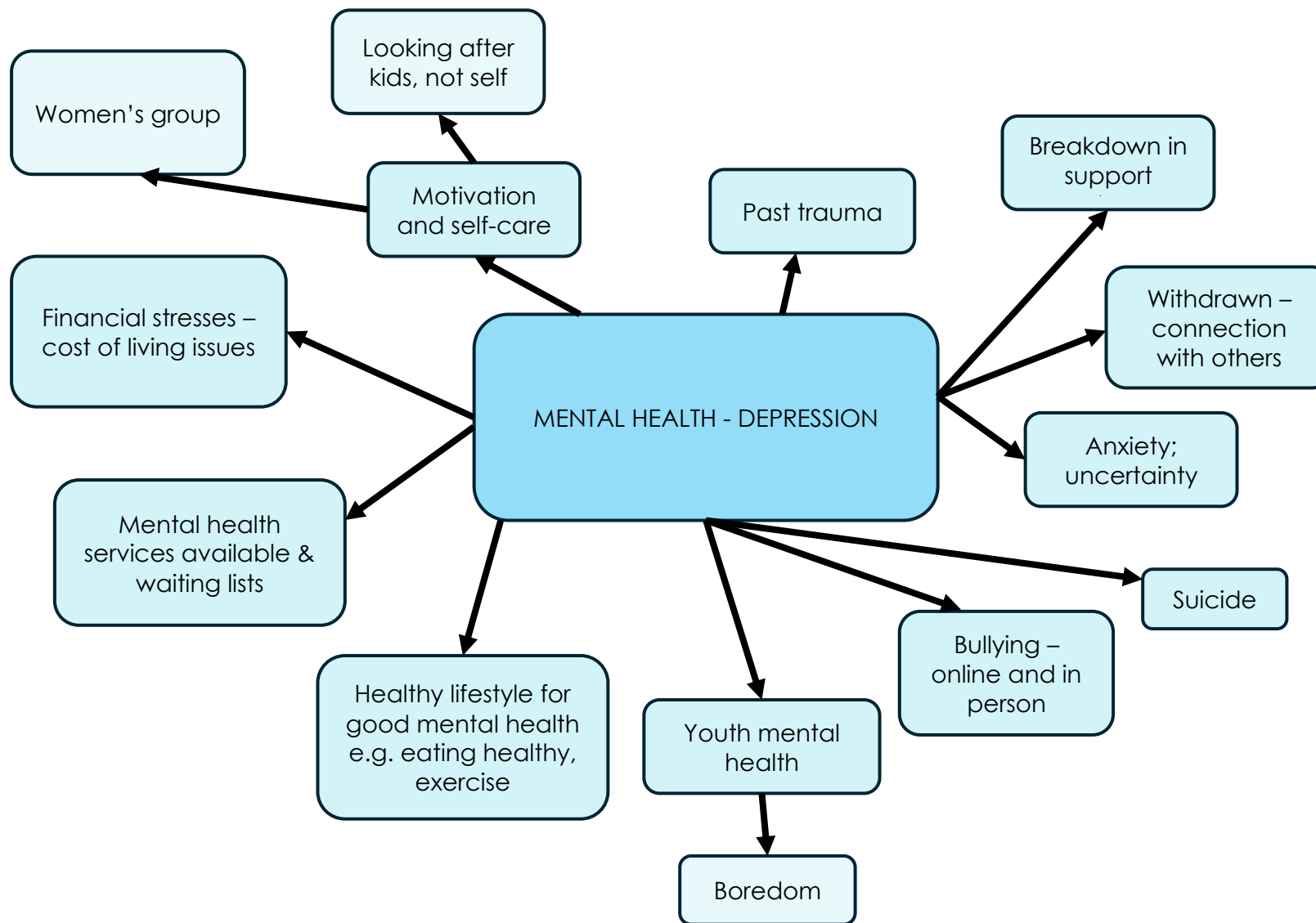


Figure 11 Coding framework related to theme MENTAL HEALTH - DEPRESSION

