

CSIRO Submission 20/720

## Draft Indigenous Evaluation Strategy

Productivity Commission

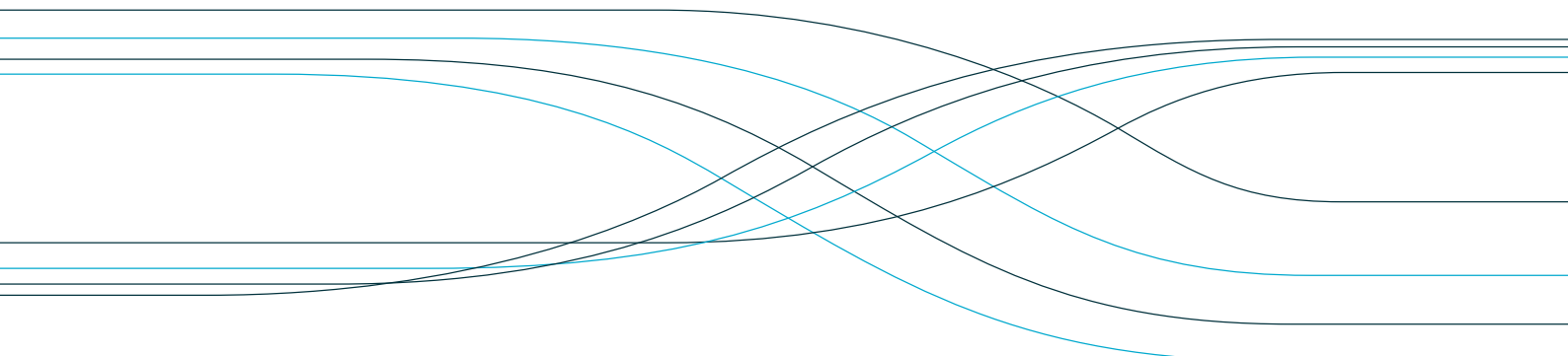
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**Enquiries should be addressed to:**

Claire Manson, Executive Officer  
Future Industries Office

**Main Submission Author:**

Chris Banks  
CSIRO Education and Outreach



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## Executive Summary

CSIRO is committed to the participation of and partnerships with Aboriginal and Torres Strait Islander peoples and communities. CSIRO's feedback and recommendations on the draft Strategy are organised around five themes:

### *Impact planning*

- Currently the Strategy focuses on evaluation and would benefit from including more discussion of planning and monitoring of impact to ensure the entire evaluation lifecycle is represented.
- A more detailed impact pathway for the Strategy could increase clarity on how the intended outcomes will be achieved.

### *Diversity and strengths-based approaches*

- Recognition of the diversity of Aboriginal and Torres Strait Islander peoples and evaluations through a strengths-based approach would be advantageous, including in the language of the Strategy, acknowledging the existing strengths of Indigenous evaluators and organisations, and membership of the Indigenous Evaluation Council.

### *Indigenous-led good practice and evaluation approaches*

- Acknowledgement and advocacy for Indigenous research and evaluation methods could improve the effectiveness of the Strategy.
- Ensuring evaluation findings are provided to Aboriginal and Torres Strait Islander peoples and communities in equitable and meaningful ways, including in language, would ensure findings are useful and accepted.
- Assessments of how effective communicating evaluation evidence has been for people and communities, and how useful it has been to communities, can improve information dissemination.
- Engaging evaluation participants for as long as is mutually beneficial can have ongoing advantages.
- Ensuring evaluation tools and methodologies are validated for use by Aboriginal and Torres Strait Islander communities will increase the acceptability and benefit of findings.
- Aboriginal and Torres Strait Islander evaluators and organisations leading or co-leading evaluations can increase the credibility and quality of evaluations.
- Ensuring Aboriginal and Torres Strait Islander community members involved in evaluations are recognised as co-authors on reports and academic articles, where appropriate, can help ensure roles and knowledges are valued.
- Including 'sky' in the 'Land and waters' Priority policy area can be more inclusive of a significant connection Aboriginal and Torres Strait Islander peoples have.

