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Enablers and barriers to primary health care for Aboriginal and Torres Strait Islander adolescents: Study protocol for participatory mixed-methods research that builds on WHO global standards.

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Enablers and barriers to primary health care for Aboriginal and Torres Strait Islander adolescents: Study protocol for participatory mixed-methods research that builds on WHO global standards.

Tirritpa Ritchie* (1), Tara Purcell* (2, 3), Seth Westhead (1), Mark Wenitong (4, 5), Yvonne Cadet-James (4, 5), Alex Brown (1,6), Renae Kirkham (7), Johanna Neville (4), Clara Saleh (4), Ngiare Brown (8), Elissa Kennedy (2), Julie Hennegan (2), Odette Pearson** (1,6), Peter Azzopardi**(1,2,6,9).

¹Wardliparingga Aboriginal Health Equity Research Unit, South Australian Health and Medical Research Institute, Adelaide, Australia

² Global Adolescent Health Group, Maternal Child and Adolescent Health Program, Burnet Institute, Melbourne, Australia

- ³ Doherty Institute, University of Melbourne, Melbourne, Australia
- ⁴ Apunipima Cape York Health Council, Queensland, Australia
- ⁵ James Cook University, Townsville, Queensland, Australia
- ⁶ Faculty of Health and Medical Sciences, University of Adelaide, Adelaide
- ⁷ Menzies School of Health Research, Darwin, Australia
- ⁸Ngaoara Aboriginal child and adolescent wellbeing, Wollongong, Australia
- ⁹Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne, Melbourne

* Joint first authors

** Joint senior authors

Corresponding author: A/Prof Peter Azzopardi, Wardliparingga Aboriginal Health Equity Research Unit, South Australian Health and Medical Research Institute, Adelaide, Australia. Peter.azzopardi@sahmri.com. +61 418 575 936

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ABSRACT

Introduction: One third of Australia's Aboriginal and Torres Strait Islander population are adolescents, recent data highlighting their health needs are substantial and poorly met by existing services. To design effective models of primary health care we need to understand the enablers and barriers to care for Aboriginal and Torres Strait Islander adolescents, the focus of this study.

Methods and analysis: This protocol was co-designed with Apunipima Cape York Health Council that supports the delivery of primary health care for 11 communities in Far North Queensland. We framed our study around the WHO global standards for high-quality health services for adolescents, adding an additional standard around culturally safe care. The study is participatory and mixed methods in design and builds on the recommended WHO assessment tools. Formative qualitative research with young people and their communities (exploring concepts in the WHO recommended quantitative surveys) seeks to understand *demand* side enablers and barriers to care, as well as preferences for an enhanced response. *Supply* side enablers and barriers will be explored through: a retrospective audit of clinic data (to identify current reasons for access and what can be strengthened); an objective assessment of the adolescent friendliness of clinical spaces; anonymous feedback from adolescent clients around quality of care received and what can be improved; and surveys and qualitative interviews with health providers to understand their perspectives and needs to provide enhanced care.

Ethics and dissemination: This co-designed project has been approved by Apunipima Cape York Health Council and Far North Queensland Human Research Ethics Committee. The findings from this project will inform a co-designed accessible and responsive model of primary health care for Aboriginal and Torres Strait Islander adolescents.

Strengths and limitations of this study

- Co-designed in partnership with the Apunipima Cape York Health Council- the peak Aboriginal community-controlled health body for Far North Queensland- to ensure the project is relevant, feasible, builds capacity, conducted in a culturally safe way and is translatable to action;
- Adaptation of WHO guidelines and tools (global standards) for use with Indigenous adolescents in high income settings, including development of items relating to culturally safe care;
- Incorporates an assessment of both *demand* and *supply* side enablers and barriers to adolescent friendly primary health care, both essential considerations in strengthening models of care;
- Will contribute to an otherwise sparse literature around responsive primary health care for Aboriginal and Torres Strait Islander adolescents;
- Whilst the deep focus on Aboriginal and Torres Strait Islander communities within Far North Queensland is a strength in terms of driving local response, generalisability of findings to other settings may be limited. The process detailed here however is broadly generalisable.



INTRODUCTION

One third of the Australian Aboriginal and Torres Strait Islander population are aged 10-24 years, these adolescents central to assuring the prosperity and cultural continuity of Australia's First People.¹ However, as highlighted by two recent publications, Aboriginal and Torres Strait Islander adolescents have substantial health needs that are unmet by current services.²³ In summary, Aboriginal and Torres Strait Islander adolescents experience a heavy burden of mental disorders, suicide and self-harm, sexually transmitted infection, and injury (health conditions typical of adolescence); an excess burden of pneumonia and skin infections (more typical of childhood); an early onset of type-2 diabetes (more typical of adulthood); and a high burden of rheumatic heart disease and bronchiectasis (otherwise rare in Australia).² This profile is underpinned by distinct risk exposures and determinants of health, including racism, discrimination and intergenerational trauma. As a result, adolescence is where inequities in indicators of health and wellbeing (such as mortality) widen between Aboriginal and Torres Strait Islander and non-Indigenous Australians.² Adolescence also presents a substantial opportunity for health gain; more than 80% of mortality amongst Aboriginal and Torres Strait Islander adolescents is potentially avoidable within the current health system; these avoidable deaths are amenable to preventative interventions (rather than treatment), highlighting the need to strengthen primary health care.²

Australia's health system largely provides an enabling environment for accessible primary health care, particularly through the Medicare universal health coverage scheme that eliminates many of the financial barriers to access. This scheme includes adolescents, with Medicare being accessible independently from age 15 years and Australian law recognising the right of mature minors to provide their own consent for health care. There are also specific provisions to enable access to primary health care for Aboriginal and Torres Strait Islander people, including through the Medicare Benefits Scheme '715 item' that funds an annual well person's check to facilitate health screening and promotion. However, despite these provisions, coverage of health checks in 2016 was only 22% for Aboriginal and Torres Strait Islander 15-24 year olds, the lowest of any age group,⁴ and arguably at a stage of life where the opportunities for health screening are greatest. Our team is currently undertaking a systematic review (led by TP) to understand the enablers and barriers to primary health care for Indigenous and First Nations adolescents in Australia, New Zealand, USA and Canada. Data for Australia are limited, with evidence from other settings highlighting that Indigenous

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adolescents experience barriers common to all adolescents (including accessibility, concerns around consent and confidentiality),⁵ compounded by specific issues including those related to racism and cultural security.⁶⁷

Improving primary health care for adolescents is a recognized priority globally.⁸ Reasons for adolescents not accessing health care can be largely framed as those relating to: *demand* for services (factors at individual, household or community level that prevent access to services, including knowledge of services, sociocultural norms that limit access, or services not being seen as 'relevant' to need); and *supply* (factors inherent to the health system that prevent service uptake, including both physical resources and competencies/ skills to provide quality care). To help address these broad barriers, the World Health Organization has defined eight global standards that support adolescent's demand for primary health care services and the delivery of quality care (Table 1). Accompanying these standards are tools that can be used to understand supply and demand side barriers, essential to informing locally relevant responses and models of care. However, these tools have largely been developed for use in low- and middle-income settings, and to our knowledge, not yet adapted or used with Indigenous or First Nations adolescents in high income contexts.

In this protocol, we adapt the WHO global standards and tools to explore the enablers and barriers to primary health care for Aboriginal and Torres Strait Islander adolescents, from both the perspectives of demand and supply. This new knowledge will be used to co-design an improved model of care for Aboriginal and Torres Strait Islander adolescents.

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METHODS AND ANALYSIS

a. Community partnership and co-design of study objectives and research plan

This project was designed in partnership with Apunipima Cape York Health Council (Apunipima), the peak body for Aboriginal community-controlled primary health care in Australia's Far North Queensland. Apunipima supports each primary health care service in 11 remote Indigenous communities in Cape York and is also the primary provider of additional support programs. Initial invitation for collaboration came in 2018 when a publication documenting health needs of Indigenous adolescents in Australia (authored by PA, NB and AB)² was shared with an established network of Aboriginal Community Controlled Health Organisations (MW represented Apunipima on that network). In 2019 TR, TP and PA were invited to Apunipima to meet with clinical staff, discuss findings from previous research, and consider a project together to strengthen primary health care for Indigenous adolescents in the Cape York. As a result, the following objectives for a research project were defined:

Objective 1: To understand the strengths, needs and preferences of Aboriginal and Torres Strait Islander young people with respect to primary health care (*Demand side*). Specifically,

- a) The health needs and priorities for Aboriginal and Torres Strait Islander adolescents;
- b) What Aboriginal and Torres Strait Islander adolescents identify as barriers and enablers to primary health care; and
- c) What Aboriginal and Torres Strait Islander adolescents identify as key things that could be done to make primary health care more accessible and responsive to their health and wellbeing needs.

Objective 2: To understand the strengths and needs of health services and providers to deliver responsive primary health care for Aboriginal and Torres Strait Islander adolescents (Supply side). Specifically:

- a) How often, and why, do Aboriginal and Torres Strait Islander adolescents currently access primary health care (identifying opportunities to strengthen existing care);
- b) How does the physical environment of existing clinics align with global standards for adolescent responsive health care; and

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c) What do health providers currently provide for young people, what is their current knowledge of adolescent health, and what do they identify as training needs specific to adolescent health.

These objectives were defined to respond to local issues and needs, and also to align with global standards for quality health care (Table 1). All eight WHO standards were considered as relevant to the provision of high quality and responsive care for Aboriginal and Torres Strait Islander adolescents in Cape York, with an additional standard (referred here as standard 9) around cultural safety also considered in developing the research tools.⁹ All elements of the project design (detailed below) were co-designed by the research team and Apunipima.

b. Target populations and research advisory group

Populations: The focus of this research is Aboriginal and Torres Strait Islander adolescents, with a specific focus on those aged 16 - 18 years. The age of 16 years marks an important transition in terms of health needs, capacity to provide consent, and capacity to explore complex issues in research.¹⁰¹¹ By age 18 years, many young people also complete secondary education and transition out of communities.² The dynamic nature of health needs across adolescence also influenced the decision for a more narrow focus on this age-band for the majority of research activities, as did the advice from Apunipima that for this particular age group services need to be strengthened. In addition to young people, we will also engage parents and carers, Aboriginal and Torres Strait Islander Elders, community members, and health service providers given they all contribute to the health and wellbeing of young people and the services they can access. With respect to communities, research efforts will be focussed on three of the 11 communities Apunipima serves so as to ensure feasibility. The community partners are to be purposively selected by Apunipima taking into consideration: competing demands on the community and/or service; community priorities and readiness to focus on adolescent health; and ability of the research team to travel to the community (relating to seasonal access). Findings from these 3 communities will be used to inform a scalable model across all 11 communities and beyond.

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<u>Advisory group</u>: An advisory group will be established to ensure research is aligned with needs, meaningful data is generated, interpretation is contextualised, outcomes are translatable, and inclusive of existing and building local capacity. The advisory group of

approximately 10 -15 members will include core members of Apunipima as well as members of the communities where the research will occur. We will aim for involvement of young people (aged 16 - 24 years and diverse in gender, engagement with services, and health needs), service providers, Elders and community members. Consideration will be given as to whether or not this format is conducive of meaningful engagement of the younger members and adjusted accordingly. This advisory group will inform implementation of research activities, interpretation of findings, framing of recommendations and informing important next steps.

c. Data collection instruments

 Data collection instruments for this study include qualitative focus groups and interviews (particularly to explore the demand side) and quantitative questionnaires, facility checklists and an audit of clinic data to understand the supply side, summarised in Table 2.

To inform the development of these instruments we first mapped all 8 standards and their specific criteria as defined by WHO.¹² We added a ninth standard on cultural safety, defining specific criteria by reviewing: The National Safety and Quality Health Service Standards User Guide for Aboriginal and Torres Strait Islander Health; The Cultural Respect Framework 2016-2026 for Aboriginal and Torres Strait Islander health; and The Queensland Health Aboriginal and Torres Strait Islander Cultural Capability Framework 2010-2033. Criteria defined for this standard included: Organisational commitment to cultural safety and rights; Indigenous governance and leadership, including polices that enable this; meaningful participation of community; ensuring and supporting Indigenous workforce; ensuring a culturally welcoming environment; availability of cultural resources; and communication and service provision that is culturally sensitive.

Against the 9 standards and criteria we then mapped the specific items of the surveys and instruments defined by WHO.¹²⁻¹⁴ Two investigators (TR and PA) then independently reviewed each item, removing those not considered relevant to Aboriginal and Torres Strait Islander adolescents in Australia (e.g. items relating to the control of Malaria), using a comprehensive synthesis of population data as a reference.² Where there were multiple items measuring the same construct, we reviewed and selected the most relevant item and instrument to measure the construct of interest with the aim of streamlining the instruments where possible and minimising respondent burden. This mapping was then used to draft instruments for this study. One key modification was that we developed qualitative instruments (focus group discussions and in-depth interviews) reflecting the key concepts in

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the WHO surveys so as to gather formative data around needs and preferences of adolescents, community stakeholders and providers. This was because the WHO instruments have been developed for adolescents in low- and middle-income settings and may not be sensitive to the specific needs of Indigenous adolescents. The data collection instruments were then reviewed by the investigator group and core members of the advisory group from Apunipima; prior to implementation in community these question guides will also be reviewed by advisory group members from community and adapted as necessary. These instruments developed are summarised in Table 3 and shown in the Appendix.

Focus group discussions (FGDs) are to be had with adolescents to understand their health needs and preferences, barriers and enablers to accessing primary health care, and opportunities and preferences to strengthen adolescent friendly health care (Objective 1 a-c). In each community, two FGDs (one for males and one for females aged 16-18 years) including 4 - 8 participants will be undertaken. FGDs will be guided by a semi-structured interview guide, with participants encouraged to talk about broader issues and not just their own personal lived experience. Each FGD will commence with participants describing health of Indigenous young people- in terms of strengths and challenges. To facilitate the discussion, the participatory visual method of body mapping will be used. Participants will be invited to draw around another participant to create a human outline. Participants will then be invited to draw pictures, symbols or words to reflect their views around health and wellbeing strengths and challenges for young people in their community. This method has successfully been used about health with Indigenous young people.¹⁵ Barriers and enablers to health care access will then be explored. From the barriers described, the group will be invited to nominate (up to) 10 of the most important challenges for young people accessing primary health care. A modified priority ranking activity will engage participants to identify the barriers that they feel are the most important using sticky dots. The discussion will then move onto participants designing an ideal health service. To facilitate the discussion, the participatory visual method of community mapping will be used.¹⁶ Participants will be invited to draw pictures, symbols or words to reflect their opinions on what an ideal youth friendly service looks like. The group will be encouraged to consider what the building looks like, describe features inside the health service and enablers in the community that can support accessible primary health care for young people. FGDs will be audio recorded and researchers will take handwritten notes during the sessions. Participants will be encouraged

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not to use names or identifying information, however if this occurs, this information will be removed at the analysis stage.

<u>In depth interviews with adolescents living with chronic illness (IDI_adol)</u> will be used to augment the FGDs. We anticipate 3-6 IDIs in each of the 3 communities. We will focus on young people living with rheumatic heart disease and type 2 diabetes given these conditions are common in the partner communities and these young people are likely high utilisers of primary health care. These interviews will explore similar concepts to the FGDs but focus directly on the lived experiences of participants.

Key informant interviews with parents, Aboriginal and Torres Strait Islander Elders and key community stakeholders (KIIs) will augment the perceptions of young people. Their views are especially important as these stakeholders can support adolescents seeking primary health care, but can also be barriers or gatekeepers to adolescents accessing the care they need. We anticipate the need for 3-6 in depth interviews in each of the 3 communities. These KIIs follow a similar form to the IDIs but will enable an exploration of broader social and structural enablers and barriers to care.

<u>Review of de-identified patient management data over a 24-month period</u> will determine the number of adolescents accessing primary health services and the key primary presenting issues; this data is key to understanding what can be strengthened. This data will be obtained from the electronic patient management software (Communicare, Telstra Health) and include age (in single year for 10-24 year olds), gender, clinic accessed, principle presenting reason, and whether this presentation was part of a well person's check (715 MBS item billed). To place this data in context, the total number of presentations (by age in 5 year age bands and gender across clinics) will also be extracted. This analysis will be across the 11 communities that Apunipima serves.

<u>Objective facility checklist</u> will be used to assess the adolescent friendliness of the clinic with respect to physical environment, resources, policies and procedures. This assessment will be conducted in the 3 communities and largely use the tool as defined by WHO, modified to include assessment of cultural safety.

<u>Anonymous client survey following primary health service</u> will enable a prospective assessment of the quality of care provided, and opportunities to improve that care. The original WHO tool is a formal interviewer-assisted survey of considerable length. We adapted this to be brief (2 pages) with visual rating scales and opportunities to provide

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written feedback. We also adapted this tool to be self-completed for feasibility, but also to minimise response bias. Following a clinical consultation with a young person aged 16-24 years, the health care provider will invite the young person to anonymously complete the feedback and deposit it in a locked box in the clinic; posters in the waiting area will also advertise this opportunity to provide feedback. This approach enables only those of eligible age to provide feedback. Administrative data on attendance provides a denominator to calculate completion rate.

<u>Health provider survey</u> will explore current knowledge and practices with respect to adolescent primary care and identify areas of need with respect to support and training. All primary health care providers across all 11 communities will be invited to complete this survey.

<u>In depth interviews with health providers (IDI_hw)</u> will further explore views and perspectives about young people accessing health services, barriers to health care, and how health services can be improved, with a focus on supply side. Key informant interviews will be audio recorded and notes taken.

d. Design adaptations due to the COVID pandemic

The COVID pandemic has resulted in restricted of domestic travel in Australia, with travel to remote Indigenous communities largely closed. Whilst we ideally would have sequenced the research to begin with qualitative work in communities to understand demand, we have adapted our design to commence with first exploring the supply side enablers and barriers. On the advice of Apunipima we will first deploy (November 2020) the health provider questionnaire for all health staff. We have adapted the health provider survey to be completed online and will also explore the potential of conducting the in-depth interviews with health providers online. We will also review routinely collected administrative data across all 11 communities; on reflection this sequencing may help identify communities to invite to partner in the research which we plan for early 2021 once travel is possible. Changes have also occurred with regards to the advisory group. Whilst the advisory group will eventually include representation from partner communities, in the first instance the advisory group (DIYDG, Deadly Indigenous Youth Doing Good) external to Apunipima.

e. Sample size

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All primary health care providers (Aboriginal and Torres Strait Islander health workers, youth workers, nurses, doctors, allied staff) working across the 11 communities that Apunipima serves will be invited to complete the health provider survey. The majority of other components of the study are qualitative, and we have estimated the number of participants taking into consideration diversity of the sample and feasibility. During qualitative data collection, the concept of 'saturation' will be used to assess if additional data needs to be collected to satisfy the aims of the study. If so, more participants will be recruited.

f. Participant recruitment

Recruitment of health providers to the research will be facilitated by the Health Action Team at Apunipima; identity of staff will not be collected. Recruitment of young people and their community in the three communities will be co-designed with the advisory group once the communities have been selected and agreed to participate. Potential approaches include advertisement and invitation to participate through posters at the health clinic and local media (including social media), augmented by purposive sampling of young people with diverse experiences and needs as identified by youth and community leaders. The locations for the qualitative data collection will be discussed with the advisory group and will be at a mutually agreed safe place, which may not be the health service.

g. Informed consent

Parents, Elders, community members, and health care providers over the age of 18 years will provide their own informed consent to participate (either in person or electronically). For young people aged 16-18 years, written *consent* for participation in the qualitative research will be obtained from parents or guardians, with written *assent* also obtained from all young participants. We will inform all participants that they can withdraw at any time of data collection.

For the anonymous client feedback, the health care provider referring the young person to complete the feedback will provide an information sheet, with consent for participation implied by the completion of anonymous feedback. This approach has been adopted so as not to burden health providers with the need to collect consent and to prevent bias. Further, young people aged 16 - 18 years have the capacity to understand the benefits and risks of participating in this low risk activity. ^{10 11}

h. Data management and security

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All paper records, including consent forms, will be stored in a locked cabinet in a secure room at Wardliparingga Aboriginal Health Equity theme at SAHMRI (Wardliparingga). Raw electronic data (including audio recordings) will be stored on password protected devices and computers at Wardliparingga. Paper records and electronic data will be securely stored for at least 7 years after collection. At the end of this period all hard copies of documents will be shredded, and electronic copies deleted. Data will only be accessible to authorised members of the research team. De-identified and cleaned data sets will be provided to Apunipima and shared amongst investigators using a secure, password protected cloud.