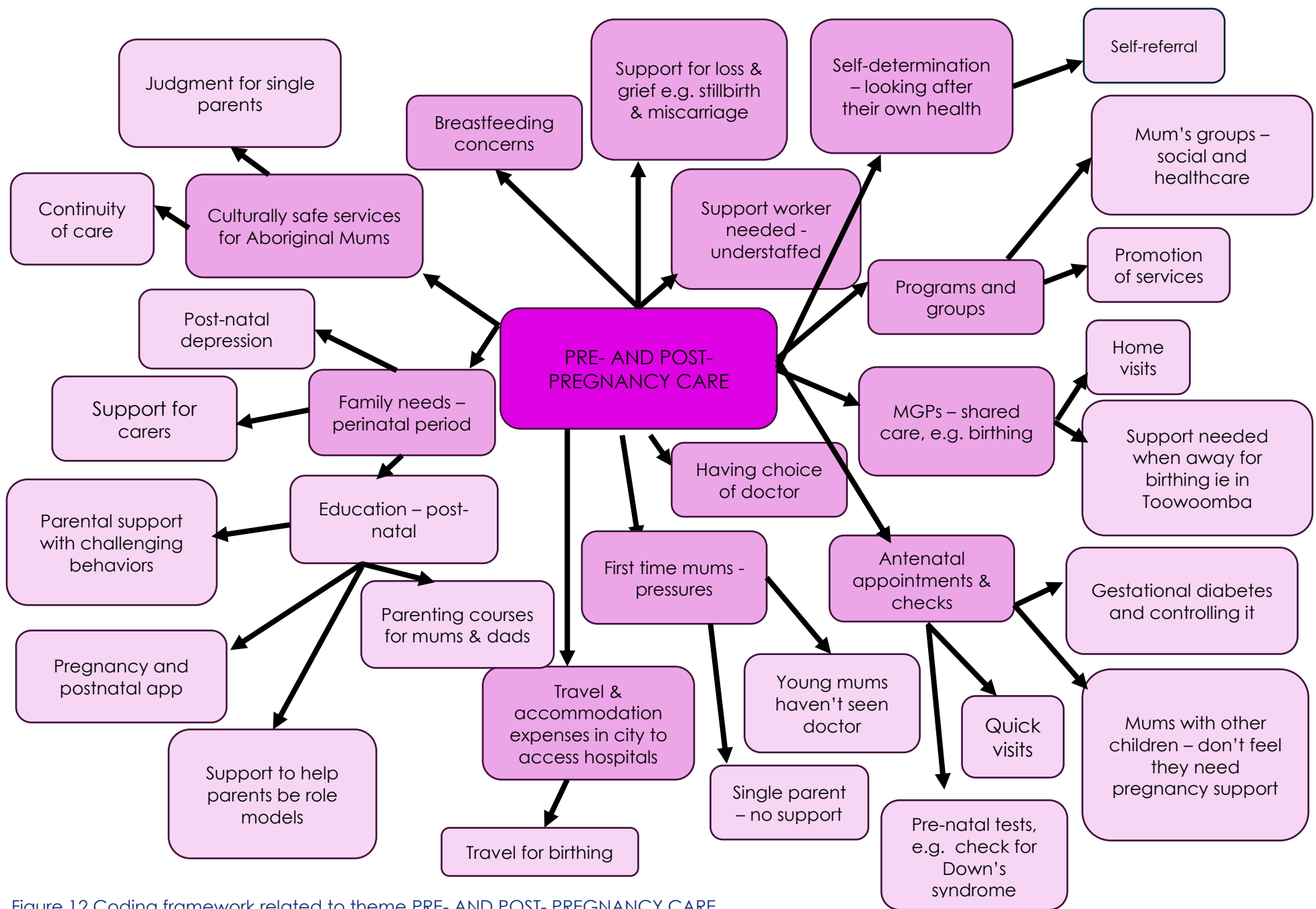


Figure 12 Coding framework related to theme PRE- AND POST- PREGNANCY CARE