### *Data governance and sovereignty*

- Incorporating data sovereignty and intellectual property into the evaluation data model will strengthen the Strategy's commitments to these rights.
- Ensuring Aboriginal and Torres Strait Islander organisations with expertise in data sovereignty and data dictionaries are involved in or lead relevant aspects of the Strategy will be mutually beneficial.

- Aggregating existing platforms to make data and evidence more accessible can supplement the aims of the central clearinghouse of evaluations.
- The resourcing of skills enhancements and platforms for Aboriginal and Torres Strait Islander peoples to build on existing skills to access and analyse data will ensure community priorities can be pursued.

#### *Ethical considerations*

- Citing the overarching guide for human research in Australia will provide clarity on the structure of ethics guidelines.
- Clarifying why some evaluations may not require ethics review will be helpful for readers' understanding.
- Clarifying that ethics reviews are essential components of the evaluation process would help put into perspective their importance.

#### *Implementation and operationalisation*

- Defining key concepts and terms, such as 'useful' and 'improvement', will assist with the operationalisation of the Strategy.
- Seeking the diversity of Aboriginal and Torres Strait Islander voices and experiences will guide and benefit the evaluation process.
- Providing guidance on different approaches needed to evaluate and integrate local, regional, and national policies and programs will produce more credible evaluation outcomes.
- Including guidance on required cultural competencies of evaluators and how they can be assessed by agencies would be beneficial.

## Introduction

CSIRO welcomes the opportunity to provide input to the Productivity Commission's draft Indigenous Evaluation Strategy. CSIRO has extensive experience partnering with Aboriginal and Torres Strait Islander peoples and communities to deliver research and education programs, and to evaluate their impact:

- The Indigenous Science Program is a whole of organisation platform to deliver science solutions prioritised by Indigenous Australia; pathways that embrace co-development in how we deliver our science; and talent that is inspired and equipped to make a difference for the nation.
- Indigenous Futures ([www.csiro.au/en/Showcase/Indigenous-Futures](http://www.csiro.au/en/Showcase/Indigenous-Futures)) involves working with Indigenous communities to ensure sustainable futures for Indigenous peoples, cultures, and country.
- CSIRO's Indigenous Engagement Strategy ([www.csiro.au/en/Showcase/Indigenous-Futures](http://www.csiro.au/en/Showcase/Indigenous-Futures)) aims to achieve greater Indigenous participation in CSIRO's research and development agenda and activities.
- CSIRO has also worked closely with Aboriginal and Torres Strait Islander knowledge custodians on approaches to land and sea management ([www.csiro.au/en/Research/Environment/Land-management/Indigenous](http://www.csiro.au/en/Research/Environment/Land-management/Indigenous)).
- The Indigenous STEM Education Project ([www.csiro.au/en/Education/Programs/Indigenous-STEM](http://www.csiro.au/en/Education/Programs/Indigenous-STEM)), funded by the BHP Foundation and delivered by CSIRO, is a six-year project aims to increase participation of Aboriginal and Torres Strait Islander students in science, technology, engineering and mathematics (STEM). The Project has involved detailed monitoring and evaluation to improve practice and share lessons more broadly (CSIRO, 2020).

CSIRO has extensive experience with co-design approaches and partnerships with Aboriginal and Torres Strait Islander peoples and communities that can assist with the implementation of the final Strategy through sharing effective co-design, research, and evaluation practice with other agencies. CSIRO's research and evaluation evidence, and the voices of Aboriginal and Torres Strait Islander staff, provide insights that may help inform the final Indigenous Evaluation Strategy. Feedback on the Strategy is organised around general themes with references to specific principles, priorities, and actions in the draft Strategy where relevant.