The only raw data to be exchanged electronically will be data collected from health providers. The questionnaire will be collected using RedCap, and other than clinical role and Indigenous status, no other identifying information will be captured. ReDCap data is encrypted in transit via transport-layer security (industry best standard), with the dataset securely stored as outlined above. The in-depth interviews with health care providers will be conducted over Zoom videoconferencing using a password protected link, with the discussion recorded using the inbuilt recording feature and securely stored as above.

i. Data Analysis plan

The health provider survey, facility checklist and client feedback survey will be quantitatively analysed using World Health Organisation analysis guidelines.¹⁷

Audio-recordings of interviews will be transcribed verbatim. Transcripts will be analysed by two researchers thematically using an inductive 'data-driven' process, with codes identified from the empirical material.¹⁸ Data extracts will be selected to illustrate key constructs. No personal or other identifying data (including details that could identify participating organisations or individuals) will be included in summaries or other research outputs.

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Aggregated de-identified patient management data will be analysed using descriptive quantitative methods (frequencies) to report the rates of the different clinical presentations by age and gender. Population estimates from the Australian Bureau of Statistics (by age and sex) for the communities that Apunipima services will enable estimation of age- and sex-specific access rates per population denominator.

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j. Patient and public involvement

As detailed above, this project was co-designed in partnership with Apunipima Cape York Health Council. This involved co-design of the objectives, research tools and dissemination strategy. This co-design was to ensure that the project is aligned with needs and translatable to action- it also represents best practice in Aboriginal health research.¹⁹ Further, once the focal communities for this research are selected, we will establish an advisory group that will include membership from those communities to ensure local knowledge, ownership and translation. This advisory group will be involved in the implementation of the research, however not directly involved in the qualitative inquiry to ensure confidentiality is maintained. The advisory group will also support dissemination (detailed below). They will ſġed in a... be formally acknowledged in all publications and materials resulting from this work.

ETHICS AND DISSEMINATION

a. Ethics review

The research protocol was first fully reviewed and endorsed by Apunipima's Research Review Panel. The project subsequently received ethics approval from Far North Queensland Human Research Ethics Committee [HREC/2019/QCH/57297, with amendment for online health provider survey AM/2020/QCH/57297].

b. Benefits and risks

There are no direct benefits for individuals participating in the study. However, the information provided during the project may help strengthen health care services to meet the health needs of adolescents. Possible risks include discomfort from talking about particular issues and disclosure of sensitive health related information that requires clinical review. This project has been designed to ensure that the risk of participants experiencing distress is low. Specifically, we will not be probing for distressing issues. To minimise risk we will exclude participants who are acutely unwell. We will also be obtaining consent from parents and assent from participants themselves. A Distress Protocol has been developed to guide the research team response to support any participants who experience distress or the need to report risk of harm (Figure 1). We will also provide all participants with a follow-up card at the completion of the qualitative enquiry which will include contact numbers of the research team and also key health care providers. That this research is being conducted in partnership with a primary health care provider is enabling of appropriate follow-up of those who require it.

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c. Dissemination and translation

A final report of results will be provided to Apunipima Cape York Health Council. These will also be formally presented at dissemination workshops held at Apunipima Cape York Health Council and the three participating communities, and to other audiences as defined by the Advisory Group. In collaboration with Apunipima Cape York Health Council, data collected during this study will be published in peer reviewed journals and/or presented at a conference. The findings from this project will inform a co-designed accessible and responsive model of primary health care for Aboriginal and Torres Strait Islander adolescents in Far North Queensland.

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AUTHOR'S CONTRIBUTIONS

The study design was led by TR and TP with the support and supervision of AB, OP, YCJ, MW, RK and PA. SW joined the research team in early 2020 and has led the implementation of efforts since, including establishment of the study's advisory group. All authors contributed to the manuscript, critically reviewed its content and approved its publication.

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COMPETING INTEREST'S STATEMENT

The authors have no interests to declare.

Table 1. Global standards for quality health-care for adolescents (reproduced from WHO, 2015). ¹²
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WHO Standard	Key concept
Standard 1. The health facility implements systems to ensure that adolescents are	Adolescent health
knowledgeable about their own health, and they know where and when to obtain health services.	literacy (demand)
Standard 2 . The health facility implements systems to ensure that parents, guardians and other community members and community organizations recognize the value of providing health services to adolescents and support such provision and the utilization of services by adolescents.	Community support (demand)
Standard 3 . The health facility provides a package of information, counselling, diagnostic, treatment and care services that fulfils the needs of all adolescents. Services are provided in the facility and through referral linkages and outreach.	Appropriate package of services (supply)
Standard 4 . Health-care providers demonstrate the technical competence required to provide effective health services to adolescents. Both healthcare providers and support staff respect, protect and fulfil adolescents' rights to information, privacy, confidentiality, non-discrimination, non-judgemental attitude and respect.	Providers' competencies (supply
Standard 5. The health facility has convenient operating hours, a welcoming and clean environment and maintains privacy and confidentiality. It has the equipment, medicines, supplies and technology needed to ensure effective service provision to adolescents.	Facility characteristic (supply)
Standard 6. The health facility provides quality services to all adolescents irrespective of their ability to pay, age, sex, marital status, education level, ethnic origin, sexual orientation or other characteristics.	Equity and non- discrimination (supply)
Standard 7. The health facility collects, analyses and uses data on service utilization and	Data and quality
quality of care, disaggregated by age and sex, to support quality improvement. Health	improvement
facility staff are supported to participate in continuous quality improvement.	(demand)
Standard 8. Adolescents are involved in the planning, monitoring and evaluation of	Adolescents'
health services and in decisions regarding their own care, as well as in certain appropriate aspects of service provision.	participation (deman
0	

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 Table 2: Summary of study design for the objectives of the study

 For each objective (and relevant standards, Table 1), this table summarises the population groups, design and target sample. Instruments are shown in table 3.

Objective	Relevant standards	Population groups	Instrument 07 29	Target sample size
1.a. Health needs & priorities of	1, 2, 8, 9	Young people (16-18 years)	Focus group discussions (F	2 FGDs of 4-8 per community (3), total 32-64
Indigenous adolescents		Young people with chronic illness	In depth interviews (IDIad	3-6 IDIs per community (3), total 9-18
(demand)		Parents, Elders, key community	Key informant interviews (8)	3-6 KIIs per community (3), total 9-18
1.b. Barriers and	1,2, 5, 6, 8, 9	Young people (16-18 years)	FGD 6 Providence	Same sample as 1.a
enablers to health care		Young people with chronic illness	IDI adol	Same sample as 1.a
(demand)		Parents, community members and health care providers	KII and IDI_hw (see 2c)	Same sample as 1.a and 2.c
1.c. Opportunities and	1, 2, 3, 5, 6, 8, 9	Young people (16-18 years)	FGD	Same sample as 1.a
preferences for		Young people with chronic illness	IDIadol 387	Same sample as 1.a
adolescent friendly health care (demand)		Parents, community members and health care providers	KII and IDIhw	Same sample as 1.a and 2.c
2.a. Current utilisation of primary health care services (supply)	7	Young people aged 10-24 years	FGD to endocrement IDI_adol textuperied KII and IDI_hw (see 2c) and data for FGD data for IDIadol mission KII and IDI_hw (see 2c) and data for Review de-identified patient management data mining Facility checklist g	Retrospective review of data over 24m period
2.b. Adolescent	1, 3, 4, 5, 6, 8, 9	Health care service	Facility checklist	Clinics in three communities
friendliness of clinics (supply)		Young people aged 16-24 years.	Anonymous client feedback	Prospective feedback, clinics in 3 communities
2.c. Needs of primary	3, 4, 5, 6, 7, 9	Health care providers	Survey E. S	All health care providers at Apunipima
health care staff to support adolescent friendly care (supply)			In depth interviews (IDI_hw)	3-6 IDIs per community (3), total 9-18
			h 13, 2025 at chnologies.	
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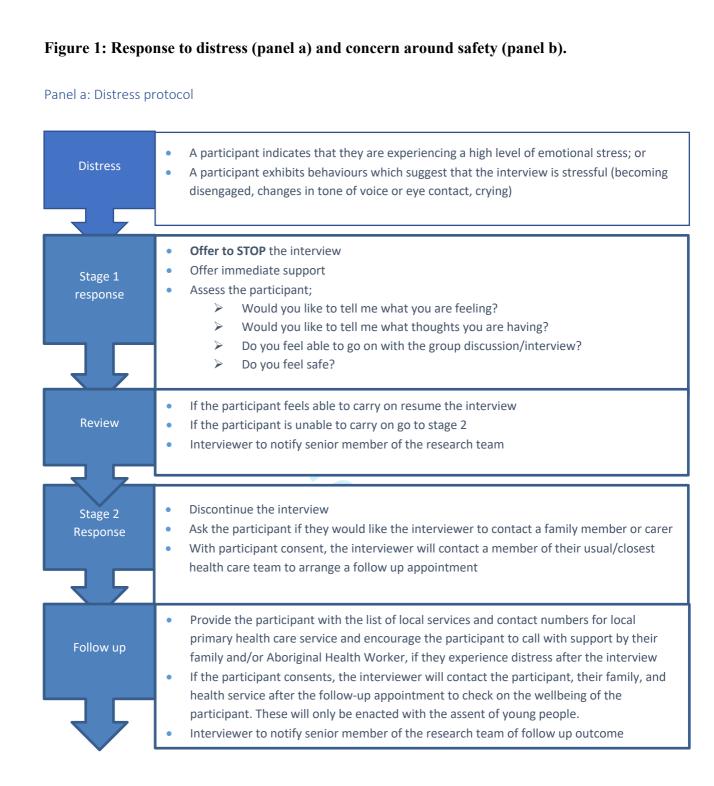
Table 3. Study instruments

This table shows the study instruments, their adaptation from WHO tools, and concepts measured. Instruments are provided in the appendix.

Study instrument	WHO tool	Key adaptations	Concepts measured in study instrum
FGD: Semi-structured focus group discussions utilising participatory methods: body mapping, priority ranking and service mapping.	Adolescent in the community interview tool (quant survey)	Original quantitative tool was developed into a qualitative instrument to gather rich formative data.	Strengths (what keeps you strong) and challenges (main problems and conce enablers and barriers to accessing prin health care; and opportunities to stren services (ideal service design, what services does it provide, skills of providers).
IDI_adol: Semi- structured in-depth interviews with young people with chronic illness	As above	As above. These IDIs are focussed around the lived experiences as opposed to FGDs above that explore issues broadly.	As above but focussing on the lived experiences of young people with chro illness who are likely high users of pri- care.
KII: Semi-structured key informant interviews with parents, elders and community members.	Adult in community interview tool (quant. survey)	Adapted from quantitative survey so as to generate rich formative data.	Perceived strengths and challenges fo young people; enablers and barriers to young people accessing primary healt care services; opportunities to strength care.
Review of de-identified patient management data	N/A	N/A	Retrospective audit (24 months) of cli data. Key indicators include: age, gene clinic being accessed, principle reasor the person's presentation, and whether presentation was part of a well person check (715 MBS item billed).
Facility checklist	Observation tool and facility checklist (16 items)	Instrument largely maintained as recommended by WHO, with additional items included to capture cultural safety.	Facility operating hours, waiting area up and information (including cultural relevance), availability of key medicir and equipment, client privacy and confidentiality, guidelines and decisio support tools.
Anonymous client feedback. To be self- completed and deposited following clinical service.	Adolescent client exit interview tool (Survey) 34 questions	Adapted WHO tool to a simple survey (including visual rating scales) that can be self-completed for feasibility.	Age and gender, what services provid (including elements of psychosocial assessment), satisfaction with services including cultural safety of those servi- opportunities to improve service provi
Health provider survey	Health-care provider interview tool (Survey) 35 items	Core content maintained, adapted to include larger emphasis on current practices and needs around support and training (so as to inform a potential response).	Current role, reasons for having seen adolescents in clinic, current services provided when seeing young people (including psychosocial screening), knowledge around adolescent care and legislation, use of guidelines and tools needs around training and support, and recommendations to improve care to adolescents.
IDIhw: Semi-structured Key informant interviews with health care providers	Based on health provider survey (as above)	Adapted from quantitative survey so as to generate rich formative data.	Perceived health issues for young peo enablers and barriers for young people wellbeing and services access, service delivery, opportunities to strengthen c (with focus on supply side).

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Panel b: Mandatory reporting protocol

In the context of this study, mandatory reporting relates to risk of abuse/ neglect / harm from others. It also extends to risk of harm from self, or risk of the young person harming others.

Beginning of interview	 Obtain consent from parents/ guardians, and assent from young people to participate in this study. As part of this consent/ assent procedure, the need to potentially breach confidentiality (if a young person is at risk of harm, or harming others) is discussed.
Stage 1 response to disclosure of information	 STOP the interview and advise participant that what they have disclosed meets reasonable cause for suspicion of harm to self or others. Offer immediate support if participant is distressed Reassure the young person that your main concern is to keep them/ others safe.
Stage 2 Response	 Interviewer to notify senior member of the research team to assist with next steps Explain to the participant that you are notifying a family member or carer- involve them in the decision around who the best person is. Notify appropriate service depending on the nature of the risk, For example, if risk of self harm, notify acute mental health services. If risk of harm from others, child protection.
Follow up	 Provide the participant with the list of local services and contact numbers and encourage the participant to call if they experience distress after the interview Research team of follow up outcome of the referral.



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Contents

Appendix A: Focus Group Discussion with Adolescents Guide (FGD) 2
Appendix B: Adolescent In-depth Interview Guide (IDI_adol)6
Appendix C: Key Informant Interview Guide (KII)10
Appendix D: Facility Checklist13
Appendix E: Anonymous Client feedback form20
Appendix F: Health Professional & Provider Survey23
Appendix G: Health Providers/Professionals Interview Guide (IDI_hw)







Appendix A: Focus Group Discussion with Adolescents Guide (FGD)

Title	Paving the path to accessible health care for Aboriginal and Torres Strait Islander adolescents
Project Number	
Principal Investigator	A/Prof Peter Azzopardi
Location	Cairns, Victoria
Survey method	Focus Group Discussion

Thank you very much for agreeing to participate in this group discussion.

Today we invite you to share your ideas about the health needs of young people and what keeps young people healthy. We would also like to hear your ideas about why some young people don't want to attend health services in the community.

Everyone's views are important so it will be good for everyone to have a say and share ideas. It is important for everyone in the group to respect each other's privacy so things discussed in the group should not be discussed outside the group, but we can't make sure that this happens. However, the information that the researchers record will be kept confidential. During the discussion, if the names of individuals, places and dates are used, the research team will remove the information and use false/gammon names and dates.

With your permission we will be taking notes and recording today's session on a tape recorder to make sure we gather everyone's ideas, The only time we may need to break this confidentiality, is if one of the research team are worried that is a risk of harm to you or others.

The session today will take approximately two hours. Participating in this project is voluntary and you may leave the session at any time. Any information shared during the session prior to leaving will be used in this study. If you decide not to participate in the study or leave the study, you can do this without having to give a reason or feel that you will be judged about your decision and your care or treatment as a patients at the health clinic will not be affected.

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Before commencing the

facilitator will check consent forms are complete and the recorder is working.

Ice breaker activity – TO BE ADVISED BY ADVISORY GROUP

Introductions and acknowledgement

• Facilitator and participants to introduce themselves.

Health strengths & challenges

We would like to learn a bit more about the health strengths and challenges of young people in your community

- What keeps young people feeling strong and healthy?
 - Prompts: culture, connections with family/friends, active lifestyle, nutritious food
- Activity: Body mapping
 - One of the participants will be invited to draw around another participant to create a human outline. Participants will then be invited to draw pictures, symbols or words to reflect their opinions on what keeps young people healthy.
- In your community, what are the main health concerns/problems for young people?
 - Prompts: being away/disconnected from culture, family or friends, social and emotional wellbeing, sexual and reproductive health, smoking, use of alcohol or drugs
- Activity: Body mapping (continued)
 - On the same picture, but using a different colour marker, participants will be encouraged to share their opinions on health concerns that are encountered by young people in their community.

Enablers and barriers to accessing primary health care services

Next, we would like to ask about what makes it easier for young people to use health services and barriers to health care that young people may experience.

- How do young people <u>learn</u> about health, and where from?
 - Prompts: health clinic, school, pharmacy, family, friends, internet, youth centre
- What services can young people use <u>to stay healthy</u>?
 - Prompts: Community controlled health clinic, mainstream clinic, school, pharmacy, friends/family
 - Are any of these health services especially for young people?
 - Are these health service used by young people?







What do you

like/not like about these health services?

Now I want you to think specifically about your local Community Controlled health service

- Is this health service used by young people?
- What do you like/not like about this health services?
- What supports/helps young people to use this health service in the community?

Prompts: family/friends, Elders, community support, cultural safety, friendly health care staff, reassurance of confidentially, diverse services provided, opening times, cost, transport

• What are the challenges/barriers for young people to access this service?

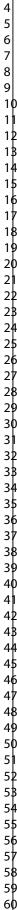
Prompts: health care staff, opening times, cost, transport, lack of services provided, confidentially, family/friends, cultural safety, age, gender

- Activity: Modified priority ranking
 - From the barriers described above, the group will be invited to nominate (up to) 10 of the most important factors for young people accessing primary health care. The characteristics will be listed on a piece of paper. Each participant will be provided with three dots, numbered either 1, 2 or 3. The participants will be encouraged to identify the three barriers that they feel are the most important by place a dot next to issue. A dot with a number 3 will be assigned to the barrier that is most important, a 2 to the second most important issue and a 1 to the third most important issue.

Youth friendly primary health service

In this section we would like you to image what a perfect health service for young people could look like. In particular, the key factors that are important to ensure young people are able to access health care service and to ensure health services meet the needs of young people.

- What does a perfect health service look like?
- Now, let's think about what is important within this perfect health service?
 - What services should be offered for young people?
 - Who should be providing these health services to young people?
 - What are the important skills and attitudes of health care staff?
 - Can you describe what confidentially and privacy should look like?
- Finally, let's think outside of the health service and within the community. What would enable/support young people to access the service?
- Activity: Modified community mapping
 - The participants will be invited to draw pictures, symbols or words to reflect their opinions on what a perfect youth friendly service looks like. The group will be encouraged to consider the model of health service delivery. They will then be asked



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describe what is important with the health service, in particular, services offered and characteristics of staff. Finally, the group will be invited to think about important enablers in the community that can support young people to access health care.

Encourage the group to explain what they have done and why at the end of each step in the activity.

- Now, we will explore which the characteristics of this ideal health service are most important.
- Activity: Modified priority ranking

to

• From the characteristics described above, the group will be invited to nominate (up to) 10 of the most important factors for youth friendly primary health care. The characteristics will be listed on a piece of paper. Each participant will be provided with three dots, numbered either 1, 2 or 3. The participants will be encouraged to identify the three characteristics that they feel are the most important by place a dot next to issue. A dot with a number 3 will be assigned to the characteristic that is most important, a 2 to the second most important issue and a 1 to the third most important issue.

Encourage the group to explain what they have done and why at the end of each step in the activity.

- What is the best thing about being a young person in your community?
- Lastly, if you could share one message about (health / young people) what would it be?

Thank all participants for their time and their contributions to the discussion.



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Appendix B: Adolescent In-depth Interview Guide (IDI_adol)

Title	Paving the path to accessible health care for Aboriginal and Torres Strait Islander adolescents
Project Number	
Principal Investigator	A/Prof Peter Azzopardi
Location	Cairns, Victoria
Survey method	In depth interviews

Thank you very much for agreeing to participate in this interview.

Today we invite you to share your ideas about the health needs of young people and reasons why some young people may not want to attend health services in the community.

With your permission we will be taking notes and recording today's interview on a tape recorder to make sure we gather all your ideas, but everything you say today will remain confidential and we won't be recordings anyone's name. The only time we may need to break this confidentiality, is if one of the research team are worried that is a risk of harm to you or others.

During the discussion, if the names of individuals, places and dates are used, the research team will replace these with a false/gammon name in the field notes.

The session today will take approximately one hour. Participating in this project is voluntary and you may leave the session at any time without having to give a reason or feel judged about your decision to leave. If you wish to withdraw from the study, please contact the interviewer directly and the information that you shared will be destroyed at your request. If you don't wish to participate in the study or decide to leave the study your care and treatment at the health clinic will not be affected.

The findings from the research will be provided to services to help them improve services for young people. The findings will also be used in journal and conference presentations and for use in other research proposals.







Before commencing the

facilitator will check if the consent form is complete and the recorder is working.

Introductions and acknowledgement

- Facilitator and participant to introduce themselves.
- Please tell me about yourself.
 - Prompts: interests, hobbies, sports, siblings

Health strengths & challenges

We would like to learn a bit more about your health strengths and challenges.

