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Title	Investing in the health of Aboriginal and Torres Strait Islander adolescents: a foundation for achieving health equity
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Investing in the health of Aboriginal and Torres Strait Islander adolescents: a foundation for achieving health equity

Without specific investments in the health of adolescents, Australia will not redress health inequalities experienced by Aboriginal and Torres Strait Island peoples

One-third of the Australian Aboriginal and Torres Strait Islander (First Nations) population are adolescents or young people aged 10–24 years.¹ These young people are central to assuring cultural continuity and the prosperity of Australia's First Nations people. First Nations young people are incredibly resilient, the majority reporting good health, pride in their culture, and strong nurturing relationships with family and community.^{1,2} However, as highlighted by two recent publications, there are also substantial health needs that appear to be largely unmet by current services.^{1,3} First Nations adolescents experience a heavy burden of mental disorders, suicide and self-harm, sexually transmitted infection, and injury — all health needs that typically manifest during adolescence. They also experience an excessive burden of pneumonia and skin infections (more typical of childhood), early onset of type 2 diabetes and ischaemic heart disease (more typical of adulthood), and a high burden of rheumatic heart disease and bronchiectasis, otherwise rare in Australia.¹ As a result, adolescence is where disparities in mortality widen between First Nations and other Australians. However, more than 80% of mortality among First Nations adolescents is potentially avoidable within the current health system, providing an important opportunity for health gain.¹

Adolescence is also a critical developmental window that lays the foundations for health across the life course — and that of the next generation.⁴ In addition to puberty and physical growth, adolescence involves neurocognitive maturation that extends into the mid-20s. These transitions are responsive to environmental exposures, including adverse exposures such as psychological trauma and racism. As such, further to childhood, adolescence provides an opportunity to shape developmental trajectories and human capital.⁴ Related to these biological transitions are profound transitions in social role, including those related to cultural identity, education and employment, and family role. The timing and nature of these transitions shape the broader sociocultural determinants of health, underpinning the health inequity experienced by First Nations

Australians.⁵

These new understandings provide a rationale for bringing a clearer focus to adolescents within health and social policy. Here we outline four key principles and some specific recommendations to improve First Nations adolescent health in Australia, building on those made in a *Lancet* commission on adolescent health and wellbeing (Box).⁴

Engage with adolescents and their communities

Young people have a fundamental right to be involved in matters that concern them. Further, adolescents and young adults bring unique perspectives and skills, particularly around social mobilisation and digital communication, and their engagement is essential to building and designing a better future.⁴ As outlined in the Koorie Youth Council's recent Ngaga-dji (hear me) report (<https://www.ngaga-djiproject.org.au/>), a stronger focus on youth participation is necessary for "relevant and effective solutions".

Models of engaging young people range from tokenism to completely youth led. In general, models that enable young people's control and responsibility are most effective when coupled with supportive adults and community.⁴ This approach is consistent with the evolving capacities of young people but also recognises the critical role that parents, guardians and community play in supporting health and access to services. This engagement is also critical to enabling and supporting cultural continuity; only half of First Nations adolescents are satisfied with their current cultural knowledge.¹

There are several ways in which First Nations adolescents can engage with policy and decision makers. For example, the Koorie Youth Council and the Northern Territory Youth Round Table provide a forum for the interests and issues of youth to be presented to local governments. The Australian Electoral Commission provides a capacity building National Indigenous Youth Parliament focused on skills relating to legislation, media and communication. Initiatives such as these provide a platform on which to build a model of stronger youth engagement where young people have an equal seat at the table.

Define priority areas for First Nations adolescent health to focus investments and effort

Australia does not have a national strategy for First Nations adolescent health, and as a result, investments have been limited, reactive and fragmented. Previous efforts have focused separately on sexually transmitted infections,⁶ social and emotional wellbeing,⁷ suicide,⁸ youth justice,⁹ rheumatic heart disease,¹⁰ and risk behaviours such as tobacco smoking and substance misuse.¹¹ However, the needs of First Nations adolescents and opportunities to improve health extend well beyond these areas.¹ Largely absent from policy has been a specific focus on injuries that are not self-inflicted, including road traffic injuries and interpersonal violence, leading contributors to poor health in this age group.¹ Equally absent from policy has been a response to the excess burden of metabolic

syndrome, an important driver of the health gap between First Nations and other Australian adults.³ Underpinning these needs is substantial inequity across the social determinants; one-quarter of First Nations adolescents live in overcrowded houses, and 10% in houses that lack basic water and sanitation.¹ Intergenerational trauma — resulting from colonisation; forced separation from family, land, community and culture; and ongoing discrimination and exclusion (including determinant policies and practices) — remains a critical issue, with the needs of young adolescents often overlooked despite the substantial impact on health and wellbeing.¹²

The process of setting priorities should embody the right to self-determination under the United Nations Declaration on the Rights of Indigenous Peoples. A set of national priorities for First Nations adolescent health would help ensure appropriate resource allocation and policy development, while enabling the setting of locally defined priorities and responses by individual communities.