## Impact planning

The focus on evaluation in the Strategy could be supplemented by more discussion of planning, evaluability, and monitoring, in terms of the Strategy itself and programs and policies for Aboriginal and Torres Strait Islander peoples. A relevant framework that could be applied to the Strategy and relevant policies and programs is CSIRO's Impact planning and monitoring, part of CSIRO's overall Impact Model<sup>1</sup> ([www.csiro.au/en/About/Our-impact/Our-impact-model](http://www.csiro.au/en/About/Our-impact/Our-impact-model)). Impact planning and monitoring involves the continuous collection and analysis of evidence and reporting on progress against impact pathways. This involves planning, monitoring, evaluating, and reporting activities, which ensures there is a consistent approach to planning and managing the impact of programs and research (Dowd, Keenan & Cosgrove, 2020). Impact management is integrated into CSIRO's strategic and operational plans and relies on a two-way engagement with all stakeholders along the impact pathway to ensure the research is relevant, realistic and that risks are identified and mitigated. The final Indigenous Evaluation Strategy would also benefit from a robust Impact pathway analysis (CSIRO, 2020) to ensure there is clarity around how desired impacts, such as 'Better lives for Aboriginal and Torres Strait Islander people' will result from the intermediate outcome of 'Better policies and programs.' The Impact framework is adaptable to the goals of Aboriginal and Torres Strait Islander peoples and communities and can be developed and adapted in partnership with communities, particularly in terms of indicators of success. Impact planning also explicitly ensures there are opportunities for input at all stages of the program and evaluation lifecycles. This can ensure Aboriginal and Torres Strait Islander perspectives are woven through-out program and evaluation design and implementation, that opportunities for reflection and sensitivity to community aspirations are incorporated, and that outcomes and measures important to Aboriginal and Torres Strait Islander peoples are included.

## Diversity and strengths-based approaches

Aboriginal and Torres Strait Islander peoples are diverse and so are experiences with different government agencies and approaches. Considered of this diversity through a strengths-based approach to evaluation, and specifically in the Strategy can offer a solution, rather than a problem or deficit focus (Fogarty, Lovell, Langenberg, & Heron, 2018). For example, 'lift the bar' on the quality of evaluations could be reframed as building on existing strengths, which may vary from evaluation to evaluation, from community to community, and region to region across Australia. In addition, removing references to Aboriginal and/or Torres Strait Islander peoples as 'they' and 'them' could avoid any unintended perceptions of a dichotomous 'us' and 'them', and promote the genuine two-way approach the Strategy aims for (Reconciliation Australia, 2018a).

A strengths-based approach to evaluation is employed in CSIRO's Indigenous STEM Education Project. Evaluation of this Project is based on identifying program and community strengths and 'what works' and creating opportunities for ongoing learning and sustainability (Cherry, Banks, Mudhan & McNeilly, 2019). Areas for a strengths-based approach in the draft Strategy could include creating opportunities for Aboriginal and Torres Strait Islander people to lead the prioritisation of evaluation priorities, and the acknowledgement of the existing capabilities, skills, and successes of Aboriginal and Torres Strait Islander evaluators and organisations. Another opportunity for a strengths-based approach is the membership of the Indigenous Evaluation Council. Aiming for all members of the Council to be Aboriginal and Torres Strait Islander people, with non-Indigenous Australian Government staff being additional to Council membership, would

<sup>1</sup> In CSIRO, the Impact Model is applied to science and research, but the impact model can be applied to any policy, program, or domain.

show the highest levels of expectation around Indigenous participation and leadership. Strong Indigenous leadership has been shown to be a key success factor for Indigenous programs (Morely, 2015).