- Can you tell me about your diabetes/rheumatic heart disease (RHD) story?
 - Prompts: diagnosis, duration, treatment, follow up care, supports, worries, shame
- What do you do to look after your diabetes/RHD?
- Do you talk to anyone about your diabetes/RHD? Who and Why?
- How has diabetes/RHD impacted other areas of your health?
 - Prompts: mental health, physical activity, eye health, at risk behaviours,
- How has diabetes/RHD impacted other areas of your life?
 - Prompts: home, school, work, sports/social
- What keeps you feeling strong and healthy?
 - Prompts: connections with family/friends/teachers, active lifestyle, sports/social nutritious food, medications

Experience at primary health care service

Next, we would like to ask about your experience that last time you attended a health service.

- What type of health service did you go to and who did you see?
- Broadly, can you share why you went to the health service?
- Were there any challenges getting to the health service?
- How did you feel whilst you were at the health service?
 - Prompts: welcome, belong, embarrassed, worried/anxious
- How did you feel the staff and the health service treated you?
 - Prompts: friendly, respectful, caring
- Tell me about the confidentiality and privacy you experienced at the health service.



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Prompts: seen in a

private space (not seen or overheard), provider explained confidentiality, offered an opportunity to speak to provider alone without parent or guardian

- Overall, were you satisfied with the care you received?
 - Prompts: Feel like your needs were adequately addressed, felt listened to, had an opportunity to ask questions
- What do you think could be done to improve health care for young people living with diabetes /RHD?

Enablers and barriers to accessing primary health care services

Now, we would like to ask about any barriers to health care and anything that makes it easier for you to access care.

- In your community, what are the challenges/barriers for young people when accessing health care?
 - Prompts: health care staff available, opening times, cost, transport, lack of services provided, confidentially, family/friends, cultural safety
 - Do you think you may experience different (or more) barriers that other young people that may not have diabetes/RHD? Why do you say that / can you explain more?
- What supports/helps you to be able to use health services?
 - Prompts: family/friends, Elders, community support, cultural safety, friendly health care staff, reassurance of confidentially, diverse services provided, opening times, cost, transport
- What do you think could be done to improve access to health service for young people living with diabetes / RHD?

Youth friendly primary health service

In this section we would like you to image what a perfect health service for young people could look like. In particular, the key factors that are important to ensure young people are able to access health care service and to ensure health services meet the needs of young people.

- What does a perfect health service look like? Is it a building or is it something else?
- Next, what do you think is important within this perfect health service?
 - What services should be offered for young people?
 - Who should be providing these health services to young people?
 - What are the important skills and attitudes of health care staff?
 - Can you describe what confidentially and privacy should look like?

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Finally, let's think

outside of the health service and within the community. What would enable/support young people to access the service?

- Are these factors different or the same for a young people with diabetes/RHD?
- Lastly, what is the best thing about being a young person in your community?

To conclude, is there anything that we have not covered that you would like to discuss?

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Appendix C: Key Informant Interview Guide (KII)

Title	Paving the path to accessible health care for Aboriginal and Torres Strait Islander adolescents
Project Number	
Principal Investigator	A/Prof Peter Azzopardi
Location	Cairns, Victoria
Survey method	Key Informant Interviews

Thank you very much for agreeing to participate in this interview.

Today we invite you to share your opinions and reflections on what the health needs of young people are, what keeps them healthy and explore barriers to attending primary health services.

We will be taking notes and recording today's interview to make sure we gather all your ideas, but everything you say today will remain confidential and we won't be recordings anyone's name. The only time we may need to break this confidentiality, is if one of the research team are worried that is a risk of harm to a young person.

During the discussion, if the names of individuals, places and dates are used, the research team will replace these with a pseudonym/false name in the field notes.

The session today will take approximately one hour. Participating in this project is voluntary and you may leave the session at any time. If you wish to withdraw from the study, please contact the interviewer directly and the information that you shared will be destroyed at your request.



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facilitator will check if the consent form is complete and the recorder is working.

Introductions and acknowledgement

• Facilitator and participant to introduce themselves.

Health strengths & challenges

We would like to learn a bit more about the health strengths and challenges of young people in your community

- In your opinion, what keeps young people feeling strong and healthy?
 - Prompts: connections with family/friends/teachers, active lifestyle, sports/social nutritious food,
- What are the main health concerns/problems facing young people in your community?
 - Prompts: being away/disconnected from culture, family or friends, social and emotional wellbeing, sexual and reproductive health, smoking, use of alcohol or drugs

Primary health care service for young people

Now, we would like to ask about primary health care services for young people

- Do you think young people are interested in their health? Why?
- Do you think it is important to provide services for young people? Why?
- What health services should be provided to young people?
 - Prompts: mental health, alcohol and drug services, management of STIs/BBVs, contraception, condoms, termination of pregnancy, nutrition services
- Are there any health services should not be provided to young people?
 - Prompts: mental health, alcohol and drug services, management of STIs/BBVs, contraception, condoms, termination of pregnancy, nutrition services
- Where do young people in your community go for health care? Who provides this?
 - Prompts: health clinic, school, pharmacy, friends/family
- Do you think young people feel comfortable accessing these services? Why/Why not?
- Are there any other places where young people in your community go to learn about or get information about their health?
 - Prompts: family, friends, internet, youth centre

Enablers and barriers to accessing primary health care services

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Page 36 of 57

Lastly, we would like to

ask about any barriers that may prevent young people from receiving health care and anything that makes it easier for young people to access care.

- What are the challenges/barriers that prevent young people from using the health service?
 - Prompts: health care staff, opening times, cost, transport, lack of services provided, confidentially, family/friends, cultural safety
- What supports/helps young people to be able to use the health services?
 - Prompts: family/friends, cultural safety, friendly health care staff, reassures confidentially, diverse services provided, opening times, cost, transport
- What do you think could be done to improve access to health service for young people living in your community?
- What would encourage young people to use health services?

Lastly, what do you think the strengths of young people in your community are?

To conclude, is there anything that we have not covered that you would like to discuss?







Appendix D: Facility Checklist

1.	ls t	here a signboard that mentions the facility operating hours?	
			□Yes □No
			(If "no" skip to question 4
2.	ls i	t clearly visible?	□Yes □No
3.	Do	es it mention hours for adolescent health clinics?	□Yes □No
4.	Do	es the waiting area?	
	a)	Have adequate and comfortable seating?	□ Yes □No
	b)	Have information, education and communication materials specifically developed for adolescents?	□ Yes □No
	c)	Have drinking water?	□ Yes □No
	d)	Seem welcoming overall?	□ Yes □No
	e)	Seem clean overall?	🗆 Yes 🗆 No
	f)	Include posters and materials that include or portray Indigenery young people in them?	ious 🗌 Yes 🗌 No
5.	Ch	eck for basic amenities:	
	a)	Is there a functional toilet?	□ Yes □No
	b)	Does the toilet have a lockable door and is private?	🗆 Yes 🗆 No
	c)	Does the toilet have functioning hand hygiene facilities?	🗆 Yes 🗆 No
	d)	Is the toilet clean?	🗆 Yes 🗆 No
	e)	Does the toilet have a disposal bin?	🗆 Yes 🗆 No
	f)	Does the facility have permanent electricity during working he	ours? 🗌 Yes 🗌 No
	g)	Does the facility have a general waste disposal?	□ Yes □No
	h)	Does the facility have safe storage and disposal of clinical was potentially infectious waste that requires special disposal - suc disposal of equipment that may have come in contact with bo fluids?	ich as
	i)	Does the facility have safe storage and disposal of sharps?	□ Yes □No
	j)	Does the facility have adequate hand hygiene facilities that ar located in or adjacent to the office/examination room?	re 🗌 Yes 🗌 No
6.	Do	es the facility furniture seem adequate?	
	a)	Regarding quantity?	🗆 Yes 🗆 No
	b)	Regarding state of repair?	□ Yes □No









7. Does the waiting

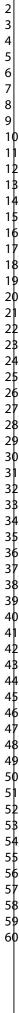
room have age appropriate information, decorations, representation, health promotion specifically to young people? e.g. sexual health promotion

 \Box Yes \Box No

8.	Do	es the facility have the following equipment/material/supplies?	
	a)	Blood pressure measurement machine	\Box Yes \Box No
	b)	Binaural adult stethoscope	\Box Yes \Box No
	c)	Monaural foetal stethoscope	□ Yes □No
	d)	Pregnancy test strips	□ Yes □No
	e)	Clinical thermometer	\Box Yes \Box No
	f)	Adult weighing scales	\Box Yes \Box No
	g)	Measuring tape	\Box Yes \Box No
	h)	Light source, for example a torch	\Box Yes \Box No
	i)	Refrigerator	\Box Yes \Box No
	j)	Pathology service (ability to test haemoglobin hba1c at point of care)	\Box Yes \Box No
	k)	Test strips for urine (10 parameters)	\Box Yes \Box No
	I)	BMI growth charts for adolescents	□ Yes □No
	m)	Height meter	\Box Yes \Box No
	n)	Ophthalmoscope set	\Box Yes \Box No
	o)	Otoscope set	\Box Yes \Box No
	p)	Gloves	\Box Yes \Box No
	q)	Single-use standard disposable or auto-disposable syringes	\Box Yes \Box No
	r)	Soap or alcohol-based hand rub for hand hygiene	\Box Yes \Box No
	s)	Communication equipment (phone or short-wave radio)	\Box Yes \Box No
	t)	Computer with email/internet access	

9. Check the minimum levels of stock for the following medicines and supplies in the facility:

a)	Condoms	⊔ Yes ∟No
b)	Oral contraceptive pills	□ Yes □No
c)	Emergency contraceptive pills	□ Yes □No
d)	Injectable contraceptives	□ Yes □No
e)	Contraceptive implants	□ Yes □No
f)	Intravenous fluids	□ Yes □No
g)	Paracetamol	□ Yes □No
h)	Amoxicillin	🗆 Yes 🗆 No







I)	Atenolol	⊔ Yes ⊔No
j)	Ceftriaxone	□ Yes □No
k)	Ciprofloxacin	□ Yes □No
I)	Cotrimoxazole suspension	□ Yes □No
m)	Diclofenac	□ Yes □No
n)	Insulin	□ Yes □No
o)	Azithromycin	□ Yes □No
p)	Salbutamol	\Box Yes \Box No
q)	Diazepam	□ Yes □No
r)	Magnesium sulphate	\Box Yes \Box No
s)	Vaccines	□ Yes □No
t)	HPV	🗆 Yes 🗆 No

10. Check for visual and auditory privacy features:

	a)	There are curtains on the doors and windows	\Box Yes \Box No
	b)	Communication between reception staff and visitors is private and cannot be overheard, including from the waiting room	□ Yes □No
	c)	In the offices/examining rooms, there is a screen to separate the examination area	□ Yes □No
	d)	No one can see or hear an adolescent client from the outside during the consultation or counselling	□ Yes □No
11.	Ch	eck to see the following registers, tools and records:	
	a)	The register on service utilisation has a data disaggregated by age	🗆 Yes 🗆 No

	and sex	
b)	The reporting forms have a format that allows the presentation of data disaggregated by age and sex	□ Yes □No
c)	Stock and medicines and supplies register	□ Yes □No
d)	Referral register	\Box Yes \Box No
e)	Register/records of accomplished outreach activities to inform adolescents in community settings and services available?	□ Yes □No
f)	Register/records of accomplished outreach activities to inform youth	\Box Yes \Box No

	and other community organisations about the value of providing health services to adolescents	
g)	Register/records of accomplished outreach activities to inform parents/guardians and teachers during school meetings about the value or providing health services to adolescents	□ Yes □ No

h)	Record(s) of formal agreements/partnerships with community	🗌 Yes	s 🗆 No
	organisations to develop health education and behaviour-oriented		
	communications strategies and materials, and plan service provision		
• •			_

i) Tools for facility self-assessment of the quality of adolescent health Care







Page 40 of 57

j)	Tools for supportive supervision in adolescent health care	\Box Yes \Box No
k)	Records/reports on accomplished self-assessments of the quality of adolescent health care	□ Yes □No
I)	Records of accomplished supportive supervision visits focused on adolescent health care	□ Yes □No
m)	Reports to the district on cause-specific service utilisation by adolescents that include data disaggregated by age and sex	□ Yes □No
n)	Reports to the district on quality of care that have a focus on adolescents	□ Yes □No

12. Check for confidentiality procedures and their application in practice:

a)	Information on the identity of the adolescent and the presenting issue are gathered in confidence during registration	□ Yes □No
b)	Adolescent clients are offered anonymous registration if they wish	\Box Yes \Box No
c)	The registration register has the name and code, but the service register has only the code (if anonymous registration is asked for)	□ Yes □No
d)	The information in laboratory registers (if applicable) is registered using codes	□ Yes □No
e)	Case records are kept in a secure place, accessible only to authorised personnel	□ Yes □No
f)	The registers are kept under lock and key outside of operating hours	\Box Yes \Box No
g)	For electronically stored information, measures are applied to	🗆 Yes 🗆 No

g)	For electronically stored information, measures are applied to	
	prevent unauthorised access	

13. Check for guidelines and other decision support tools (e.g. job aids, algorithms) for information, counselling and clinical management in the following areas:

			Information	Counselling	Clinical management
	a)	Growth and pubertal development	🗆 Yes 🗆 No	\Box Yes \Box No	\Box Yes \Box No
	b)	Pubertal delay	□ Yes □No	\Box Yes \Box No	\Box Yes \Box No
	c)	Precocious puberty	□ Yes □No	□ Yes □No	\Box Yes \Box No
	d)	Mental health and mental health problems	□ Yes □No	□ Yes □No	□ Yes □No
	e)	Nutrition	\Box Yes \Box No	□ Yes □No	\Box Yes \Box No
	f)	Physical activity	\Box Yes \Box No	\Box Yes \Box No	\Box Yes \Box No
	g)	Adolescent-specific immunisation	□ Yes □No	\Box Yes \Box No	\Box Yes \Box No
	h)	Menstrual hygiene and health	\Box Yes \Box No	\Box Yes \Box No	\Box Yes \Box No
	i)	Family planning and contraception-oral contraceptive pills, IUDs, condoms, emergency contraceptive pills, implants, injectable contraceptives	□ Yes □No	□ Yes □No	□ Yes □No
	j)	Safe abortion and post-abortion care	\Box Yes \Box No	\Box Yes \Box No	\Box Yes \Box No
	k)	Antenatal care and emergency preparedness, delivery and postnatal care	□ Yes □No	□ Yes □No	□ Yes □No

Page 41	of 57
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			-11					
a	PUNICAPE TORK	Pima SAHN South Australian Medical Researc	MRI n Health & ch Institute	GGA H N				
	I)	transmitted infections	□ Yes □No	□ Yes □No	□ Yes □No			
	n	n) HIV screening and counselling	□ Yes □No	□ Yes □No	□ Yes □No			
	n) Sexual violence	□ Yes □No	□ Yes □No	□ Yes □No			
	0) Family violence	\Box Yes \Box No	\Box Yes \Box No	\Box Yes \Box No			
	р) Bullying and school violence	□ Yes □No	\Box Yes \Box No	□ Yes □No			
	q	 Substance use and substance use disorders 	□ Yes □No	□ Yes □No	□ Yes □No			
	r)) Injuries	🗆 Yes 🗆 No	□ Yes □No	□ Yes □No			
	S)) Skin problems	□ Yes □No	\Box Yes \Box No	□ Yes □No			
	t)) Chronic conditions and disabilities	□ Yes □No	\Box Yes \Box No	\Box Yes \Box No			
	u) Endemic diseases	□ Yes □No	\Box Yes \Box No	□ Yes □No			
	v) fatigue, abdominal pain, diarrhoea, headache	□ Yes □No	□ Yes □No	□ Yes □No			
	v	v) Overweight	□ Yes □No	□ Yes □No	□ Yes □No			
	x) Underweight	□ Yes □No	□ Yes □No	□ Yes □No			
	y) Micronutrient (anaemia)	□ Yes □No	□ Yes □No	□ Yes □No			
	14. Check if the following information items are displayed in the facility:							
	а	and respectful care	, ,		Yes 🗆 No			
	b	 The policy commitment of the health facil services to all adolescents without discrim remedial actions if necessary 			Yes 🗆 No			
	c				Yes 🗆 No			
	d	 The policy on free and affordable service 	provision for adole	escents 🗌	Yes 🗆 No			
	15. C	Check to see training records/reports for the	following topics:					
	а) Communication skills to talk to adolescent	ts		Yes 🗆 No			
	b	 Communication skills to talk to adult visito members 	ors and communit	у 🗆	Yes 🗆 No			
	c) The policy on privacy and confidentiality			Yes 🗆 No			
	d	 Clinical case management of adolescent h 	ealth conditions		Yes 🗆 No			
	e	 Orientation on the importance of respecti adolescents to information and health car respectful, non-judgemental and non-disc 	re that is provided	in a	Yes 🗆 No			
	f)	provision			Yes 🗆 No			
	g	adolescent health care			Yes 🗆 No			
	h) Training of outreach workers in adolescen	nt health care		Yes 🗆 No			

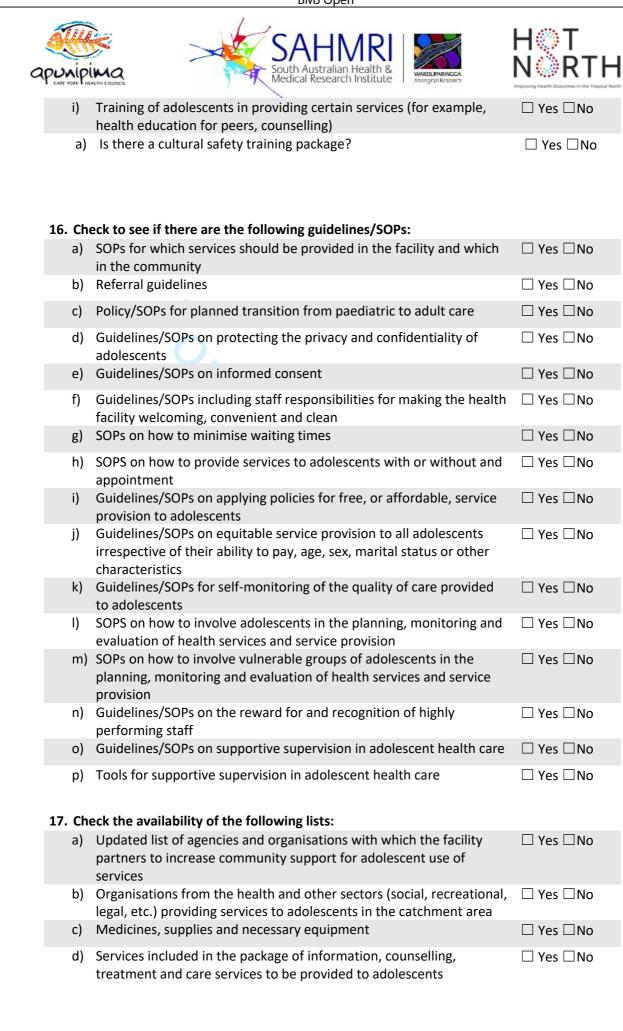
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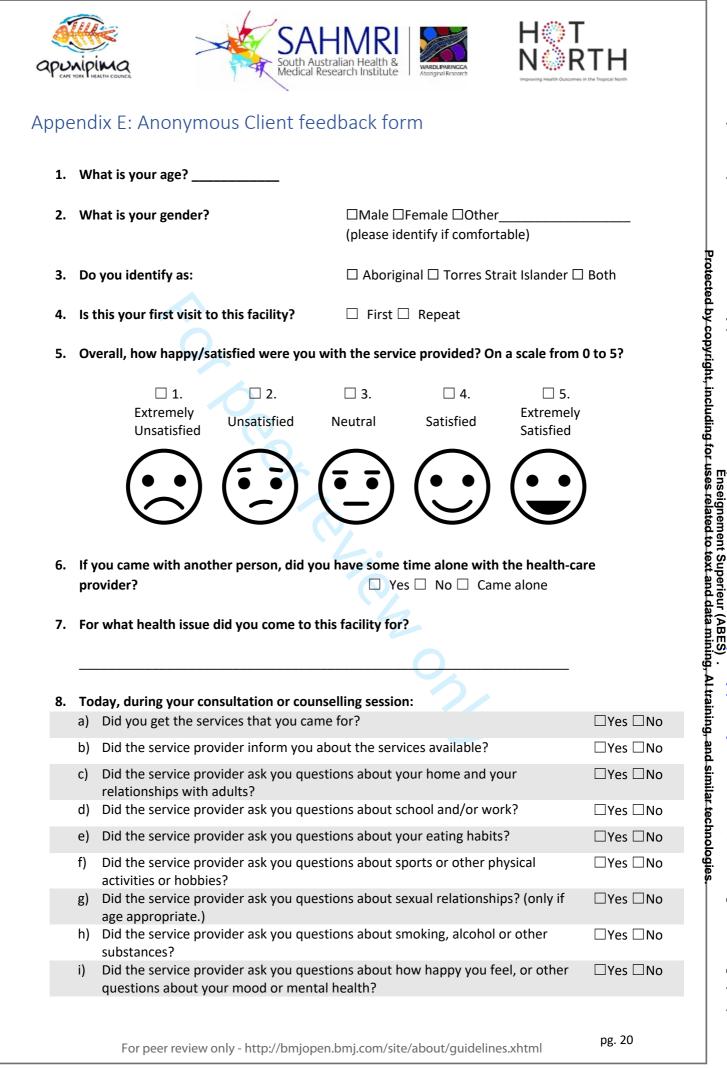
18. Check if the job

description of the following personnel is available and has a focus on adolescent health				
care:				
a)	Doctor	□ Yes □No		
b)	Nurse	□ Yes □No		
c)	Midwife	□ Yes □No		
d)	Outreach worker	\Box Yes \Box No		
e)	Counsellor	□ Yes □No		
f)	Aboriginal health work and Aboriginal health practitioner	\Box Yes \Box No		
g)	Allied health e.g. OTs, Physios, Podiatrists etc.	□ Yes □No		
h)	Other (please specify)	\Box Yes \Box No		