Improve adolescent health and wellbeing through intersectoral action

Addressing the health needs of First Nations adolescents requires investments and actions in sectors that extend beyond health. The education sector provides an important platform for health promotion and prevention, with education in its own right a powerful determinant of health across the life course.⁴ Ensuring education that is culturally safe and responsive to the needs arising from socio-economic inequity, mobility due to insecure housing, teenage parenthood and poor physical and mental health is an important target for investment. Of note, 70% of First Nations 15–19-year-olds not currently in education aspire to re-engage in the future, providing a very real opportunity to improve wellbeing.¹

Opportunities for health gain within the health system are yet to be fully realised. The Medicare Benefits Schedule item 715 Indigenous health check provides a mechanism for early identification and modification of health risk and the detection and treatment of inconspicuous health needs.¹³ While health screening would appear to be most effective for adolescents (given this is when health risks typically emerge), this is the age when uptake is the lowest, likely reflecting barriers to accessing primary health care. The co-design of accessible and responsive primary health care represents an important target for action, including the Aboriginal community controlled health sector but also ensuring that the mainstream health system is culturally safe. There is also a need to strengthen linkages between levels of the health system, particularly hospitals and primary care.

A challenge to addressing the health needs of First Nations adolescents is the early age of onset of both health risk and poor outcome. Young adolescents may not, however, be seen as competent or legally able to access health interventions independently, despite Australian legislation recognising the rights of the competent minor.¹⁴ This again highlights the need to engage with communities and families, as well as health providers, to provide an enabling environment for service access while also respecting the evolving autonomy of young people. A further challenge is responding to the needs of young

people who are incarcerated or in out-of-home care. These young people are at high risk of poor mental and physical health, as well as being typically separated from culture and family, which are powerful determinants of wellbeing.⁴

Define policy relevant indicators and strengthen data quality to enable accountability

The National Indigenous Reform Agreement, built around specific targets and indicators, has contributed to effective and accountable public policy for First Nations Australians (<https://meteor.aihw.gov.au/content/index.phtml/itemId/697092>). While adolescents are currently only mentioned in the National Indigenous Reform Agreement in the context of education, the current refresh of targets and indicators provides an opportunity to be more inclusive of the needs of adolescents. We have recently populated 12 headline indicators for adolescent health across the globe.¹⁵ These headline indicators may provide a framework for measuring some aspects of First Nations adolescent health as they are aligned with the United Nations Sustainable Development Goals.¹⁵ Yet they remain incomplete in terms of social and cultural determinants of health. As an example, indicators that speak to the issues of cultural connection, community participation and identity are required.

To ensure accountable policy, we need to improve the completeness, quality and validity of health and administrative data, inclusive of information pertaining to culture and identity. There is a need to engage with young people directly as respondents in the existing health surveys, particularly given their complex health needs. There is also a need to improve the quality of measures, both through the use of validated scales and appropriate direct assessment of health needs. The quality of identification of Indigenous status in administrative datasets must also be further improved. Without these data, the needs of First Nations adolescents will remain invisible.

Summary

The health of First Nations adolescents has remained at the margins of policy for too long. Investments in First Nations adolescent health will bring improved health to adolescents (one-third of the First Nations population), and will also improve health for future adults and ensure the best start to life for the next generation. The principles outlined here provide a framework for investing in this critical developmental stage. Without specific investments in the health of First Nations adolescents, Australia will not effectively redress health inequalities experienced by Australia's First Nations peoples.