## **Indigenous-led good practice and evaluation approaches**

In terms of the Credible principle, the Strategy could more explicitly consider different and/or competing understandings of what is considered 'credible' evidence to inform evaluations, and to acknowledge the limitations of some traditional evaluation methods and approaches (for example, see Austin et al., 2018; Robinson, James & Whitehead, 2016). Indigenous evaluation research traditions, methods, and approaches could also be more prominently featured in the Strategy, rather than in A Guide to Evaluation under the Indigenous Evaluation Strategy (the Guide) only, given their importance (Laycock, Walker, Harrison & Brands, 2011; Robinson, Maclean, Hill, Bock, & Rist, 2016; Ryder et al., 2020). The Guide advocates for embedding Indigenous methods into evaluation, however research shows that a more substantial approach that brings together Indigenous and Western research traditions has the most chance of achieving the aims of the Strategy (Katz, Newton, Bates & Raven, 2016). For example, place-based evaluations and 'boundary work,' that supports knowledge sharing and co-creation between research partners and that can translate (evaluation) research outcomes into on-ground action, are useful collaborative approaches (Robinson & Wallington, 2012; Zurba, Maclean, Woodward, & Islam, 2018). Examples of this two-way approach include the methods outlined by two Aboriginal and/or Torres Strait Islander researchers at CSIRO to increase awareness of building mutually conducive and appropriate principles, protocols, and practices that address the gathering, sharing, and use of Traditional Ecological Knowledge in marine research (Fischer & Hunter, 2017); and the weaving of Indigenous knowledges with artificial intelligence to manage complex threats affecting joint management lands (<https://www.csiro.au/en/News/News-releases/2019/AI-transforms-Kakadu-management>).

CSIRO's experience is that it is important to ensure that findings from evaluations are generated in partnership with communities and communicated back to Aboriginal and Torres Strait Islander communities and program partners. For example, CSIRO's engagement with the Data Integration Partnership Agreement (<https://www.pmc.gov.au/public-data/data-integration-partnership-australia>) and Physical Environment Analysis Network (<https://www.pean.gov.au/>) investigated the benefits of Indigenous environmental programs using CARE principles for Indigenous data governance: collective benefit, authority to control, responsibility and ethics (<https://www.gida-global.org/care>). These principles enabled Aboriginal and Torres Strait Islander peoples to create value from Indigenous data in ways that are grounded in Indigenous worldviews and realise knowledge economy opportunities. Specifically, the principles guided data collection and analysis on Indigenous environmental management, employment, and businesses, using data held by multiple federal agencies.

CARE principles also guide efforts to ensure program evaluations are communicated so that results are meaningful and tailored to audiences (The Overarching and Useful principles, and in Section 4 of the Guide). A CSIRO program that demonstrates the commitment to keeping evaluation participants involved in the longer term is the Marine National Facility (MNF) Indigenous Time at Sea Scholarship program (<https://mnf.csiro.au/en/Education/ITSS-Scholarship>), which places Aboriginal and Torres Strait Islander university students on research voyages. The program was co-developed with Aboriginal and Torres Strait Islander stakeholders, including a cadet, and the evaluation activities were designed to enable continuous feedback from, and long-term engagement with, participants. This includes an alumni program, which aims to create a

community of practice that supports participants from voyages on RV *Investigator* to continue to connect, consult and collaborate in order to share knowledge, experience and ideas.

The reporting of evaluation findings and communicating back to Aboriginal and Torres Strait Islander people, communities and organisations in the Strategy and Guide could also be strengthened by including more references to ensuring evaluation plans and findings are translated into language where appropriate, for example oral recordings for remote communities, or methods that are based on Indigenous ways of knowing and learning (Yunkaporta, 2009). For example, the findings from the evaluation of the CSIRO Science Pathways for Indigenous Communities program was provided to case study communities through a range of community-focused methods, including an e-document embedded with audio recordings in Luritja/Pintupi, an infographic based on a desert tree, personalised video messages, and face-to-face yarns in community (Cherry, Banks, Gibert & Fidler, in press). Similarly, CSIRO's involvement in a community-based evaluation in Cape York included a collaborative film project, which was positioned as a community-based evaluative research output for community members (Barber et al., 2017). Similarly collaborative films have been negotiated in Kakadu to enable joint managers to share and agree on evaluations of on-ground efforts to improve the health of country (<https://vimeo.com/333282498/ce1b714660>) and to agree on the evidence base and methods used to base these evaluations (<https://vimeo.com/359448474>). The NAILSMA and CSIRO's Our Knowledge Our Way guidelines outline knowledge sharing protocols that are vital to positive experiences in sharing knowledge, which could be applied in an evaluation context (Woodward, Hill, Harkness, & Archer, 2020). The effectiveness of communicating findings back to communities, and how useful communities found the evaluation findings, should be assessed as part of the evaluation lifecycle.