19. Are there Aboriginal and Torres Islander people:

-		
a)	Involved in the design and delivery of the service?	\Box Yes \Box No
b)	In leadership positions?	□ Yes □No
c)	Working in both clinical and nonclinical roles?	□ Yes □No
d)	Are young people consulted and involved in decisions?	□ Yes □ No

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	j)	Did the service provider treat you in a friendly manner?		\Box Yes \Box No
	k)	Was the service provider respectful of your needs?		□Yes □No
	I)	Did anyone else enter the room during your consultation?		□Yes □No
	m)	Did the service provider assure you at the beginning of the consultat your information will not be shared with anyone without your conse		□Yes □No
	n)	Do you feel confident that the information you shared with service p today will not be disclosed to anyone else without your consent?	provider	□Yes □No
	o)	Do you feel that the health information provided during the consultaclear and that you understood it well?	ation was	□Yes □No
	p)	Did the provider ask you if you agree with the treatment/procedure, that was proposed?	/solution	□Yes □No
	q)	Overall, do you feel like you have been provided a culturally safe ser	vice?	\Box Yes \Box No
	r)	Overall, did you feel that you were involved in the decisions regardin care? For example, you had a chance to express your opinion or pref the care provided, and your opinion was listened to, and heard?		□Yes □No
9.	Did	you feel that support staff (receptionist, cleaning staff, or security	staff)? were f	riendly
	anc	I treated you with respect?	□Yes □No	
10.	Did	the health care provider provide you a script for any medicines?	\Box Yes \Box No	

11. Do you know where or how to get them?	□Yes □No

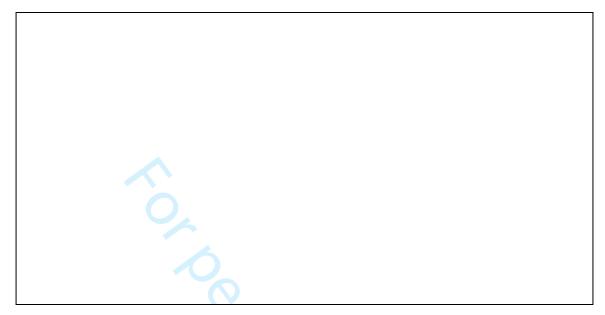
- 12. Is there anything else you would like to tell us, about the care that was provide to you?
- - 13. Is there anything else you would like to tell us, about what makes it easy to access your health care?





Page 46 of 57

14. Is there anything else you would like to tell us, about what makes it hard to access your health care?



15. If you could make one recommendation to improve care based on your experience today what would it be?



End of survey. Thank you.

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4¢







Appendix F: Health Professional & Provider Survey

We are inviting Health providers including Doctors, Nurses, Aboriginal Health Workers and Allied Health professionals, to participate in a confidential online survey to identify:

- What services are currently provided to adolescents
- What training you may have received around adolescent health
- What guidelines and clinical tools you may use to provide care
- What areas of training you would value to improve care provided; and
- How else providers could be supported to provide the best care possible.

The survey has been based on global standards as defined by WHO for adolescent health. *Adolescents is defined as 10 – 24 years of age

Demographics

- 1. What is your current position(s)
- 2. What type of work do you mostly do? Community based □ FIFO □ Outreach □ Clinic based □ Mixed □
- 3. For how long have you been working in your current role? _____Months _____Years
- 4. How many days a week do you work in this role?
- 5. Do you identify as;
 - a) Aboriginal
 - b) Torres Strait Islander
 - c) Aboriginal and Torres Strait Islander
 - d) Neither Aboriginal and/or Torres Strait Islander

Current Role and Practice

- 6. From your perspective, what are the major social emotional wellbeing issues facing adolescents today?
- What percentage of your role involves or includes seeing adolescent clients?
 _____%



1 2 3

4 5

34

60





 8. How often do you work with/see adolescent clients? Daily Dekly Once a week Monthly Rarely Never 				
9. In the last month, which of the following issues have you addressed with adolescent clients? Tick all that apply.				
a) Growth and puberty development				
b) Mental health				
Mental health conditions (eg: Depression, anxiety)				
Suicide and Self-Harm				
Substance use and substance use disorders				
c) Sexual & Reproductive health				
Safe sexual practices				
Reproductive tract infections/Sexually transmitted infections				
Sexual violence				
Safe abortion and post-abortion care				
Antenatal care and emergency preparedness, delivery, and postnat care	tal 🗌			
Blood borne viruses and counselling				
Menstrual hygiene and health				
Contraception				
Long acting reversable contraception				
d) Specific diseases & symptoms				
Diabetes care				
Cardiovascular conditions				
Respiratory conditions				
Chronic conditions and disabilities				
Musculo-skeletal injuries and conditions				
Fatigue				
Abdominal pain and other gastronomical symptoms				
Headaches and migraines				
Skin conditions				
e) Immunisation				
Influenza				

7

9

11

33







Are yo	u aware of other adolescent services you can refer clients too? Please	list
	Other	
	Racism	
	Youth Justice	
	School Issues (eg: Bullying, Violence)	
	Child protection	
	Family relationships	
	Education	
	Housing	
	Employment and Income	
g) P	sychosocial Wellbeing	
	Micronutrient deficiencies (eg: anaemia)	
	Eating disorders (eg: Anorexia, bulimia)	
	Overweight and Obesity	
	Physical activity	
	Diet related conditions	
f) N	lutrition & Physical activity	
	Vaccine misinformation	
	Other catch up vaccines	
	Pneumococcal	
	Diphtheria-tetanus-pertussis	
	Meningococcal ACWY	
	HPV	

10a. Are you aware of other adolescent services you can refer clients too? Pleas	se list □ Yes □No
10b. Do you make referrals for adolescent clients to other services regularly? Why/Why not?	□ Yes □No

10c. Are referrals straightforward/easy to make?

Why/Why not?

□ Yes □No







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11. Do you inform adolescents about the availability of other health and social services that are	ì
available?	

 \Box Yes \Box No

12. What practices or measures do you undertake to protect the confidentiality (consult information) of adolescent clients?

13. What practices or measures do you undertake to protect the privacy (physical space) of adolescent clients?

14. When you see an adolescent client for services or counselling do you?

a)	Introduce yourself first to the adolescent?	□ Yes □No
b)	Ask the adolescent if they would like to see a same-sex clinician/provider?	□ Yes □No
c)	Ask the adolescent what they would like to be called?	□ Yes □No
d)	Ask the adolescent who they have may have brought with them for the consultation?	□ Yes □No
e)	Offering if they would like an Aboriginal Health Worker present	\Box Yes \Box No
f)	Ask the adolescent if they would like a translator present?	\Box Yes \Box No
g)	Explain to the adolescents that are accompanied that you routinely spend some time alone with the adolescent towards the end of the consultation?	□ Yes □No
h)	Ask the adolescent permission to ask the accompanying person(s) their opinions/observations?	□ Yes □No
i)	Obtain, in cases when an informed consent from a third party is required, the adolescent's assent to the service/procedure?	□ Yes □No
j)	Ensure that no one can see or hear the adolescent client from outside during the consultation or counselling?	□ Yes □No
k)	Ensure that there is there adequate privacy between the consultation and examination area? eg. a screen	□ Yes □No
I)	Assure the adolescent client that no information will be disclosed to anyone (parents/other) without his/her/their permission?	□ Yes □No
m)	Explain to the adolescent client conditions when you might need to disclose information, such as mandatory reporting?	□ Yes □No
n)	Involve the adolescent in decision making and care planning?	□ Yes □No

15. During a routine consultation with an adolescent client, do you explore or screen for the following?

a) Asking the adolescent questions about home and relationships with \Box Yes \Box No adults?

Page 51 of 57		BMJ Open	
1 2 3	apuni	SAHMRI South Australian Health & Medical Research Institute	H©T N©RTH
4 5	b) Asking the adolescent questions about school and/or work?	□ Yes □No
6 7	c)	Asking the adolescent questions about his/her/their eating habits?	□ Yes □No
8 9	d	Asking the adolescent about sports or other physical activities/socia activities/hobbies?	I □ Yes □No
10 11	e		□ Yes □No
12 13 14	f)		□ Yes □No
15 16	g	Asking the adolescent questions about how happy he/she/they feel(s), or other questions about his/her mood or mental health?	□ Yes □No
17 18 19	h	Asking the adolescent about his/her/their involvement in cultural events or activities?	□ Yes □No
20 21	16. From	what age would you provide the following advices or services for add	elescents?
22	a	Healthy relationships Comment	
22 23 24 25 26	b	Sexual health	
25 26	c)	Hormonal contraceptives	
27 28	ď		
29	e	STI treatment	
30 31	f)	Blood borne virus and counselling	
32 33	g	Medical termination of pregnancy/abortion	
34	h) Medicare	
35 36 37 38 39 40		ny adolescent you have provided support for been denied services wi If yes, why?	thin the last 12

Yes	\square	No

Guidelines and Tools

Why? _

18. Do you regularly use guidelines or decision support tools (such as clinical guidelines) for information, counselling, and clinical management in the following areas? Tick all that apply.

a) Growth and puberty development	
b) Mental health	
Mental health conditions (eg: Depression, anxiety)	
Suicide and Self-Harm	

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		improving means outcomes in the mopical non-
	Substance use and substance use disorders	
c) 9	Sexual and reproductive health	
	Safe sexual practices	
	Reproductive tract infections/sexually transmitted infections	
	Sexual violence	
	Safe abortion and post-abortion care	
	Antenatal care and emergency preparedness, delivery and postnatal care	
	Blood borne viruses and counselling	
	Menstrual hygiene and health	
	Contraception	
	Long acting reversable contraception	
d) S	Specific diseases and symptoms	
	Diabetes care	
	Cardiovascular Conditions	
	Respiratory Conditions	
	Chronic conditions and disabilities	
	Musculo-skeletal injuries and conditions	
	Fatigue	
	abdominal pain and other gastronomical symptoms	
	headache	
	Skin conditions	
e) I	Immunisation	
	Influenza	
	HPV	
	Meningococcal ACWY	
	Diphtheria-tetanus-pertussis	
	Pneumococcal	
	Other catch up vaccines	
	Vaccine misinformation	
f) N	lutrition & Physical activity	
	Diet related conditions	
	Physical activity	
	Overweight/Obesity	

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	Eating disorders (eg: Anorexia/Bulimia)	
	Micronutrient deficiencies (eg: anaemia)	
g) P	Psychosocial Wellbeing	
	Employment/Income	
	Housing	
	Education	
	Family relationships	
	School issues (eg: Bullying, Violence)	
	Child protection	
	Youth Justice	
	Racism	
	Other	

19. Are you aware of adolescent health guidelines in your service in the following areas? Guidelines on:

a)	Which services should be provided in	the facility	\Box Yes \Box No
b)	Referrals		\Box Yes \Box No
c)	Planned transition from paediatric to	adult care	\Box Yes \Box No
d)	Informed consent		\Box Yes \Box No
e) /	At what age adolescents can access se	rvices independently	\Box Yes \Box No
e)	Providing free, or affordable, service	s to adolescents	\Box Yes \Box No
f)	Measures to protect privacy and con	fidentiality of adolescents	\Box Yes \Box No

20. From what age can you legally see an adolescent by themselves?

21. At what age can an adolescent legally have their own Medicare card?

Education and Training

22. Have you received any of the following training in adolescent health?

- a) Communication skills to talk to 🗌 Yes Satisfied 🗌 Yes want more 🗌 No but need 🗌 No don't need adolescents
- b) Communication skills to talk to \Box Yes Satisfied \Box Yes want more \Box No but need \Box No don't need adult escorts/visitors

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ap	Unipima CATE TORY I HEALTH COUNCIL		SAHN South Australiar Medical Researc	ARI Health & Institute	WARDLEVEINCGA Abanginal Research	H N mproving	T RTH	
c)	-	are that respects of adolescents	□ Yes Satisfied	□Yes w	ant more	🛛 No but ne	eed 🗆 No don'i	t need
d)	Providing c care?	confidential health	□ Yes Satisfied	□Yes w	ant more 🗆	🗌 No but ne	eed 🗆 No don'i	t need
e)	Providing c care?	culturally safe health	□ Yes Satisfied	□Yes w	ant more 🗆	🗌 No but ne	eed 🗆 No don'i	t need
f)		nagement of dolescent health						
	□Mental H	lealth	□ Yes Satisfied	□Yes w	ant more 🗆	🗌 No but ne	eed 🗆 No don'i	t need
	□Sexual He	ealth					eed □No don'i	
	□Child pro	taction	□ Yes Satisfied	∐Yes w	ant more ∟	l No but ne	eed ∐No don'i	t need
g)	•	cess social supports	□ Yes Satisfied	□Yes w	ant more 🗆	🛛 No but ne	eed □No don'i	t need
h)		cess the NDIS	Yes Satisfied	□Yes w	ant more 🗆	🗌 No but ne	eed 🗆 No don't	t need
i)	-	formation into nagement systems	Yes Satisfied	□Yes w	ant more 🗆	🛛 No but ne	eed 🗆 No don'i	t need
j)	•	or analysing data for	□ Yes Satisfied	□Yes w	ant more 🗆	🗌 No but ne	eed □No don'i	t need
	Do you feel y r training ne	you would benefit fro eds?	om additional tra	aining in a	adolescent	health? If y	es, what are	
	a) Cultu	ural safety		🗆 High [□Medium	\Box Low \Box	Not needed	
	b) Norr	nal adolescent develc	pment	🗆 High [Medium	□ Low □	Not needed	
	c) How	to engage with adole	scents	🗆 High [□Medium	\Box Low \Box	Not needed	
	d) How	to assess competenc	e	🗆 High 🛛	□Medium	🗆 Low 🗆	Not needed	
	e) How	to provide confident	ial health care	🗆 High [□Medium		Not needed	
	f) How	to respond to menta	l health	🗆 High [□Medium	Low 🗆	Not needed	

Sexual health

Unplanned pregnancy

Issues with justice

Child protection

Injury

Other _

g)

h)

i)

j)

k)

I)

1

 \Box High \Box Medium \Box Low \Box Not needed

 \Box High \Box Medium $\ \Box$ Low \Box Not needed

 \Box High \Box Medium $\ \Box$ Low \Box Not needed

 \Box High \Box Medium \Box Low \Box Not needed

 \Box High \Box Medium \Box Low \Box Not needed

 \Box High \Box Medium \Box Low \Box Not needed

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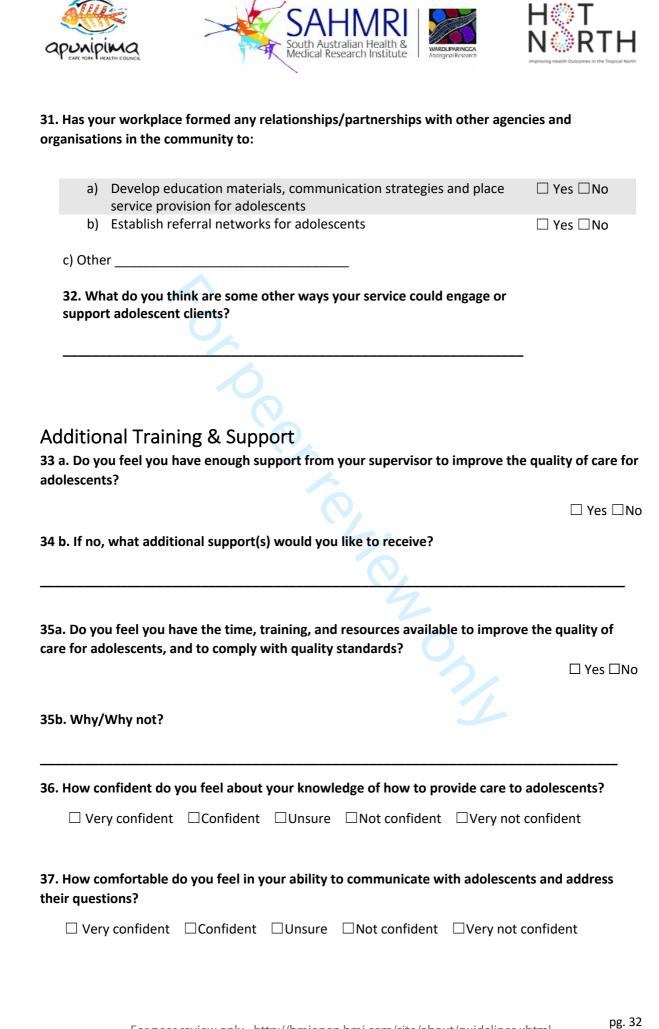
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CAPE YORK	LALTH COUNCIL	South Australian Health & Medical Research Institute	WARDLIPARINGGA Aboriginal Research	Improving Health Outcomes in the Tropical North
	••	r you to regularly (at least once al education training in adolesce	• • •	?
				□Yes □No
25. Has yo	ur manager/superv	isor ever observed a consultatio	n by you with a	an adolescent client?
				□ Yes □No
Health	Service			
26 Have v	ou ever discussed y	vith you manager and/or colleag	ques actions to	improve services for
-	ts? If Yes, Please list			□ Yes □No
		anticipated in an adalassant ha	alth quality of	
-		participated in an adolescent he	alth quality of	
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38. Is there anything else you'd like to tell us, about the care you provide to adolescents?



39. Is there anything else you'd like to tell us, about the enablers and barriers to providing care?



40. Is there anything else you'd like to tell us, about what you need to provide the best care you can?

End of questionnaire. Thank you.







Appendix G: Health Providers/Professionals Interview Guide (IDI_hw)

Title	Paving the path to accessible health care for Indigenous adolescents
Project Number	
Principal Investigator	A/Prof Peter Azzopardi
Location	Cairns, Victoria
Survey method	In depth interviews with health providers

Thank you very much for agreeing to participate in this interview.

Today we invite you to share your opinions and reflections on what the health needs of young people are, what keeps them healthy and explore barriers to attending primary health services.

During the discussion we would like to encourage you to please not refer to individuals, places, and dates by name; if actual names are used, they will be replaced with a pseudonym in the field notes.

Introductions and acknowledgement

- Facilitator and participant to introduce themselves.
- Please tell me about yourself.

Health issues for young people

I would like to learn a bit about your perspective of the health issues facing young people.

- In your opinion, what are the key health issues for young people?
 - Prompts: Being away/disconnected from culture, family or friends, social and emotional wellbeing, sexual and reproductive health, smoking, use of alcohol or drugs
- How does this impact a young person's life?
 - Prompts: Other areas of life or wellbeing e.g. mental, social and emotional, school, work, family, friends, engaging in healthy life choices
- From your perspective, what are the major social emotional wellbeing issues facing adolescents today?
 - Prompts: Being away/disconnected from culture, family or friends, racism and discrimination, bullying and online harassment, climate change etc
- How can a young person remain healthy?

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Prompts: Supportive

network, friends, family, school, work, active lifestyle, nutritious food, taking medications

Enablers and barriers

- In your opinion, what are the challenges and barriers to providing health care for young people?
 - Prompts: knowledge of services, ability of services to cater for young people, suitable hours for young people, availability of services (ie limited mental health services)
- What supports and enables good health care to young people?
 - Prompts: allocated resources, friendly and welcoming services, collaborative approaches
- What do you think could be done to improve access to health service for young people?
 - Prompts: tailored service, welcoming environment, respect, young people included in the decision-making process

Service delivery

- How you think that health care to young people can be improved?
 - Prompts: training, finding out from young people, including young people in the service design or structure
- What would help you strengthen/enhance the health care you provide to young people?
 - Prompts: training, support, leadership, funding, resources
- What areas of training would support you/would you like in health care provision for young people?
 - Prompts: sexual health training, communication, rights, cultural safety
- What would an ideal youth friendly service look like?
 - Prompts: welcoming to young people, young people represented in the service structure, services that are specific to young people's needs

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Enablers and barriers to primary health care for Aboriginal and Torres Strait Islander adolescents: Study protocol for participatory mixed-methods research that builds on WHO global standards.