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References

- 1 Azzopardi PS, Sawyer SM, Carlin JB, et al. Health and wellbeing of Indigenous adolescents in Australia: a systematic synthesis of population data. *Lancet* 2018; 391: 766-782.
- 2 Young C, Craig JC, Clapham K, et al. The prevalence and protective factors for resilience in adolescent Aboriginal Australians living in urban areas: a cross-sectional study. *Aust N Z J Public Health* 2019; 43: 8-14.
- 3 Australian Institute of Health and Welfare. Aboriginal and Torres Strait Islander adolescent and youth health and wellbeing 2018. Canberra: AIHW, 2018.
- 4 Patton GC, Sawyer SM, Santelli JS, et al. Our future: a *Lancet* commission on adolescent health and wellbeing. *Lancet* 2016; 387: 2423-2478.
- 5 Marmot M. Social determinants and the health of Indigenous Australians. *Med J Aust* 2011; 194: 512-513. <https://www.mja.com.au/journal/2011/194/10/social-determinants-and-health-indigenous-australians>
- 6 Australian Government Department of Health. Fifth National Aboriginal and Torres Strait Islander Blood Borne Virus and Sexually Transmissible Infections Strategy 2018–2022. Canberra: Commonwealth of Australia, 2018. [https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-bbvs-1/\\$File/ATSI-Fifth-Nat-Strategy-2018-22.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-bbvs-1/$File/ATSI-Fifth-Nat-Strategy-2018-22.pdf) (viewed Jan 2020).
- 7 Haswell M, Blignault I, Fitzpatrick S, Jackson Pulver L. The social and emotional wellbeing of indigenous youth: reviewing and extending the evidence and examining its implications for policy and practice. Sydney: Muru Marri, UNSW, 2013.
- 8 The Elders' report into preventing Indigenous self-harm and youth suicide. People Culture Environment in partnership with Our Generation Media, 2014. <https://apo.org.au/sites/default/files/resource-files/2014/04/apo-nid40060-1209076.pdf> (viewed Jan 2020).
- 9 Australian Government. Royal Commission And Board Of Inquiry Into The Protection And Detention Of Children In The Northern Territory: findings and recommendations. Canberra: Australian Government, 2017. <https://www.royalcommission.gov.au/sites/default/files/2019-01/rcnt-royal-commission-nt-findings-and-recommendations.pdf> (viewed Jan 2020).
- 10 Australian Institute of Health and Welfare. Acute rheumatic fever and rheumatic heart disease in Australia. Canberra: AIHW, 2019. <https://www.aihw.gov.au/reports/indigenous-australians/acute-rheumatic-fever-rheumatic-heart-disease/contents/summary> (viewed Jan 2020).
- 11 Australian Government Department of Health. National Aboriginal and Torres Strait Islander Health Plan 2013–2023. Canberra: Commonwealth of Australia, 2013. <https://www1.health.gov.au/internet/main/publishing.nsf/Content/natsih-plan> (viewed Jan 2020).
- 12 Coroner's Court of Western Australia. Inquest into the 13 deaths of children and young persons in the Kimberley region. 7 Feb 2019. https://www.coronerscourt.wa.gov.au//inquest_into_the_13_deaths_of_children_and_young_persons_in_the_ki

mberley_region.aspx (viewed Jan 2020).

- 13 National Aboriginal Community Controlled Health Organisation and the Royal Australian College of General Practitioners. National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people. Melbourne: RACGP, 2018. <https://www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/view-all-racgp-guidelines/national-guide> (viewed Jan 2020).
- 14 Sanci LA, Sawyer SM, Kang MS, et al. Confidential health care for adolescents: reconciling clinical evidence with family values. *Med J Aust* 2005; 183: 410-414. <https://www.mja.com.au/journal/2005/183/8/confidential-health-care-adolescents-reconciling-clinical-evidence-family-values>
- 15 Azzopardi PS, Hearps SJC, Francis KL, et al. Progress in adolescent health and wellbeing: tracking 12 headline indicators for 195 countries and territories, 1990–2016. *Lancet* 2019; 393: 1101-1118.

[Box]

Summary of principles and some specific recommendations to improve First Nations adolescent health*

Principle	Some specific recommendations
Engage with adolescents and their communities	<ul style="list-style-type: none"> Engage adolescents fully in discussing, planning, implementing and deciding on issues that affect them. This includes research, service development and delivery, and policy. Enable the meaningful engagement of young people through appropriate resourcing, training, and respectful mentorship from supportive adults. Also engage the parents, guardians and communities of adolescents and the organisations that support their needs in decisions about young people's health, but not at the expense of young people's voices.
Define priority areas for First Nations adolescent health to focus investments and efforts	<ul style="list-style-type: none"> Define priority areas for First Nations adolescent health to enable effective policy, investment and action. These priorities should be determined by young people, their communities and organisations that support them. These priorities may include consideration of key drivers of health (such as cultural connection, education, voice) and contributors to ill health (such as suicide, unintentional injuries, substance misuse, incarceration, metabolic risk and disease, racism and intergenerational trauma). Develop a national strategy for adolescent health in Australia, and a specific strategy for the health of First Nations adolescents that is responsive to defined priorities. This strategy should engage a nationally representative group of First Nations young people and their communities, be comprehensive, recognise the need for intersectoral response, and have clear goals and indicators to ensure accountable action.
Improve adolescent health and wellbeing through intersectoral action	<ul style="list-style-type: none"> The health sector should engage and collaborate with sectors beyond health in the response to First Nations adolescent health, particularly education, social services and justice. Opportunities for health gain through the health system should be optimised. This includes co-designing models of primary care that are accessible and responsive to needs, strengthening existing platforms (Indigenous health check [item 715, Medicare Benefits Schedule], immunisation), building on existing areas of focus (social and emotional wellbeing, suicide prevention, sexual and reproductive health) and strengthening linkages between levels of the health system. Legislation should be reformed so as to protect young people (ie, raise the minimum age of criminal responsibility) and to enable young people to independently access confidential care.
Define policy relevant indicators and strengthen data quality to enable accountability	<ul style="list-style-type: none"> Indicators aligned with the identified priority areas of need should be agreed and embedded within a national strategy for adolescent health and other key policy frameworks, including the National Indigenous Reform Agreement. Strengthen the measurement of First Nations adolescent health within existing surveys through direct engagement with young people as respondents and use of validated measures.

- Strengthen administrative data, including the quality of identification of Indigenous status.

* Adapted from Patton et al.⁴

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