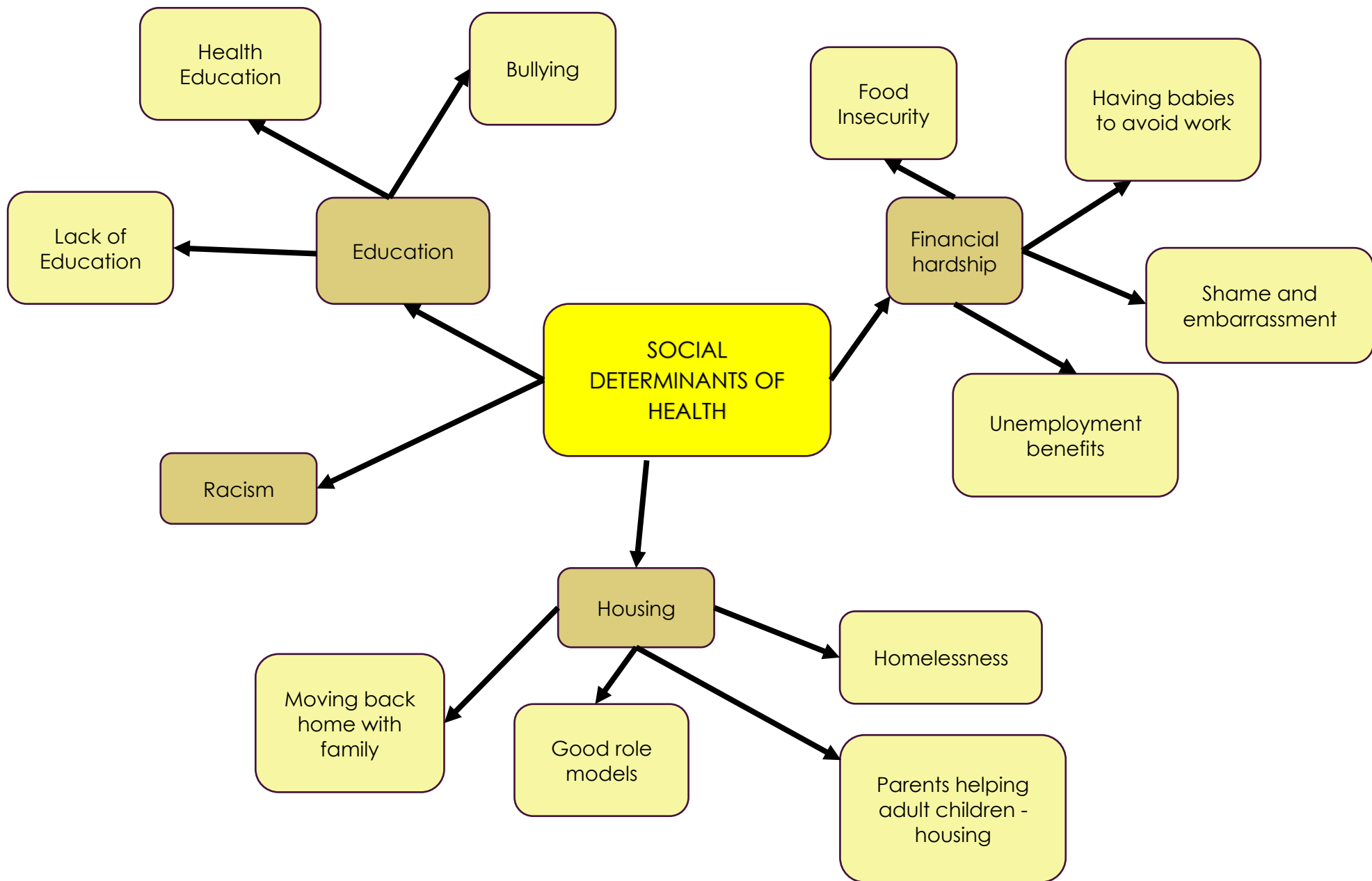


Figure 13 Coding framework related to theme SOCIAL DETERMINANTS OF HEALTH