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Enablers and barriers to primary health care for Aboriginal and Torres Strait Islander adolescents: Study protocol for participatory mixed-methods research that builds on WHO global standards.

Tirritpa Ritchie* (1), Tara Purcell* (2, 3), Seth Westhead (1), Mark Wenitong (4, 5), Yvonne Cadet-James (4, 5), Alex Brown (1,6), Renae Kirkham (7), Johanna Neville (4), Clara Saleh (4), Ngiare Brown (8), Elissa Kennedy (2), Julie Hennegan (2), Odette Pearson** (1,6), Peter Azzopardi**(1,2,6,9).

¹Wardliparingga Aboriginal Health Equity Research Unit, South Australian Health and Medical Research Institute, Adelaide, Australia

² Global Adolescent Health Group, Maternal Child and Adolescent Health Program, Burnet Institute, Melbourne, Australia

- ³ Doherty Institute, University of Melbourne, Melbourne, Australia
- ⁴ Apunipima Cape York Health Council, Queensland, Australia
- ⁵ James Cook University, Townsville, Queensland, Australia
- ⁶ Faculty of Health and Medical Sciences, University of Adelaide, Adelaide
- ⁷ Menzies School of Health Research, Darwin, Australia
- ⁸Ngaoara Aboriginal child and adolescent wellbeing, Wollongong, Australia
- ⁹Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne, Melbourne

* Joint first authors

** Joint senior authors

Corresponding author: A/Prof Peter Azzopardi, Wardliparingga Aboriginal Health Equity Research Unit, South Australian Health and Medical Research Institute, Adelaide, Australia. Peter.azzopardi@sahmri.com. +61 418 575 936



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ABSRACT

Introduction: One third of Australia's Aboriginal and Torres Strait Islander population are adolescents. Recent data highlights their health needs are substantial and poorly met by existing services. To design effective models of primary health care we need to understand the enablers and barriers to care for Aboriginal and Torres Strait Islander adolescents, the focus of this study.

Methods and analysis: This protocol was co-designed with Apunipima Cape York Health Council that supports the delivery of primary health care for 11 communities in Far North Queensland. We framed our study around the WHO global standards for high-quality health services for adolescents, adding an additional standard around culturally-safe care. The study is participatory and mixed methods in design and builds on the recommended WHO assessment tools. Formative qualitative research with young people and their communities (exploring concepts in the WHO recommended quantitative surveys) seeks to understand *demand* side enablers and barriers to care, as well as preferences for an enhanced response. *Supply* side enablers and barriers will be explored through: a retrospective audit of clinic data (to identify current reasons for access and what can be strengthened); an objective assessment of the adolescent friendliness of clinical spaces; anonymous feedback from adolescent clients around quality of care received and what can be improved; and surveys and qualitative interviews with health providers to understand their perspectives and needs to provide enhanced care. This co-designed project has been approved by Apunipima Cape York Health Council and Far North Queensland Human Research Ethics Committee.

Dissemination and implications: The findings from this project will inform a co-designed accessible and responsive model of primary health care for Aboriginal and Torres Strait Islander adolescents.

Strengths and limitations of this study

- Co-designed in partnership with the Apunipima Cape York Health Council to ensure the project is relevant, feasible, builds capacity, conducted in a culturally safe way and is translatable to action;
- Adaptation of WHO guidelines and tools (global standards) for use with Indigenous adolescents in a high income nation, including development of items relating to culturally safe care;
- Incorporates an assessment of both *demand* and *supply* side enablers and barriers to adolescent friendly primary health care, both essential considerations in strengthening models of care;
- Will contribute to an otherwise sparse literature around responsive primary health care for Aboriginal and Torres Strait Islander adolescents;
- Generalisability of findings to other settings may be limited, however, the process detailed is broadly generalisable.

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INTRODUCTION

One third of the Australian Aboriginal and Torres Strait Islander population are aged 10-24 years; these adolescents central to assuring the prosperity and cultural continuity of Australia's First People.¹ However, as highlighted by two recent publications, Aboriginal and Torres Strait Islander adolescents have substantial health needs that are unmet by current services.²³ In summary, Aboriginal and Torres Strait Islander adolescents experience a heavy burden of mental disorders, suicide and self-harm, sexually transmitted infection, and injury (health conditions typical of adolescence); an excess burden of pneumonia and skin infections (more typical of childhood); an early onset of type-2 diabetes (more typical of adulthood); and a high burden of rheumatic heart disease and bronchiectasis (otherwise rare in Australia).² This profile is underpinned by distinct risk exposures and determinants of health, including racism, discrimination and intergenerational trauma. As a result, adolescence is where inequities in indicators of health and wellbeing (such as mortality) widen between Aboriginal and Torres Strait Islander and non-Indigenous Australians.² Adolescence also presents a substantial opportunity for health gain; more than 80% of mortality amongst Aboriginal and Torres Strait Islander adolescents is potentially avoidable within the current health system; these avoidable deaths are amenable to preventative interventions (rather than treatment), highlighting the need to strengthen primary health care.²

Australia's health system largely provides an enabling environment for accessible primary health care, particularly through the Medicare universal health coverage scheme that eliminates many of the financial barriers to access. This scheme includes adolescents, with Medicare being accessible independently from age 15 years and Australian law recognising the right of mature minors to provide their own consent for health care. There are also specific provisions to enable access to primary health care for Aboriginal and Torres Strait Islander people, including through the Medicare Benefits Scheme '715 item' that funds an annual well person's check to facilitate health screening and promotion. However, despite these provisions, coverage of health checks in 2016 was only 22% for Aboriginal and Torres Strait Islander 15-24 year olds, the lowest of any age group,⁴ and arguably at a stage of life where the opportunities for health screening are greatest. Our team is currently undertaking a systematic review (led by TP) to understand the enablers and barriers to primary health care for Indigenous and First Nations adolescents in Australia, New Zealand, USA and Canada. Data for Australia are limited, with evidence from other settings highlighting that Indigenous

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adolescents experience barriers common to all adolescents (including accessibility, concerns around consent and confidentiality),⁵ compounded by specific issues including those related to racism and cultural security.⁶⁷

Improving primary health care for adolescents is a recognized priority globally.⁸ Reasons for adolescents not accessing health care can be largely framed as those relating to: *demand* for services (factors at individual, household or community level that prevent access to services, including knowledge of services, sociocultural norms that limit access, or services not being seen as 'relevant' to need); and *supply* (factors inherent to the health system that prevent service uptake, including both physical resources and competencies/ skills to provide quality care). To help address these broad barriers, the World Health Organization has defined eight global standards that support adolescent's demand for primary health care services and the delivery of quality care (Table 1). Accompanying these standards are tools that can be used to understand supply and demand side barriers, essential to informing locally relevant responses and models of care. However, these tools have largely been developed for use in low- and middle-income settings, and to our knowledge, not yet adapted or used with Indigenous or First Nations adolescents in high income contexts.

In this protocol, we adapt the WHO global standards and tools to explore the enablers and barriers to primary health care for Aboriginal and Torres Strait Islander adolescents, from both the perspectives of demand and supply. This new knowledge will be used to co-design an improved model of care for Aboriginal and Torres Strait Islander adolescents.

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METHODS AND ANALYSIS

a. Community partnership and co-design of study objectives and research plan

This project was designed in partnership with Apunipima Cape York Health Council (Apunipima),⁹ the peak body for Aboriginal community-controlled primary health care in Australia's Far North Queensland. Apunipima supports each primary health care service in 11 remote Indigenous communities in Cape York and is also the primary provider of additional support programs. Initial invitation for collaboration came in 2018 when a publication documenting health needs of Indigenous adolescents in Australia (authored by PA, NB and AB)² was shared with an established network of Aboriginal Community Controlled Health Organisations (MW represented Apunipima on that network). In 2019 TR, TP and PA were invited to Apunipima to meet with clinical staff, discuss findings from previous research, and consider a project together to strengthen primary health care for Indigenous adolescents in the Cape York. As a result, the following objectives for a research project were defined:

Objective 1: To understand the strengths, needs and preferences of Aboriginal and Torres Strait Islander young people with respect to primary health care (*Demand side*). Specifically,

- a) The health needs and priorities for Aboriginal and Torres Strait Islander adolescents;
- b) What Aboriginal and Torres Strait Islander adolescents identify as barriers and enablers to primary health care; and
- c) What Aboriginal and Torres Strait Islander adolescents identify as key things that could be done to make primary health care more accessible and responsive to their health and wellbeing needs.

Objective 2: To understand the strengths and needs of health services and providers to deliver responsive primary health care for Aboriginal and Torres Strait Islander adolescents (Supply side). Specifically:

- a) How often, and why, do Aboriginal and Torres Strait Islander adolescents currently access primary health care (identifying opportunities to strengthen existing care);
- b) How does the physical environment of existing clinics align with global standards for adolescent responsive health care; and

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c) What do health providers currently provide for young people, what is their current knowledge of adolescent health, and what do they identify as training needs specific to adolescent health.

These objectives were defined to respond to local issues and needs, and also to align with global standards for quality health care (Table 1). All eight WHO standards were considered as relevant to the provision of high quality and responsive care for Aboriginal and Torres Strait Islander adolescents in Cape York, with an additional standard (referred here as standard 9) around cultural safety also considered in developing the research tools.¹⁰ All elements of the project design (detailed below) were co-designed by the research team and Apunipima. To ensure meaningful partnership and co-design across this project we will adopt a *Participatory Action Research* (PAR) approach.¹¹ PAR enables power to be shared between the participating communities and the research team, and its iterative approach of data collection and reflection is focussed on developing actions which, in this case, are to strengthen primary health care.

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b. Target populations and research advisory group

Populations: The focus of this research is Aboriginal and Torres Strait Islander adolescents, with a specific focus on those aged 16 – 18 years. The age of 16 years marks an important transition in terms of health needs, capacity to provide consent, and capacity to explore complex issues in research.^{12 13} By age 18 years, many young people also complete secondary education and transition out of communities.² The dynamic nature of health needs across adolescence also influenced the decision for a more narrow focus on this age-band for the majority of research activities, as did the advice from Apunipima that for this particular age group services need to be strengthened. In addition to young people, we will also engage parents and carers, Aboriginal and Torres Strait Islander Elders, community members, and health service providers given they all contribute to the health and wellbeing of young people and the services they can access. With respect to communities, research efforts will be focussed on three of the 11 communities Apunipima serves so as to ensure feasibility. The community partners are to be purposively selected by Apunipima taking into consideration: competing demands on the community and/or service; community priorities and readiness to

focus on adolescent health; and ability of the research team to travel to the community (relating to seasonal access). Findings from these 3 communities will be used to inform a scalable model across all 11 communities and beyond.

<u>Advisory group</u>: An advisory group will be established to ensure research is aligned with needs, meaningful data is generated, interpretation is contextualised, outcomes are translatable, and inclusive of existing and building local capacity. The advisory group of approximately 10 -15 members will include core members of Apunipima as well as members of the communities where the research will occur. We will aim for involvement of young people (aged 16 - 24 years and diverse in gender, engagement with services, and health needs), service providers, Elders and community members. Consideration will be given as to whether or not this format is conducive of meaningful engagement of the younger members and adjusted accordingly. This advisory group will inform implementation of research activities, interpretation of findings, framing of recommendations and informing important next steps.

c. Data collection instruments

 Data collection instruments for this study include qualitative focus groups and interviews (particularly to explore the demand side) and quantitative questionnaires, facility checklists and an audit of clinic data to understand the supply side, summarised in Table 2.

To inform the development of these instruments we first mapped all 8 standards and their specific criteria as defined by WHO.¹⁴ We added a ninth standard on cultural safety, defining specific criteria by reviewing: The National Safety and Quality Health Service Standards User Guide for Aboriginal and Torres Strait Islander Health; The Cultural Respect Framework 2016-2026 for Aboriginal and Torres Strait Islander health; and The Queensland Health Aboriginal and Torres Strait Islander Cultural Capability Framework 2010-2033. Criteria defined for this standard included: Organisational commitment to cultural safety and rights; Indigenous governance and leadership, including polices that enable this; meaningful participation of community; ensuring and supporting Indigenous workforce; ensuring a culturally welcoming environment; availability of cultural resources; and communication and service provision that is culturally sensitive.

Against the 9 standards and criteria we then mapped the specific items of the surveys and instruments defined by WHO.¹⁴⁻¹⁶ Two investigators (TR and PA) then independently reviewed each item, removing those not considered relevant to Aboriginal and Torres Strait

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Islander adolescents in Australia (e.g. items relating to the control of Malaria), using a comprehensive synthesis of population data as a reference.² Where there were multiple items measuring the same construct, we reviewed and selected the most relevant item and instrument to measure the construct of interest with the aim of streamlining the instruments where possible and minimising respondent burden. This mapping was then used to draft instruments for this study. One key modification was that we developed qualitative instruments (focus group discussions and in-depth interviews) reflecting the key concepts in the WHO surveys so as to gather formative data around needs and preferences of adolescents, community stakeholders and providers. This was because the WHO instruments have been developed for adolescents in low- and middle-income settings and may not be sensitive to the specific needs of Indigenous adolescents. The data collection instruments were then reviewed by the investigator group and core members of the advisory group from Apunipima; prior to implementation in community these question guides will also be reviewed by advisory group members from community and adapted as necessary. These instruments developed are summarised in Table 3 and shown in the Appendix.

Focus group discussions (FGDs) are to be had with adolescents to understand their health needs and preferences, barriers and enablers to accessing primary health care, and opportunities and preferences to strengthen adolescent friendly health care (Objective 1 a-c). In each community, two FGDs (one for males and one for females aged 16-18 years) including 4 - 8 participants will be undertaken. FGDs will be guided by a semi-structured interview guide, with participants encouraged to talk about broader issues and not just their own personal lived experience. Each FGD will commence with participants describing health of Indigenous young people- in terms of strengths and challenges. To facilitate the discussion, the participatory visual method of body mapping will be used. Participants will be invited to draw around another participant to create a human outline. Participants will then be invited to draw pictures, symbols or words to reflect their views around health and wellbeing strengths and challenges for young people in their community. This method has successfully been used about health with Indigenous young people.¹⁷ Barriers and enablers to health care access will then be explored. From the barriers described, the group will be invited to nominate (up to) 10 of the most important challenges for young people accessing primary health care. A modified priority ranking activity will engage participants to identify the barriers that they feel are the most important using sticky dots. The discussion will then move onto participants designing an ideal health service. To facilitate the discussion, the

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 participatory visual method of community mapping will be used.¹⁸ Participants will be invited to draw pictures, symbols or words to reflect their opinions on what an ideal youth friendly service looks like. The group will be encouraged to consider what the building looks like, describe features inside the health service and enablers in the community that can support accessible primary health care for young people. FGDs will be audio recorded and researchers will take handwritten notes during the sessions. Participants will be encouraged not to use names or identifying information, however if this occurs, this information will be removed at the analysis stage.

<u>In depth interviews with adolescents living with chronic illness (IDI_adol)</u> will be used to augment the FGDs. We anticipate 3-6 IDIs in each of the 3 communities. We will focus on young people living with rheumatic heart disease and type 2 diabetes given these conditions are common in the partner communities and these young people are likely high utilisers of primary health care. These interviews will explore similar concepts to the FGDs but focus directly on the lived experiences of participants.

Key informant interviews with parents, Aboriginal and Torres Strait Islander Elders and key community stakeholders (KIIs) will augment the perceptions of young people. Their views are especially important as these stakeholders can support adolescents seeking primary health care, but can also be barriers or gatekeepers to adolescents accessing the care they need. We anticipate the need for 3-6 in depth interviews in each of the 3 communities. These KIIs follow a similar form to the IDIs but will enable an exploration of broader social and structural enablers and barriers to care.

Review of de-identified patient management data over a 24-month period will determine the number of adolescents accessing primary health services and the key primary presenting issues; this data is key to understanding what can be strengthened. This data will be obtained from the electronic patient management software (Communicare, Telstra Health) and include age (in single year for 10-24 year olds), gender, clinic accessed, principle presenting reason, and whether this presentation was part of a well person's check (715 MBS item billed). To place this data in context, the total number of presentations (by age in 5 year age bands and gender across clinics) will also be extracted. This analysis will be across the 11 communities that Apunipima serves.

<u>Objective facility checklist</u> will be used to assess the adolescent friendliness of the clinic with respect to physical environment, resources, policies and procedures. This assessment will be

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<u>Anonymous client survey following primary health service</u> will enable a prospective assessment of the quality of care provided, and opportunities to improve that care. The original WHO tool is a formal interviewer-assisted survey of considerable length. We adapted this to be brief (2 pages) with visual rating scales and opportunities to provide written feedback. We also adapted this tool to be self-completed for feasibility, but also to minimise response bias. Following a clinical consultation with a young person aged 16-24 years, the health care provider will invite the young person to anonymously complete the feedback and deposit it in a locked box in the clinic; posters in the waiting area will also advertise this opportunity to provide feedback. This approach enables only those of eligible age to provide feedback. Administrative data on attendance provides a denominator to calculate completion rate.

<u>Health provider survey</u> will explore current knowledge and practices with respect to adolescent primary care and identify areas of need with respect to support and training. All primary health care providers across all 11 communities will be invited to complete this survey.

<u>In depth interviews with health providers (IDI_hw)</u> will further explore views and perspectives about young people accessing health services, barriers to health care, and how health services can be improved, with a focus on supply side. Key informant interviews will be audio recorded and notes taken.

d. Design adaptations due to the COVID pandemic

The COVID pandemic has resulted in restricted of domestic travel in Australia, with travel to remote Indigenous communities largely closed. Whilst we ideally would have sequenced the research to begin with qualitative work in communities to understand demand, we have adapted our design to commence with first exploring the supply side enablers and barriers. On the advice of Apunipima we will first deploy (March 2021) the health provider questionnaire for all health staff. We have adapted the health provider survey to be completed online and will also explore the potential of conducting the in-depth interviews with health providers online. We will also review routinely collected administrative data across all 11 communities; on reflection this sequencing may help identify communities to invite to partner in the research which we plan for early 2021 once travel is possible. Changes have also

occurred with regards to the advisory group. Whilst the advisory group will eventually include representation from partner communities, in the first instance the advisory group includes young people who are staff of Apunipima and an established youth advisory group (DIYDG, Deadly Indigenous Youth Doing Good) external to Apunipima.

e. Sample size

All primary health care providers (Aboriginal and Torres Strait Islander health workers, youth workers, nurses, doctors, allied staff) working across the 11 communities that Apunipima serves will be invited to complete the health provider survey. The majority of other components of the study are qualitative, and we have estimated the number of participants taking into consideration diversity of the sample and feasibility. During qualitative data collection, the concept of 'saturation' will be used to assess if additional data needs to be collected to satisfy the aims of the study. If so, more participants will be recruited.

f. Participant recruitment

Recruitment of health providers to the research will be facilitated by the Health Action Team at Apunipima; identity of staff will not be collected. Recruitment of young people and their community in the three communities will be co-designed with the advisory group once the communities have been selected and agreed to participate. Potential approaches include advertisement and invitation to participate through posters at the health clinic and local media (including social media), augmented by purposive sampling of young people with diverse experiences and needs as identified by youth and community leaders. The locations for the qualitative data collection will be discussed with the advisory group and will be at a mutually agreed safe place, which may not be the health service.

g. Informed consent

Parents, Elders, community members, and health care providers over the age of 18 years will provide their own informed consent to participate (either in person or electronically). For young people aged 16-18 years, written *consent* for participation in the qualitative research will be obtained from parents or guardians, with written *assent* also obtained from all young participants. We will inform all participants that they can withdraw at any time of data collection.

For the anonymous client feedback, the health care provider referring the young person to complete the feedback will provide an information sheet, with consent for participation

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implied by the completion of anonymous feedback. This approach has been adopted so as not to burden health providers with the need to collect consent and to prevent bias. Further, young people aged 16 - 18 years have the capacity to understand the benefits and risks of participating in this low risk activity. ¹² ¹³

h. Data management and security

All paper records, including consent forms, will be stored in a locked cabinet in a secure room at Wardliparingga Aboriginal Health Equity theme at SAHMRI (Wardliparingga). Raw electronic data (including audio recordings) will be stored on password protected devices and computers at Wardliparingga. Paper records and electronic data will be securely stored for at least 7 years after collection. At the end of this period all hard copies of documents will be shredded, and electronic copies deleted. Data will only be accessible to authorised members of the research team. De-identified and cleaned data sets will be provided to Apunipima and shared amongst investigators using a secure, password protected cloud.