It will also be important to use evaluation and research tools and approaches (Credible principle) that are formally validated by Aboriginal and Torres Strait Islander people and communities, in addition to the core indicators referenced in Action 6. Tools and approaches that are not tailored and validated by Indigenous peoples will result in evaluation findings of limited acceptability and benefit. More broadly, tools to assess the quality of research from an Indigenous perspective would be another useful way to ensure Aboriginal and Torres Strait Islander community values are reflected in evaluation research (Harfield et al., 2020). A relevant exemplar from CSIRO was research to identify social indicators relevant to Indigenous peoples and communities in a conversation context, as existing measures were not appropriate or relevant (Corrigan, Robinson, Burgess, Kingston, & Hockings, 2018).

As mentioned in the Guide, for some programs or policies, better and more credible evaluations may be achieved if led or co-designed by Aboriginal and Torres Strait Islander evaluators and/or organisations. This approach will help mitigate the risk of program participants perceiving that evaluation is aimed at assessing participants, rather than the program or policy. CSIRO is involved in the Bininj/Mungguy healthy country indicators project, which is an Indigenous-led project with Traditional Owners and others, to identify community-driven indicators and methods to monitor and evaluate the health of country in Kakadu National Park (Northern Australia Environmental Resources Hub, 2019). 'Proper way research' was also employed in a CSIRO-involved project on earth systems and climate change, which employed Indigenous-led research and Indigenous driven and designed approaches (Morgan et al., 2019).

In relation to reporting evaluation findings and publication practices, key community members involved in evaluations should be recognised as co-authors of any papers or journal articles produced as part of an evaluation. Not recognising community members' contributions to reports and articles can undervalue their role and input (Ward-Fear, Pauly, Vendetti, & Shine, 2019). For



example, CSIRO research on water knowledge has been co-authored by an Indigenous representative body (Maclean & The Bana Yarralji Bubu Inc., 2015). More generally, Cultural and Intellectual Property rights should be considered, respected and adhered to through-out the evaluation lifecycle (Janke & Sentina, 2017).

Finally, the Land and waters Priority Policy area may benefit from the explicit inclusion of 'sky.' Many Aboriginal and Torres Strait Islander peoples have continuing connections to land, sea, sky and waterways, as outlined in Acknowledgements of Country (Reconciliation Australia, 2018b). CSIRO's research activities include the sea floor, ocean and atmosphere and actively acknowledge and engage with Indigenous knowledge systems that apply to the land, sea, and sky (Ashton, 2019).

## **Data governance and sovereignty**

The draft Strategy principles are broadly consistent with key data governance principles such as FAIR (Wilkinson et al., 2016) as well as the Indigenous-led CARE principles (Research Data Alliance International Indigenous Data Sovereignty Interest Group, 2019). The capacity-building actions 4 and 5 should be strongly guided by ethical guidelines for the collection, use and access of Indigenous data, and should incorporate Indigenous data sovereignty and intellectual property into the model of the management and governance of evaluation data (Kukutai & Taylor, 2016; Maïam Nayri Wingara, 2020). National Indigenous-led groups, such as the Maïam Nayri Wingara (<https://www.maïamnayriwingara.org/>), can be key advisors on data sovereignty. The principles of Aboriginal and Torres Strait Islander data sovereignty can be applied across each of the Priority Policy Areas. The Priority Reform Area around 'improving access to local data for Aboriginal and Torres Strait Islander people' will require significant improvement and resourcing across a number of socio-technical systems both from an Indigenous user and government information infrastructure perspective (Box, Lee, Kostanski, & Mason, 2019). The development of a Data dictionary (Action 6) could be led by a relevant Indigenous-led research institution, such as AIATSIS.