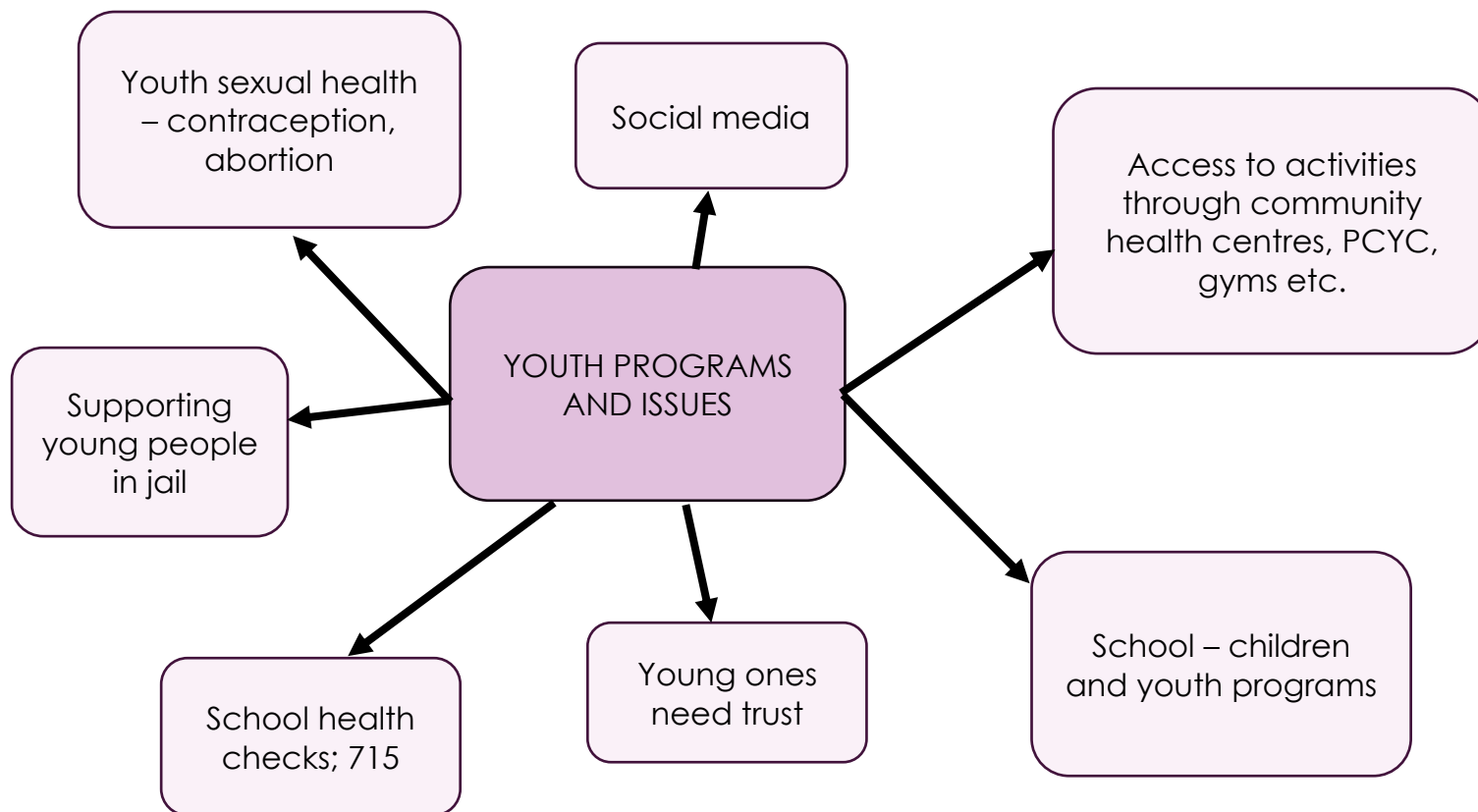


Figure 14 Coding framework related to theme YOUTH PROGRAMS AND ISSUES