The only raw data to be exchanged electronically will be data collected from health providers. The questionnaire will be collected using REDCap, and other than clinical role and Indigenous status, no other identifying information will be captured. REDCap data is encrypted in transit via transport-layer security (industry best standard), with the dataset securely stored as outlined above. The in-depth interviews with health care providers will be conducted over Zoom videoconferencing using a password protected link, with the discussion recorded using the inbuilt recording feature and securely stored as above.

i. Data Analysis plan

The health provider survey, facility checklist and client feedback survey will be quantitatively analysed using World Health Organisation analysis guidelines.¹⁹

Audio-recordings of interviews will be transcribed verbatim. Transcripts will be analysed by two researchers thematically using an inductive 'data-driven' process, with codes identified from the empirical material.²⁰ Data extracts will be selected to illustrate key constructs. No personal or other identifying data (including details that could identify participating organisations or individuals) will be included in summaries or other research outputs.

Aggregated de-identified patient management data will be analysed using descriptive quantitative methods (frequencies) to report the rates of the different clinical presentations by

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age and gender. Population estimates from the Australian Bureau of Statistics (by age and sex) for the communities that Apunipima services will enable estimation of age- and sex-specific access rates per population denominator.

j. Patient and public involvement

As detailed above, this project was co-designed in partnership with Apunipima Cape York Health Council. This involved co-design of the objectives, research tools and dissemination strategy. This co-design was to ensure that the project is aligned with needs and translatable to action- it also represents best practice in Aboriginal health research.²¹ Further, once the focal communities for this research are selected, we will establish an advisory group that will include membership from those communities to ensure local knowledge, ownership and translation. This advisory group will be involved in the implementation of the research, however not directly involved in the qualitative inquiry to ensure confidentiality is maintained. The advisory group will also support dissemination (detailed below). They will be formally acknowledged in all publications and materials resulting from this work.

ETHICS

a. Ethics review

The research protocol was first fully reviewed and endorsed by Apunipima's Research Review Panel. The project subsequently received ethics approval from Far North Queensland Human Research Ethics Committee [HREC/2019/QCH/57297, with amendment for online health provider survey AM/2020/QCH/57297].

b. Benefits and risks

There are no direct benefits for individuals participating in the study. However, the information provided during the project may help strengthen health care services to meet the health needs of adolescents. Possible risks include discomfort from talking about particular issues and disclosure of sensitive health related information that requires clinical review. This project has been designed to ensure that the risk of participants experiencing distress is low. Specifically, we will not be probing for distressing issues. To minimise risk we will exclude participants who are acutely unwell. We will also be obtaining consent from parents and assent from participants themselves. A Distress Protocol has been developed to guide the research team response to support any participants who experience distress or the need to report risk of harm (Figure 1). We will also provide all participants with a follow-up card at the completion of the qualitative enquiry which will include contact numbers of the research team and also key health care providers. That this research is being conducted in partnership with a primary health care provider is enabling of appropriate follow-up of those who require it.

DISSEMINATION AND IMPLICATIONS

A final report of results will be provided to Apunipima Cape York Health Council. These will also be formally presented at dissemination workshops held at Apunipima Cape York Health Council and the three participating communities, and to other audiences as defined by the Advisory Group. In collaboration with Apunipima Cape York Health Council, data collected during this study will be published in peer reviewed journals and/or presented at a conference. The findings from this project will inform a co-designed accessible and responsive model of primary health care for Aboriginal and Torres Strait Islander adolescents in Far North Queensland.

The implications of this project are substantial with strengthened primary care for young people having the potential to improve population health and reduce health inequities.¹

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Adolescents represent a third of the Aboriginal and Torres Strait Islander population, and their health needs are substantial and largely unmet. Improving health at this time of life, particularly when young people are establishing their identity, transitioning from education to employment, and developing new relationships has the potential for long-lasting impacts. Through strengthened primary care there is also the potential to identity and address health risks that typically emerge during adolescence, including obesity and risky substance use that determine non-communicable diseases in adult life, key drivers of premature mortality for Indigenous Australians.^{22 23} There is also the potential to strengthen health care when young people may be starting to have children, assuring the best start to life for the next generation.

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AUTHOR'S CONTRIBUTIONS

The study design was led by TR and TP with the support and supervision of AB, OP, YCJ, MW, RK and PA. SW joined the research team in early 2020 and has led the implementation of efforts since, including establishment of the study's advisory group. All authors (TR, TP, SW, MW, YCJ, AB, RK, JN, CS, NB, EK, JH, OP, PA) contributed to the drafting of the manuscript, critically reviewed its content and approved its publication.

FUNDING STATEMENT

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COMPETING INTEREST'S STATEMENT

The authors have no interests to declare.

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Table I. Global standards for	quality health-care for adolescents	(reproduced from WHO, 2015). ¹⁴

WHO Standard	Key concept
Standard 1 . The health facility implements systems to ensure that adolescents are knowledgeable about their own health, and they know where and when to obtain health	Adolescent health literacy (demand)
services.	
Standard 2 . The health facility implements systems to ensure that parents, guardians and	Community support
other community members and community organizations recognize the value of providing	(demand)
health services to adolescents and support such provision and the utilization of services by adolescents.	
Standard 3. The health facility provides a package of information, counselling,	Appropriate package
diagnostic, treatment and care services that fulfils the needs of all adolescents. Services	of services (supply)
are provided in the facility and through referral linkages and outreach.	
Standard 4. Health-care providers demonstrate the technical competence required to	Providers'
provide effective health services to adolescents. Both healthcare providers and support	competencies (supply
staff respect, protect and fulfil adolescents' rights to information, privacy, confidentiality,	
non-discrimination, non-judgemental attitude and respect.	
Standard 5. The health facility has convenient operating hours, a welcoming and clean	Facility characteristic
environment and maintains privacy and confidentiality. It has the equipment, medicines,	(supply)
supplies and technology needed to ensure effective service provision to adolescents.	
Standard 6. The health facility provides quality services to all adolescents irrespective of	Equity and non-
their ability to pay, age, sex, marital status, education level, ethnic origin, sexual	discrimination
orientation or other characteristics.	(supply)
Standard 7. The health facility collects, analyses and uses data on service utilization and	Data and quality
quality of care, disaggregated by age and sex, to support quality improvement. Health	improvement
facility staff are supported to participate in continuous quality improvement.	(demand)
Standard 8. Adolescents are involved in the planning, monitoring and evaluation of	Adolescents'
health services and in decisions regarding their own care, as well as in certain appropriate	participation (demand
aspects of service provision.	

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 Table 2: Summary of study design for the objectives of the study

 For each objective (and relevant standards, Table 1), this table summarises the population groups, design and target sample. Instruments are shown in table 3.

Objective	Relevant standards	Population groups	Instrument 0 29	Target sample size
1.a. Health needs & priorities of	1, 2, 8, 9	Young people (16-18 years)	Focus group discussions (Feinger	2 FGDs of 4-8 per community (3), tota 32-64
Indigenous adolescents		Young people with chronic illness	In depth interviews (IDIada)	3-6 IDIs per community (3), total 9-18
(demand)		Parents, Elders, key community	Key informant interviews (3-6 KIIs per community (3), total 9-18
1.b. Barriers and	1,2, 5, 6, 8, 9	Young people (16-18 years)	FGD to the form	Same sample as 1.a
enablers to health care		Young people with chronic illness	IDI_adol	Same sample as 1.a
(demand)		Parents, community members and health care providers	KII and IDI_hw (see 2c)	Same sample as 1.a and 2.c
1.c. Opportunities and	1, 2, 3, 5, 6, 8, 9	Young people (16-18 years)	FGD	Same sample as 1.a
preferences for		Young people with chronic illness	IDIadol B	Same sample as 1.a
adolescent friendly health care (demand)		Parents, community members and health care providers	KII and IDIhw	Same sample as 1.a and 2.c
2.a. Current utilisation of primary health care services (supply)	7	Young people aged 10-24 years	FGD to matche for the subscript of the subscr	Retrospective review of data over 24m period
2.b. Adolescent	1, 3, 4, 5, 6, 8, 9	Health care service	Facility checklist	Clinics in three communities
friendliness of clinics (supply)		Young people aged 16-24 years.	Anonymous client feedback	Prospective feedback, clinics in 3 communities
2.c. Needs of primary	3, 4, 5, 6, 7, 9	Health care providers	Survey	All health care providers at Apunipima
health care staff to support adolescent friendly care (supply)			Survey mil on In depth interviews (IDI_hx) une 13, 2025 at	3-6 IDIs per community (3), total 9-18
			2025 at A	
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Table 3. Study instruments

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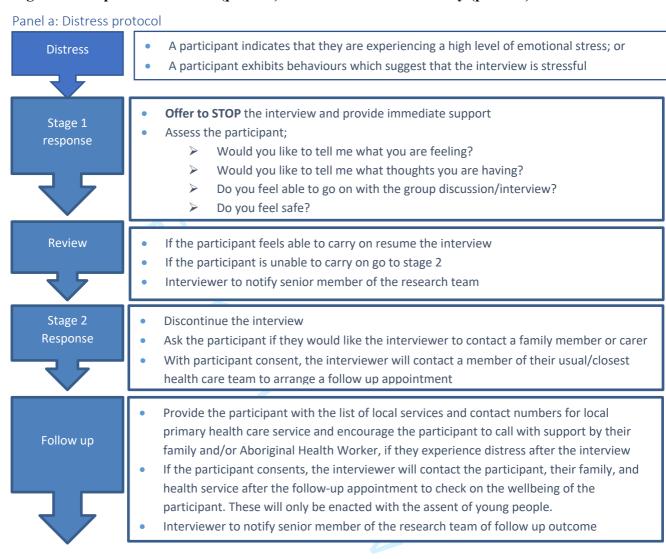
This table shows the study instruments, their adaptation from WHO tools, and concepts measured. Instruments are provided in the appendix.

Study instrument	WHO tool	Key adaptations	Concepts measured in study instrument
FGD: Semi-structured	Adolescent in the community	Original quantitative	Strengths (what keeps you strong) and
focus group discussions	interview tool	tool was developed	challenges (main problems and concerns);
utilising participatory	(quant survey)	into a qualitative	enablers and barriers to accessing primary
methods: body mapping,	(qualit survey)	instrument to gather	health care; and opportunities to strengthe
priority ranking and		rich formative data.	services (ideal service design, what
service mapping.			services does it provide, skills of
IDI adol: Semi-	As above	As above. These IDIs	providers). As above but focussing on the lived
structured in-depth	As above	are focussed around	experiences of young people with chronic
interviews with young		the lived experiences	illness who are likely high users of primar
people with chronic		as opposed to FGDs	care.
illness		above that explore	
micss		issues broadly.	
KII: Semi-structured key	Adult in	Adapted from	Perceived strengths and challenges for
informant interviews with	community	quantitative survey so	young people; enablers and barriers to
parents, elders and	interview tool	as to generate rich	young people accessing primary health
community members.	(quant. survey)	formative data.	care services; opportunities to strengthen
			care.
Review of de-identified	N/A	N/A	Retrospective audit (24 months) of clinic
patient management data			data. Key indicators include: age, gender,
		6	clinic being accessed, principle reason for
			the person's presentation, and whether th
			presentation was part of a well person's
			check (715 MBS item billed).
Facility checklist	Observation	Instrument largely	Facility operating hours, waiting area set
	tool and	maintained as	up and information (including cultural
	facility	recommended by	relevance), availability of key medicines
	checklist (16	WHO, with additional	and equipment, client privacy and
	items)	items included to	confidentiality, guidelines and decision
		capture cultural safety.	support tools.
Anonymous client	Adolescent	Adapted WHO tool to	Age and gender, what services provided
feedback. To be self-	client exit	a simple survey	(including elements of psychosocial
completed and deposited	interview tool	(including visual	assessment), satisfaction with services
following clinical service.	(Survey)	rating scales) that can	including cultural safety of those services
	34 questions	be self-completed for	opportunities to improve service provisio
TT - 141	TT - 141	feasibility.	Comment of the second for the size of the
Health provider survey	Health-care	Core content	Current role, reasons for having seen
	provider interview tool	maintained, adapted to	adolescents in clinic, current services
	(Survey)	include larger emphasis on current	provided when seeing young people (including psychosocial screening),
	35 items	practices and needs	knowledge around adolescent care and
		around support and	legislation, use of guidelines and tools,
		training (so as to	needs around training and support, and
		inform a potential	recommendations to improve care to
		response).	adolescents.
IDIhw: Semi-structured	Based on	Adapted from	Perceived health issues for young people,
Key informant interviews	health provider	quantitative survey so	enablers and barriers for young people
with health care providers	survey (as	as to generate rich	wellbeing and services access, service
Providend	above)	formative data.	delivery, opportunities to strengthen care
		1	(with focus on supply side).

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Panel b: Mandatory reporting protocol

Mandatory reporting relates to risk of abuse/ neglect / harm from others, risk of harm from self, or risk of harming others.

Beginning of interview	• Obtain consent from parents/ guardians, and assent from young people to participate in this study. As part of this consent/ assent procedure, the need to potentially breach confidentiality (if a young person is at risk of harm, or harming others) is discussed.
Stage 1 response to disclosure of	 STOP the interview and advise participant that what they have disclosed meets reasonable cause for suspicion of harm to self or others. Offer immediate support if participant is distressed Reassure the young person that your main concern is to keep them/ others safe.
Stage 2 Response	 Interviewer to notify senior member of the research team to assist with next steps Explain to the participant that you are notifying a family member or carer- involve them in the decision around who the best person is. Notify appropriate service depending on the nature of the risk
Follow up	 Provide the participant with the list of local services and contact numbers and encourage the participant to call if they experience distress after the interview Research team of follow up outcome of the referral.

Figure 1: Response to distress (panel a) and concern around safety (panel b).

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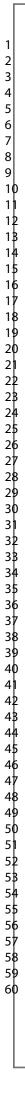






Contents

Appendix A: Focus Group Discussion with Adolescents Guide (FGD) 2
Appendix B: Adolescent In-depth Interview Guide (IDI_adol)6
Appendix C: Key Informant Interview Guide (KII)10
Appendix D: Facility Checklist13
Appendix E: Anonymous Client feedback form20
Appendix F: Health Professional & Provider Survey23
Appendix G: Health Providers/Professionals Interview Guide (IDI_hw)







Appendix A: Focus Group Discussion with Adolescents Guide (FGD)

Title	Paving the path to accessible health care for Aboriginal and Torres Strait Islander adolescents
Project Number	
Principal Investigator	A/Prof Peter Azzopardi
Location	Cairns, Victoria
Survey method	Focus Group Discussion

Thank you very much for agreeing to participate in this group discussion.

Today we invite you to share your ideas about the health needs of young people and what keeps young people healthy. We would also like to hear your ideas about why some young people don't want to attend health services in the community.

Everyone's views are important so it will be good for everyone to have a say and share ideas. It is important for everyone in the group to respect each other's privacy so things discussed in the group should not be discussed outside the group, but we can't make sure that this happens. However, the information that the researchers record will be kept confidential. During the discussion, if the names of individuals, places and dates are used, the research team will remove the information and use false/gammon names and dates.

With your permission we will be taking notes and recording today's session on a tape recorder to make sure we gather everyone's ideas, The only time we may need to break this confidentiality, is if one of the research team are worried that is a risk of harm to you or others.

The session today will take approximately two hours. Participating in this project is voluntary and you may leave the session at any time. Any information shared during the session prior to leaving will be used in this study. If you decide not to participate in the study or leave the study, you can do this without having to give a reason or feel that you will be judged about your decision and your care or treatment as a patients at the health clinic will not be affected.



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Page 28 of 58

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facilitator will check consent forms are complete and the recorder is working.

Ice breaker activity - TO BE ADVISED BY ADVISORY GROUP

Introductions and acknowledgement

Facilitator and participants to introduce themselves.

Health strengths & challenges

We would like to learn a bit more about the health strengths and challenges of young people in your community

- What keeps young people feeling strong and healthy?
 - Prompts: culture, connections with family/friends, active lifestyle, nutritious food
- Activity: Body mapping
 - One of the participants will be invited to draw around another participant to create a human outline. Participants will then be invited to draw pictures, symbols or words to reflect their opinions on what keeps young people healthy.
- In your community, what are the main health concerns/problems for young people?
 - Prompts: being away/disconnected from culture, family or friends, social and emotional wellbeing, sexual and reproductive health, smoking, use of alcohol or drugs
- Activity: Body mapping (continued)
 - On the same picture, but using a different colour marker, participants will be encouraged to share their opinions on health concerns that are encountered by young people in their community.

Enablers and barriers to accessing primary health care services

Next, we would like to ask about what makes it easier for young people to use health services and barriers to health care that young people may experience.

- How do young people learn about health, and where from?
 - Prompts: health clinic, school, pharmacy, family, friends, school, internet, youth centre
- What services can young people use to stay healthy?
 - Prompts: Community controlled health clinic, mainstream clinic, school, pharmacy, friends/family
 - Are any of these health services especially for young people?
 - Are these health service used by young people?







What do you

like/not like about these health services?

Now I want you to think specifically about your local Community Controlled health service

- Is this health service used by young people?
- What do you like/not like about this health services?
- What supports/helps young people to use this health service in the community?

Prompts: family/friends, Elders, community support, cultural safety, friendly health care staff, reassurance of confidentially, diverse services provided, opening times, cost, transport

• What are the challenges/barriers for young people to access this service?

Prompts: health care staff, opening times, cost, transport, lack of services provided, confidentially, family/friends, cultural safety, age, gender

- Activity: Modified priority ranking
 - From the barriers described above, the group will be invited to nominate (up to) 10 of the most important factors for young people accessing primary health care. The characteristics will be listed on a piece of paper. Each participant will be provided with three dots, numbered either 1, 2 or 3. The participants will be encouraged to identify the three barriers that they feel are the most important by place a dot next to issue. A dot with a number 3 will be assigned to the barrier that is most important, a 2 to the second most important issue and a 1 to the third most important issue.

Youth friendly primary health service

In this section we would like you to image what a perfect health service for young people could look like. In particular, the key factors that are important to ensure young people are able to access health care service and to ensure health services meet the needs of young people.

- What does a perfect health service look like?
- Now, let's think about what is important within this perfect health service?
 - What services should be offered for young people?
 - Who should be providing these health services to young people?
 - What are the important skills and attitudes of health care staff?
 - Can you describe what confidentially and privacy should look like?
- Finally, let's think outside of the health service and within the community. What would enable/support young people to access the service?
- Activity: Modified community mapping
 - The participants will be invited to draw pictures, symbols or words to reflect their opinions on what a perfect youth friendly service looks like. The group will be encouraged to consider the model of health service delivery. They will then be asked

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describe what is important with the health service, in particular, services offered and characteristics of staff. Finally, the group will be invited to think about important enablers in the community that can support young people to access health care.

Encourage the group to explain what they have done and why at the end of each step in the activity.

- Now, we will explore which the characteristics of this ideal health service are most important.
- Activity: Modified priority ranking

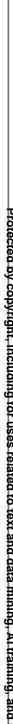
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From the characteristics described above, the group will be invited to nominate (up to) 10 of the most important factors for youth friendly primary health care. The characteristics will be listed on a piece of paper. Each participant will be provided with three dots, numbered either 1, 2 or 3. The participants will be encouraged to identify the three characteristics that they feel are the most important by place a dot next to issue. A dot with a number 3 will be assigned to the characteristic that is most important, a 2 to the second most important issue and a 1 to the third most important issue.

Encourage the group to explain what they have done and why at the end of each step in the activity.

- What is the best thing about being a young person in your community?
- Lastly, if you could share one message about (health / young people) what would it be?

Thank all participants for their time and their contributions to the discussion.



Page 30 of 58

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Appendix B: Adolescent In-depth Interview Guide (IDI_adol)

Title	Paving the path to accessible health care for Aboriginal and Torres Strait Islander adolescents
Project Number	
Principal Investigator	A/Prof Peter Azzopardi
Location	Cairns, Victoria
Survey method	In depth interviews

Thank you very much for agreeing to participate in this interview.

Today we invite you to share your ideas about the health needs of young people and reasons why some young people may not want to attend health services in the community.

With your permission we will be taking notes and recording today's interview on a tape recorder to make sure we gather all your ideas, but everything you say today will remain confidential and we won't be recordings anyone's name. The only time we may need to break this confidentiality, is if one of the research team are worried that is a risk of harm to you or others.

During the discussion, if the names of individuals, places and dates are used, the research team will replace these with a false/gammon name in the field notes.

The session today will take approximately one hour. Participating in this project is voluntary and you may leave the session at any time without having to give a reason or feel judged about your decision to leave. If you wish to withdraw from the study, please contact the interviewer directly and the information that you shared will be destroyed at your request. If you don't wish to participate in the study or decide to leave the study your care and treatment at the health clinic will not be affected.

The findings from the research will be provided to services to help them improve services for young people. The findings will also be used in journal and conference presentations and for use in other research proposals.







Before commencing the

facilitator will check if the consent form is complete and the recorder is working.

Introductions and acknowledgement

- Facilitator and participant to introduce themselves.
- Please tell me about yourself.
 - Prompts: interests, hobbies, sports, siblings

Health strengths & challenges

We would like to learn a bit more about your health strengths and challenges.

- Can you tell me about your diabetes/rheumatic heart disease (RHD) story?
 - Prompts: diagnosis, duration, treatment, follow up care, supports, worries, shame
- What do you do to look after your diabetes/RHD?
- Do you talk to anyone about your diabetes/RHD? Who and Why?
- How has diabetes/RHD impacted other areas of your health?
 - Prompts: mental health, physical activity, eye health, at risk behaviours,
- How has diabetes/RHD impacted other areas of your life?
 - Prompts: home, school, work, sports/social
- What keeps you feeling strong and healthy?
 - Prompts: connections with family/friends/teachers, active lifestyle, sports/social nutritious food, medications

Experience at primary health care service

Next, we would like to ask about your experience that last time you attended a health service.

- What type of health service did you go to and who did you see?
- Broadly, can you share why you went to the health service?
- Were there any challenges getting to the health service?
- How did you feel whilst you were at the health service?
 - Prompts: welcome, belong, embarrassed, worried/anxious
- How did you feel the staff and the health service treated you?
 - Prompts: friendly, respectful, caring
- Tell me about the confidentiality and privacy you experienced at the health service.

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Prompts: seen in a

private space (not seen or overheard), provider explained confidentiality, offered an opportunity to speak to provider alone without parent or guardian

- Overall, were you satisfied with the care you received?
 - Prompts: Feel like your needs were adequately addressed, felt listened to, had an opportunity to ask questions
- What do you think could be done to improve health care for young people living with diabetes /RHD?

Enablers and barriers to accessing primary health care services

Now, we would like to ask about any barriers to health care and anything that makes it easier for you to access care.

- In your community, what are the challenges/barriers for young people when accessing health care?
 - Prompts: health care staff available, opening times, cost, transport, lack of services provided, confidentially, family/friends, cultural safety
 - Do you think you may experience different (or more) barriers that other young people that may not have diabetes/RHD? Why do you say that / can you explain more?
- What supports/helps you to be able to use health services?
 - Prompts: family/friends, Elders, community support, cultural safety, friendly health care staff, reassurance of confidentially, diverse services provided, opening times, cost, transport
- What do you think could be done to improve access to health service for young people living with diabetes / RHD?

Youth friendly primary health service

In this section we would like you to image what a perfect health service for young people could look like. In particular, the key factors that are important to ensure young people are able to access health care service and to ensure health services meet the needs of young people.

- What does a perfect health service look like? Is it a building or is it something else?
- Next, what do you think is important within this perfect health service?
 - What services should be offered for young people?
 - Who should be providing these health services to young people?
 - What are the important skills and attitudes of health care staff?
 - Can you describe what confidentially and privacy should look like?







Finally, let's think

outside of the health service and within the community. What would enable/support young people to access the service?

- Are these factors different or the same for a young people with diabetes/RHD?
- Lastly, what is the best thing about being a young person in your community?

To conclude, is there anything that we have not covered that you would like to discuss?

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Appendix C: Key Informant Interview Guide (KII)

Title	Paving the path to accessible health care for Aboriginal and Torres Strait Islander adolescents
Project Number	
Principal Investigator	A/Prof Peter Azzopardi
Location	Cairns, Victoria
Survey method	Key Informant Interviews

Thank you very much for agreeing to participate in this interview.

Today we invite you to share your opinions and reflections on what the health needs of young people are, what keeps them healthy and explore barriers to attending primary health services.

We will be taking notes and recording today's interview to make sure we gather all your ideas, but everything you say today will remain confidential and we won't be recordings anyone's name. The only time we may need to break this confidentiality, is if one of the research team are worried that is a risk of harm to a young person.

During the discussion, if the names of individuals, places and dates are used, the research team will replace these with a pseudonym/false name in the field notes.

The session today will take approximately one hour. Participating in this project is voluntary and you may leave the session at any time. If you wish to withdraw from the study, please contact the interviewer directly and the information that you shared will be destroyed at your request.





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Page 36 of 58

Before commencing the

facilitator will check if the consent form is complete and the recorder is working.

Introductions and acknowledgement

• Facilitator and participant to introduce themselves.

Health strengths & challenges

We would like to learn a bit more about the health strengths and challenges of young people in your community

- In your opinion, what keeps young people feeling strong and healthy?
 - Prompts: connections with family/friends/teachers, active lifestyle, sports/social nutritious food,
- What are the main health concerns/problems facing young people in your community?
 - Prompts: being away/disconnected from culture, family or friends, social and emotional wellbeing, sexual and reproductive health, smoking, use of alcohol or drugs

Primary health care service for young people

Now, we would like to ask about primary health care services for young people

- Do you think young people are interested in their health? Why?
- Do you think it is important to provide services for young people? Why?
- What health services should be provided to young people?
 - Prompts: mental health, alcohol and drug services, management of STIs/BBVs, contraception, condoms, termination of pregnancy, nutrition services
- Are there any health services should not be provided to young people?
 - Prompts: mental health, alcohol and drug services, management of STIs/BBVs, contraception, condoms, termination of pregnancy, nutrition services
- Where do young people in your community go for health care? Who provides this?
 - Prompts: health clinic, school, pharmacy, friends/family
- Do you think young people feel comfortable accessing these services? Why/Why not?
- Are there any other places where young people in your community go to learn about or get information about their health?
 - Prompts: family, friends, internet, youth centre, schools

Enablers and barriers to accessing primary health care services

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Lastly, we would like to

ask about any barriers that may prevent young people from receiving health care and anything that makes it easier for young people to access care.

- What are the challenges/barriers that prevent young people from using the health service?
 - Prompts: health care staff, opening times, cost, transport, lack of services provided, confidentially, family/friends, cultural safety
- What supports/helps young people to be able to use the health services?
 - Prompts: family/friends, cultural safety, friendly health care staff, reassures confidentially, diverse services provided, opening times, cost, transport
- What do you think could be done to improve access to health service for young people living in your community?
- What would encourage young people to use health services?

Lastly, what do you think the strengths of young people in your community are?

To conclude, is there anything that we have not covered that you would like to discuss?

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Appendix D: Facility Checklist

1.	ls t	here a signboard that mentions the facility operating hours?			
			(If "no" sk	□Yes □No ip to question 4))
2.	ls i	t clearly visible?		□Yes □No	
3.	Do	es it mention hours for adolescent health clinics?		□Yes □No	
4.	Do	es the waiting area?			
	a)	Have adequate and comfortable seating?] Yes □No	
	b)	Have information, education and communication materials specifically developed for adolescents?] Yes □No	
	c)	Have drinking water?		∃Yes □No	
	d)	Seem welcoming overall?		∃Yes □No	
	e)	Seem clean overall?] Yes □No	
	f)	Include posters and materials that include or portray Indigence young people in them?	ous [□ Yes □No	
5.	Ch	eck for basic amenities:			
	a)	Is there a functional toilet?		∃Yes □No	
	b)	Does the toilet have a lockable door and is private?]Yes □No	
	c)	Does the toilet have functioning hand hygiene facilities?		∃Yes □No	
	d)	Is the toilet clean?		∃Yes □No	
	e)	Does the toilet have a disposal bin?		∃Yes □No	
	f)	Does the facility have permanent electricity during working ho	ours?]Yes □No	
	g)	Does the facility have a general waste disposal?] Yes 🗌 No	
	h)	Does the facility have safe storage and disposal of clinical was potentially infectious waste that requires special disposal - suc disposal of equipment that may have come in contact with bo fluids?	ch as]Yes □No	
	i)	Does the facility have safe storage and disposal of sharps?		∃Yes □No	
	j)	Does the facility have adequate hand hygiene facilities that ar located in or adjacent to the office/examination room?	e 🗆] Yes 🗌 No	
6.	Do	es the facility furniture seem adequate?			
	a)	Regarding quantity?] Yes 🗌 No	
	b)	Regarding state of repair?] Yes □No	











7. Does the waiting

room have age appropriate information, decorations, representation, health promotion specifically to young people? e.g. sexual health promotion

 \Box Yes \Box No

8.	Do	es the facility have the following equipment/material/supplies?	
	a)	Blood pressure measurement machine	\Box Yes \Box No
	b)	Binaural adult stethoscope	□ Yes □No
	c)	Monaural foetal stethoscope	\Box Yes \Box No
	d)	Pregnancy test strips	□ Yes □No
	e)	Clinical thermometer	\Box Yes \Box No
	f)	Adult weighing scales	\Box Yes \Box No
	g)	Measuring tape	\Box Yes \Box No
	h)	Light source, for example a torch	\Box Yes \Box No
	i)	Refrigerator	\Box Yes \Box No
	j)	Pathology service (ability to test haemoglobin hba1c at point of care)	□ Yes □No
	k)	Test strips for urine (10 parameters)	□ Yes □No
	I)	BMI growth charts for adolescents	□ Yes □No
	m)	Height meter	\Box Yes \Box No
	n)	Ophthalmoscope set	\Box Yes \Box No
	o)	Otoscope set	\Box Yes \Box No
	p)	Gloves	\Box Yes \Box No
	q)	Single-use standard disposable or auto-disposable syringes	\Box Yes \Box No
	r)	Soap or alcohol-based hand rub for hand hygiene	□ Yes □No
	s)	Communication equipment (phone or short-wave radio)	□ Yes □No
	t)	Computer with email/internet access	

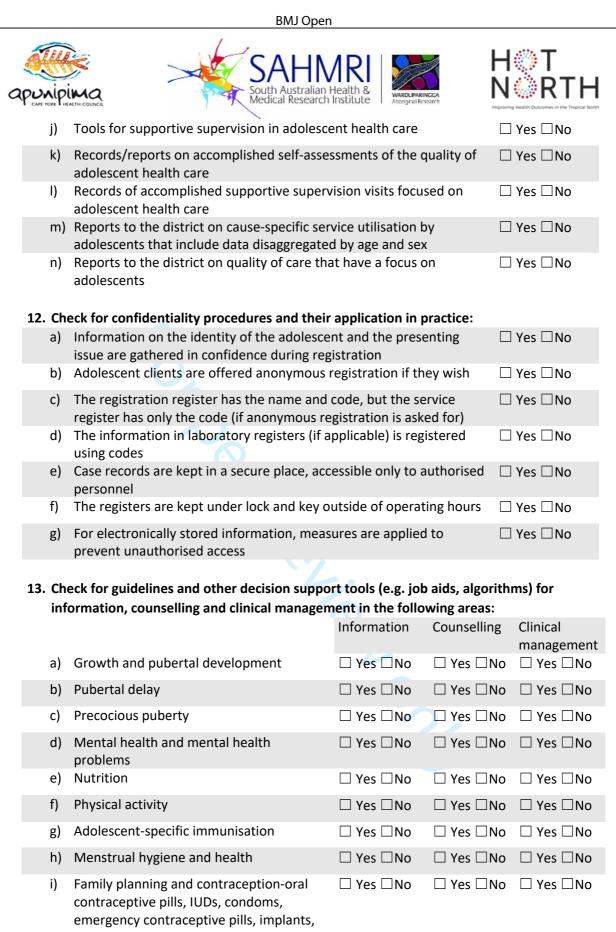
9. Check the minimum levels of stock for the following medicines and supplies in the facility:

a)	Condoms	⊔ Yes ⊔No
b)	Oral contraceptive pills	□ Yes □No
c)	Emergency contraceptive pills	□ Yes □No
d)	Injectable contraceptives	\Box Yes \Box No
e)	Contraceptive implants	□ Yes □No
f)	Intravenous fluids	□ Yes □No
g)	Paracetamol	□ Yes □No
h)	Amoxicillin	\Box Yes \Box No

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	i)	Atenolol	□ Yes □No
	j)	Ceftriaxone	□ Yes □No
	k)	Ciprofloxacin	□ Yes □No
	I)	Cotrimoxazole suspension	□ Yes □No
	m)	Diclofenac	□ Yes □No
	n)	Insulin	□ Yes □No
	o)	Azithromycin	□ Yes □No
	p)	Salbutamol	□ Yes □No
	q)	Diazepam	□ Yes □No
	r)	Magnesium sulphate	□ Yes □No
	s)	Vaccines	□ Yes □No
	t)	HPV	□ Yes □No
	10. Ch	eck for visual and auditory privacy features: There are curtains on the doors and windows	□ Yes □No
	b)	Communication between reception staff and visitors is private and	□ Yes □No
	-,	cannot be overheard, including from the waiting room	
	c)	In the offices/examining rooms, there is a screen to separate the examination area	□ Yes □No
	d)	No one can see or hear an adolescent client from the outside during	□ Yes □No
		the consultation or counselling	
	11. Ch	eck to see the following registers, tools and records:	
	a)	and sex	□ Yes □No
	b)	The reporting forms have a format that allows the presentation of data disaggregated by age and sex	□ Yes □No
	c)	Stock and medicines and supplies register	□ Yes □No
	d)	Referral register	□ Yes □No
	e)	Register/records of accomplished outreach activities to inform adolescents in community settings and services available?	□ Yes □No
	f)	Register/records of accomplished outreach activities to inform youth and other community organisations about the value of providing health services to adolescents	□ Yes □No
	g)	Register/records of accomplished outreach activities to inform parents/guardians and teachers during school meetings about the value or providing health services to adolescents	□ Yes □No
	h)	Record(s) of formal agreements/partnerships with community organisations to develop health education and behaviour-oriented communications strategies and materials, and plan service provision	□ Yes □No
	i)	Tools for facility self-assessment of the quality of adolescent health care	□ Yes □No

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	injectable contraceptives			
j)	Safe abortion and post-abortion care	\Box Yes \Box No	\Box Yes \Box No	\Box Yes \Box No
k)	Antenatal care and emergency preparedness, delivery and postnatal care	□ Yes □No	□ Yes □No	□ Yes □No
	prepared and so, derivery and postnatal care			

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Page	42	of	58
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۱)	Reproductive tract infections/sexually transmitted infections	□ Yes □No	□ Yes □No	Yes No	
m)		□ Yes □No	□ Yes □No	□ Yes □No	
n)	Sexual violence	□ Yes □No	□ Yes □No	□ Yes □No	
o)	Family violence	□ Yes □No	□ Yes □No	□ Yes □No	
p)	Bullying and school violence	□ Yes □No	□ Yes □No	□ Yes □No	
q)	Substance use and substance use disorders	□ Yes □No	□ Yes □No	□ Yes □No	
r)	Injuries	□ Yes □No	□ Yes □No	□ Yes □No	
s)	Skin problems	□ Yes □No	□ Yes □No	□ Yes □No	
t)	Chronic conditions and disabilities	□ Yes □No	□ Yes □No	□ Yes □No	
u)	Endemic diseases	□ Yes □No	□ Yes □No	□ Yes □No	
v)	fatigue, abdominal pain, diarrhoea, headache	□ Yes □No	□ Yes □No	□ Yes □No	
w)	Overweight	□ Yes □No	□ Yes □No	□ Yes □No	
x)	Underweight	□ Yes □No	□ Yes □No	□ Yes □No	
y) 14. Ch	Micronutrient (anaemia) eck if the following information items are o	☐ Yes ☐No	Yes 🗆 No	□ Yes □No	
a)	The rights of adolescents to information, r and respectful care		-	Yes 🗆 No	
b)	The policy commitment of the health facility to provide health Services to all adolescents without discrimination and to take remedial actions if necessary				
c)	The policy on confidentiality and privacy			Yes □No	
d)	The policy on free and affordable service p	provision for adol	escents 🗆]Yes □No	
15. Ch	eck to see training records/reports for the	following topics:			
a)	Communication skills to talk to adolescent	S		Yes □No	
b)	Communication skills to talk to adult visito members	ors and communit		Yes □No	
c)	The policy on privacy and confidentiality			Yes □No	
d)	Clinical case management of adolescent h	ealth conditions		Yes □No	
e)	Orientation on the importance of respecti adolescents to information and health car respectful, non-judgemental and non-disc	e that is provided	l in a	Yes □No	
f)	Policies and procedures to ensure free or a provision			Yes □No	
g)	Data collection, analysis and use for qualit adolescent health care			Yes 🗆 No	
h)	Training of outreach workers in adolescen	t health care		Yes □No	

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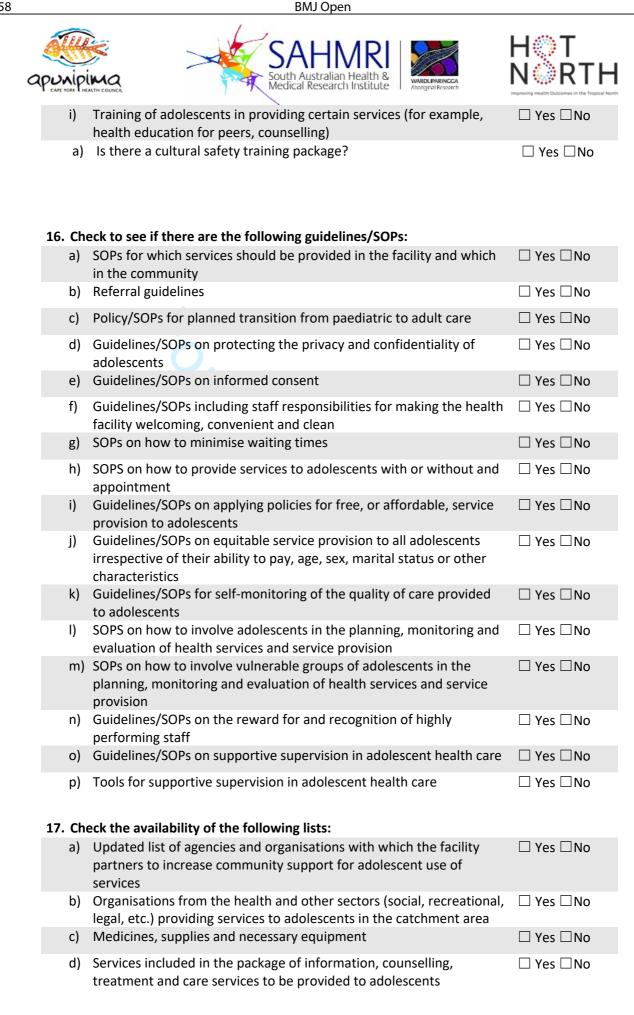
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18. Check if the job

description of the following personnel is available and has a focus on adolescent health				
care:				
a) Doctor	□ Yes □No			
b) Nurse	□ Yes □No			
c) Midwife	□ Yes □No			
d) Outreach worker	□ Yes □No			
e) Counsellor	□ Yes □No			
f) Aboriginal health work and Aboriginal health practitioner	□ Yes □No			
g) Allied health e.g. OTs, Physios, Podiatrists etc.	□ Yes □No			
h) Other (please specify)	□ Yes □No			

19. Are there Aboriginal and Torres Islander people:

a)	Involved in the design and delivery of the service?	□ Yes □No
b)	In leadership positions?	□ Yes □No
c)	Working in both clinical and nonclinical roles?	□ Yes □No
d)	Are young people consulted and involved in decisions?	□ Yes □ No

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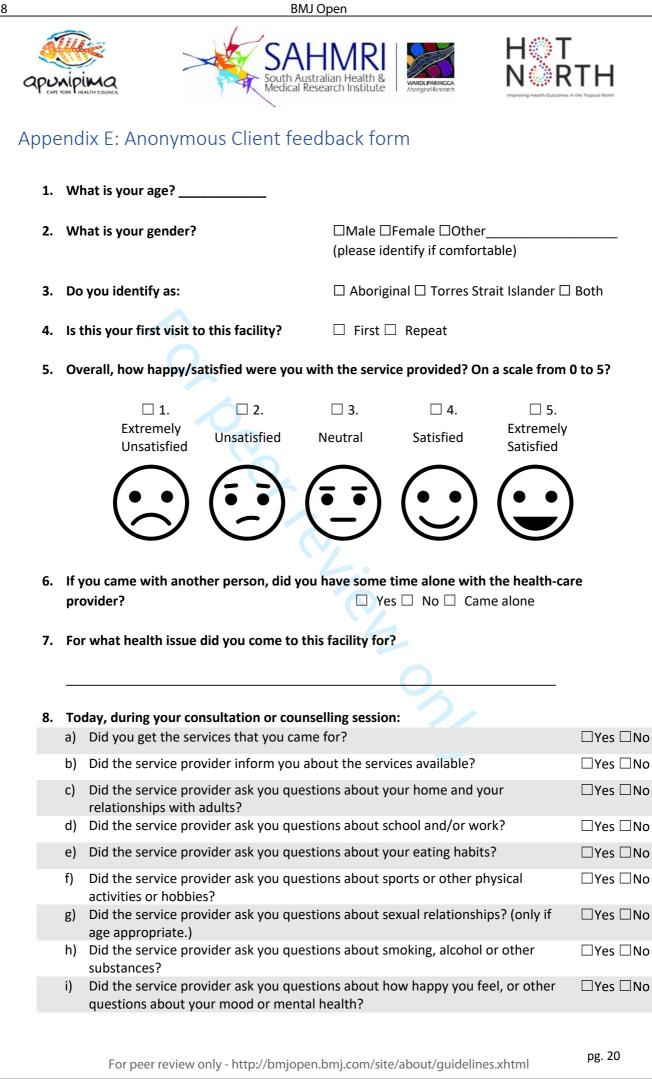
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j)	Did the service provider treat you in a friendly manner?	\Box Yes \Box No
k)	Was the service provider respectful of your needs?	□Yes □No
I)	Did anyone else enter the room during your consultation?	□Yes □No
m)	Did the service provider assure you at the beginning of the consultation that your information will not be shared with anyone without your consent?	□Yes □No
n)	Do you feel confident that the information you shared with service provider today will not be disclosed to anyone else without your consent?	□Yes □No
o)	Do you feel that the health information provided during the consultation was clear and that you understood it well?	□Yes □No
p)	Did the provider ask you if you agree with the treatment/procedure/solution that was proposed?	□Yes □No
q)	Overall, do you feel like you have been provided a culturally safe service?	□Yes □No
r)	Overall, did you feel that you were involved in the decisions regarding your care? For example, you had a chance to express your opinion or preference for the care provided, and your opinion was listened to, and heard?	□Yes □No

9.	Did you feel that support staff (receptionist, cleaning s	staff, or security staff)? were friendly
	and treated you with respect?	□Yes □No
10). Did the health care provider provide you a script for a	ny medicines? □Yes □No

11. Do you know where or how to get them?	□Yes □No

- 12. Is there anything else you would like to tell us, about the care that was provide to you?
- - 13. Is there anything else you would like to tell us, about what makes it easy to access your health care?





14. Is there anything else you would like to tell us, about what makes it hard to access your health care?



15. If you could make one recommendation to improve care based on your experience today what would it be?



End of survey. Thank you.

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Appendix F: Health Professional & Provider Survey

We are inviting Health providers including Doctors, Nurses, Aboriginal Health Workers and Allied Health professionals, to participate in a confidential online survey to identify:

- What services are currently provided to adolescents
- What training you may have received around adolescent health
- What guidelines and clinical tools you may use to provide care
- What areas of training you would value to improve care provided; and
- How else providers could be supported to provide the best care possible.

The survey has been based on global standards as defined by WHO for adolescent health. *Adolescents is defined as 10 – 24 years of age

Demographics

- 1. What is your current position(s)
- 2. What type of work do you mostly do? Community based □ FIFO □ Outreach □ Clinic based □ Mixed □
- 3. For how long have you been working in your current role? _____Months _____Years
- 4. How many days a week do you work in this role?
- 5. Do you identify as;
 - a) Aboriginal
 - b) Torres Strait Islander
 - c) Aboriginal and Torres Strait Islander
 - d) Neither Aboriginal and/or Torres Strait Islander

Current Role and Practice

- 6. From your perspective, what are the major social emotional wellbeing issues facing adolescents today?
- What percentage of your role involves or includes seeing adolescent clients?
 _____%

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How often do you work with/see adolescent clients?	
□Daily □Weekly □Once a week □Monthly □Rarely □Never	



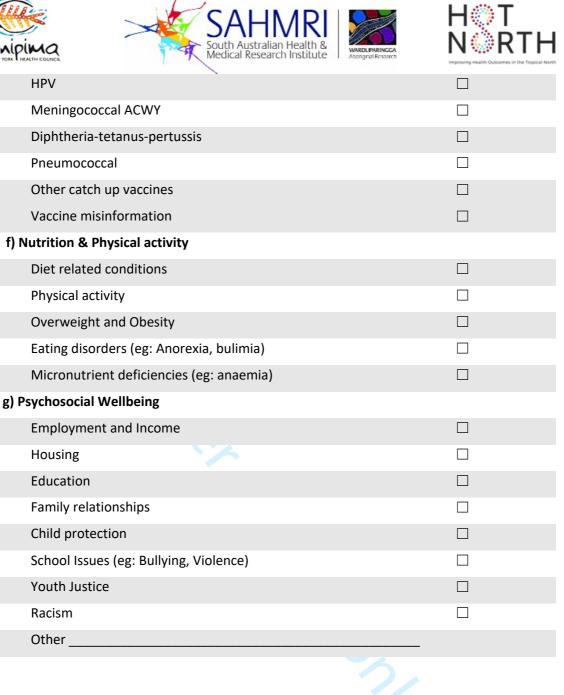
9.	In the last month, which of the following issues have you addressed with adolescent
	clients? Tick all that apply.

a) Growth and puberty development	
b) Mental health	
Mental health conditions (eg: Depression, anxiety)	
Suicide and Self-Harm	
Substance use and substance use disorders	
c) Sexual & Reproductive health	
Safe sexual practices	
Reproductive tract infections/Sexually transmitted infections	
Sexual violence	
Safe abortion and post-abortion care	
Antenatal care and emergency preparedness, delivery, and postnatal care	
Blood borne viruses and counselling	
Menstrual hygiene and health	
Contraception	
Long acting reversable contraception	
d) Specific diseases & symptoms	
Diabetes care	
Cardiovascular conditions	
Respiratory conditions	
Chronic conditions and disabilities	
Musculo-skeletal injuries and conditions	
Fatigue	
Abdominal pain and other gastronomical symptoms	
Headaches and migraines	
Skin conditions	
e) Immunisation	
Influenza	

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10a. Are you aware of other adolescent services you can refer clients too? Please lis	
	□ Yes □No
10b. Do you make referrals for adolescent clients to other services regularly?	
Why/Why not?	□ Yes □No

Why/Why not? _

□ Yes □No

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11. Do you inform adolescents about the availability of other health and social services that are available?

□ Yes □No

12. What practices or measures do you undertake to protect the confidentiality (consult information) of adolescent clients?

13. What practices or measures do you undertake to protect the privacy (physical space) of adolescent clients?

14. When you see an adolescent client for services or counselling do you?

a)	Introduce yourself first to the adolescent?	□ Yes □No
b)	Ask the adolescent if they would like to see a same-sex clinician/provider?	□ Yes □No
c)	Ask the adolescent what they would like to be called?	□ Yes □No
d)	Ask the adolescent who they have may have brought with them for the consultation?	□ Yes □No
e)	Offering if they would like an Aboriginal Health Worker present	\Box Yes \Box No
f)	Ask the adolescent if they would like a translator present?	\Box Yes \Box No
g)	Explain to the adolescents that are accompanied that you routinely spend some time alone with the adolescent towards the end of the consultation?	□ Yes □No
h)	Ask the adolescent permission to ask the accompanying person(s) their opinions/observations?	□ Yes □No
i)	Obtain, in cases when an informed consent from a third party is required, the adolescent's assent to the service/procedure?	□ Yes □No
j)	Ensure that no one can see or hear the adolescent client from outside during the consultation or counselling?	□ Yes □No
k)	Ensure that there is there adequate privacy between the consultation and examination area? eg. a screen	□ Yes □No
I)	Assure the adolescent client that no information will be disclosed to anyone (parents/other) without his/her/their permission?	□ Yes □No
m)	Explain to the adolescent client conditions when you might need to disclose information, such as mandatory reporting?	□ Yes □No
n)	Involve the adolescent in decision making and care planning?	□ Yes □No

15. During a routine consultation with an adolescent client, do you explore or screen for the following?

a) Asking the adolescent questions about home and relationships with □ Yes □No adults?

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b)	Asking the adolescent questions about school and/or work?	□ Yes □No
c)	Asking the adolescent questions about his/her/their eating habits?	□ Yes □No
d)	Asking the adolescent about sports or other physical activities/social activities/hobbies?	□ Yes □No
e)	Asking the adolescent questions about sexual relationships? (Only adolescents of an appropriate age.)	□ Yes □No
f)	Asking the adolescent questions about smoking, alcohol, or other substance use?	□ Yes □No
g)	Asking the adolescent questions about how happy he/she/they feel(s), or other questions about his/her mood or mental health?	□ Yes □No
h)	Asking the adolescent about his/her/their involvement in cultural events or activities?	□ Yes □No
16. From	what age would you provide the following advices or services for adol	escents?
a)	Healthy relationships Comment	
b)	Sexual health	
c)	Hormonal contraceptives	
d)	Condoms	
e)	STI treatment	
f)	Blood borne virus and counselling	
g)	Medical termination of pregnancy/abortion	
h)	Medicare	
	ay adolescent you have provided support for been denied services wit f yes, why?	hin the last 12
Why?		□ Yes □No
Guidel	ines and Tools	
-	u regularly use guidelines or decision support tools (such as clinical gu on, counselling, and clinical management in the following areas? Tick	-
اد	Growth and puberty development	

a) Growth and puberty development		
b) Mental health		
Mental health conditions (eg: Depression, anxiety)		
Suicide and Self-Harm		

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Substance use and substance use disorders	
c) Sexual and reproductive health	
Safe sexual practices	
Reproductive tract infections/sexually transmitted infections	
Sexual violence	
Safe abortion and post-abortion care	
Antenatal care and emergency preparedness, delivery and postnatal care	
Blood borne viruses and counselling	
Menstrual hygiene and health	
Contraception	
Long acting reversable contraception	
d) Specific diseases and symptoms	
Diabetes care	
Cardiovascular Conditions	
Respiratory Conditions	
Chronic conditions and disabilities	
Musculo-skeletal injuries and conditions	
Fatigue	
abdominal pain and other gastronomical symptoms	
headache	
Skin conditions	
e) Immunisation	
Influenza	
HPV	
Meningococcal ACWY	
Diphtheria-tetanus-pertussis	
Pneumococcal	
Other catch up vaccines	
Vaccine misinformation	
f) Nutrition & Physical activity	
Diet related conditions	
Physical activity	
Overweight/Obesity	

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Eating disorders (eg: Anorexia/Bulimia)	
Micronutrient deficiencies (eg: anaemia)	
g) Psychosocial Wellbeing	
Employment/Income	
Housing	
Education	
Family relationships	
School issues (eg: Bullying, Violence)	
Child protection	
Youth Justice	
Racism	
Other	-

19. Are you aware of adolescent health guidelines in your service in the following areas? Guidelines on:

a)	Which services should be provided in	n the facility	\Box Yes \Box No
b)	Referrals		\Box Yes \Box No
c)	Planned transition from paediatric to	o adult care	\Box Yes \Box No
d)	Informed consent		\Box Yes \Box No
e) /	At what age adolescents can access se	ervices independently	\Box Yes \Box No
e)	Providing free, or affordable, service	s to adolescents	\Box Yes \Box No
f)	Measures to protect privacy and con	fidentiality of adolescents	\Box Yes \Box No

20. From what age can you legally see an adolescent by themselves?

21. At what age can an adolescent legally have their own Medicare card?

Education and Training

22. Have you received any of the following training in adolescent health?

- a) Communication skills to talk to 🗌 Yes Satisfied 🗌 Yes want more 🗌 No but need 🗌 No don't need adolescents
- b) Communication skills to talk to \Box Yes Satisfied \Box Yes want more \Box No but need \Box No don't need adult escorts/visitors

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Page 55 of 58		BMJ Open
1 2 3	ap	SAHMRI South Australian Health & Medical Research Institute
4 5 6	c)	Providing care that respects \Box Yes Satisfied \Box Yes want more \Box No but need \Box No don't need the privacy of adolescents
7	d)	Providing confidential health Yes Satisfied Yes want more No but need No don't need care?
9 10	e)	Providing culturally safe health
11 12 13 14	f)	Clinical management of common adolescent health issues:
15 16		\Box Yes Satisfied \Box Yes want more \Box No but need \Box No don't need \Box Mental Health
17 18		□ Yes Satisfied □Yes want more □ No but need □No don't need
19 20		□ Child protection □ Yes Satisfied □ Yes want more □ No but need □ No don't need
21 22 23	g)	How to access social supports Yes Satisfied Yes want more No but need No don't need for adolescents
24	h)	How to access the NDIS Yes Satisfied Yes want more No but need No don't need
22 23 24 25 26	i)	Entering information into
27	.,	patient management systems
28 29 30	j)	Reviewing or analysing data for Yes Satisfied Yes want more No but need No don't need quality improvement
31		
32 33		Do you feel you would benefit from additional training in adolescent health? If yes, what are
34	your	r training needs?
35 36		
35 36 37		a) Cultural safety High High Low Not needed
38 39		b) Normal adolescent development \Box High \Box Medium \Box Low \Box Not needed
40		c) How to engage with adolescents High Medium Low Not needed
41 42		d) How to assess competence
43		e) How to provide confidential health care $\ \square$ High \square Medium $\ \square$ Low \square Not needed
42 43 44 45 46		f) How to respond to mental health
46 47		g) Sexual health
48		h) Injury 🗌 High 🗌 Medium 🗌 Low 🗌 Not needed

60

Unplanned pregnancy

Issues with justice

Child protection

Other ____

i)

j)

k)

I)

 \Box High \Box Medium $\ \Box$ Low \Box Not needed

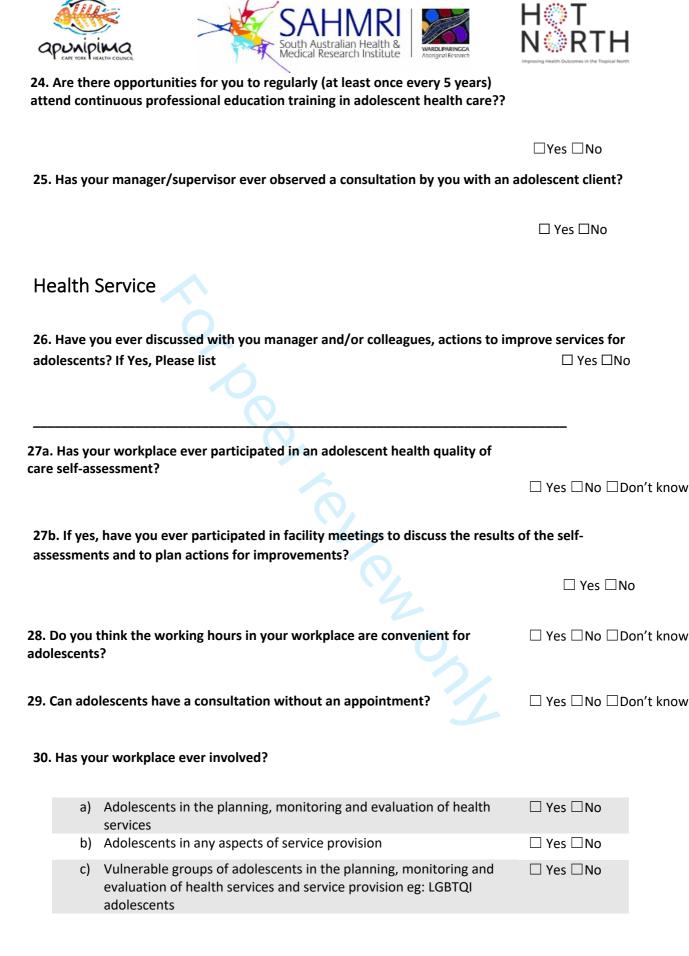
 \Box High \Box Medium \Box Low \Box Not needed

 \Box High \Box Medium \Box Low \Box Not needed

 \Box High \Box Medium \Box Low \Box Not needed

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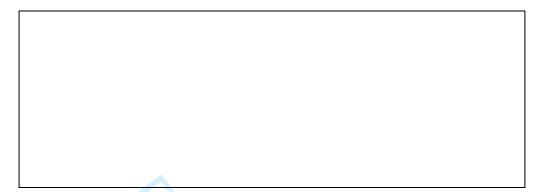
a)	Develop edu service provis			nication strategies	and place	□ Yes □No
b)	Establish refe			cents		□ Yes □No
c) Othe	er					
	nat do you thir rt adolescent c		other ways y	our service could	engage or	
						_
Additio	nal Trainir	ng & Supr	ort			
	ou feel you ha	• · ·		your supervisor to	o improve th	ne quality of care
						🗆 Yes 🗆
34 b. If no	, what additio	nal support(s) would you	like to receive?		
34 b. lf no	, what addition	nal support(s) would you	like to receive?		
34 b. lf no	, what additio	nal support(s) would you	like to receive?		
 35a. Do yc	ou feel you hav	ve the time, t	raining, and	resources availab	ole to improv	
 35a. Do yc		ve the time, t	raining, and	resources availab	ole to improv	
 35a. Do yc	ou feel you hav	ve the time, t	raining, and	resources availab	ole to improv	ve the quality of
 35a. Do yc	ou feel you hav dolescents, and	ve the time, t	raining, and	resources availab	ole to improv	ve the quality of
35a. Do yo care for ac	ou feel you hav dolescents, and	ve the time, t	raining, and	resources availab	ole to improv	ve the quality of
35a. Do yc care for ac 35b. Why/	ou feel you hav dolescents, and /Why not?	ve the time, t d to comply v	raining, and vith quality	resources availab	32	ve the quality of
35a. Do yo care for ac 35b. Why/ 36. How co	ou feel you hav dolescents, and /Why not? onfident do yo	ve the time, t d to comply v bu feel about	raining, and vith quality your knowl	resources availat standards?	ovide care to	ve the quality of Yes o adolescents?
35a. Do yo care for ac 35b. Why/ 36. How co	ou feel you hav dolescents, and /Why not? onfident do yo	ve the time, t d to comply v bu feel about	raining, and vith quality your knowl	resources availat standards? edge of how to pr	ovide care to	ve the quality of
35a. Do yc care for ac 35b. Why/ 36. How ce	ou feel you hav dolescents, and /Why not? onfident do yo ry confident	ve the time, t d to comply v ou feel about Confident	raining, and vith quality your knowl	resources availat standards? edge of how to pr	ovide care to	ve the quality of Yes o adolescents? t confident





Page 58 of 58

38. Is there anything else you'd like to tell us, about the care you provide to adolescents?



39. Is there anything else you'd like to tell us, about the enablers and barriers to providing care?



40. Is there anything else you'd like to tell us, about what you need to provide the best care you can?

End of questionnaire. Thank you.

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Appendix G: Health Providers/Professionals Interview Guide (IDI_hw)

Title	Paving the path to accessible health care for Indigenous adolescents
Project Number	
Principal Investigator	A/Prof Peter Azzopardi
Location	Cairns, Victoria
Survey method	In depth interviews with health providers

Thank you very much for agreeing to participate in this interview.

Today we invite you to share your opinions and reflections on what the health needs of young people are, what keeps them healthy and explore barriers to attending primary health services.

During the discussion we would like to encourage you to please not refer to individuals, places, and dates by name; if actual names are used, they will be replaced with a pseudonym in the field notes.

Introductions and acknowledgement

- Facilitator and participant to introduce themselves.
- Please tell me about yourself.

Health issues for young people

I would like to learn a bit about your perspective of the health issues facing young people.

- In your opinion, what are the key health issues for young people?
 - Prompts: Being away/disconnected from culture, family or friends, social and emotional wellbeing, sexual and reproductive health, smoking, use of alcohol or drugs
- How does this impact a young person's life?
 - Prompts: Other areas of life or wellbeing e.g. mental, social and emotional, school, work, family, friends, engaging in healthy life choices
- From your perspective, what are the major social emotional wellbeing issues facing adolescents today?
 - Prompts: Being away/disconnected from culture, family or friends, racism and discrimination, bullying and online harassment, climate change etc
- How can a young person remain healthy?



1₿







Prompts: Supportive

network, friends, family, school, work, active lifestyle, nutritious food, taking medications

Enablers and barriers

- In your opinion, what are the challenges and barriers to providing health care for young people?
 - Prompts: knowledge of services, ability of services to cater for young people, suitable hours for young people, availability of services (ie limited mental health services)
- What supports and enables good health care to young people?
 - Prompts: allocated resources, friendly and welcoming services, collaborative approaches
- What do you think could be done to improve access to health service for young people?
 - Prompts: tailored service, welcoming environment, respect, young people included in the decision-making process

Service delivery

- How you think that health care to young people can be improved?
 - Prompts: training, finding out from young people, including young people in the service design or structure
- What would help you strengthen/enhance the health care you provide to young people?
 - Prompts: training, support, leadership, funding, resources
- What areas of training would support you/would you like in health care provision for young people?
 - Prompts: sexual health training, communication, rights, cultural safety
- What would an ideal youth friendly service look like?
 - Prompts: welcoming to young people, young people represented in the service structure, services that are specific to young people's needs