The high level considerations outlined in Actions 5 to 9, such as appropriate data standards and data sharing and release protocols, will need to be supplemented by examples of relevant standards (such as metadata, location data standards) and practical tools (such as conceptual/visual frameworks) to ensure a degree of consistency and avoidance of 'reinventing the wheel' across agencies.

While it will be useful to have a centralised clearinghouse for published evaluations, there can also be an aggregation through existing platforms such as data.gov.au (so that other information infrastructures are able to access and reuse the data via Application Programming Interfaces). Visualisation of evaluations will also be important for all stakeholders, and most importantly for Aboriginal and Torres Strait Islander communities – for instance spatial visualisation (e.g. mapping of location of evaluations), as well as discoverability/searching of evaluation data and reports, including underlying datasets and any associated peer-reviewed journal articles. The resourcing of skills and platforms for Aboriginal and Torres Strait Islander peoples to build on existing skills to access relevant data and undertake analysis and apply to their relevant priorities will also be important. This could include specific guidelines and tools for integrating location based data (see for example the DIPA Loc-I project involving CSIRO (<http://locationindex.org/home.html>) especially with respect to relevant government and research data.

## **Ethical considerations**

The Strategy could consider citing the over-arching guide for human research in Australia, the NHMRC National Statement on Ethical Conduct in Human Research

<https://www.nhmrc.gov.au/about-us/publications/national-statement-ethical-conduct-human-research-2007-updated-2018>). While the AIATSIS *Guidelines for Ethical Research in Australian Indigenous Studies* (currently being reviewed and updated) and the NHMRC's *Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities: Guidelines for research and stakeholders* are vital, the over-arching guideline also needs to be included for practical implementation of ethical principles. The draft Strategy states that not all evaluations conducted under the Strategy would require ethics review, for example evaluations that rely exclusively on existing or de-identified data. The Strategy could be bolstered by stating why evaluations using only existing or de-identified data may not require ethics review. Care should be taken when excluding such projects from ethics review as they may introduce significant risks to evaluations of programs and policies. Evaluations using de-identified data or existing datasets may still have an impact on Aboriginal and Torres Strait Islander peoples and communities, and ethical review is essential in planning for and navigating the conduct of the evaluation and ensuring it is done so according to the principles of the strategy. The draft Strategy states that applying ethical standards improves the quality and consistency of evaluation, but a robust ethics review should be considered as an essential component to evaluation (and monitoring), and be applied throughout the evaluation lifecycle to ensure respectful research relationships with Indigenous peoples (Kwaymullina, 2016).

## **Implementation and operationalisation**

The key principles of the Strategy will facilitate improved future evaluations, however, the success of the Strategy will be dependent on the operationalisation of key aspects of the principles in the Actions, particularly on who and how key concepts are defined, for example, what a 'useful' evaluation is, and what an 'improvement' in the lives of Aboriginal and Torres Strait Islander peoples and communities is. In addition, the cross-system priority includes 'promotion of culture', which is often difficult to define in practice, including for evaluators. An example from CSIRO research highlights the importance of undertaking early engagement and processes to understand community principles, issues, and concepts before shifting to planning and implementation phases. The project examined Indigenous water values, rights, and interests, which provided the foundation for subsequent community and government planning and decision making (Barber & Woodward, 2018).

When seeking input from Aboriginal and Torres Strait Islander stakeholders on the prioritisation process (Action 1), it will be important that a range of voices are sought, going beyond relying on input from the same people and/or communities that are regularly involved. This will strengthen the quality of input and the acceptability of the findings. CSIRO researchers have developed a typology of Indigenous engagement (in an environmental management context) that may be useful to understand the different power sharing, participation, and intercultural purposes when engaging and seeking input from peoples and communities (Hill, Grant, George, Robinson, Jackson & Abel, 2012).

The aspiration expressed for greater engagement and involvement of Aboriginal and Torres Strait Islander people and communities in evaluations is positive and necessary (Action 1), and will be inclusive of local, regional, and national policies and programs. Policies and programs of different scopes will require different approaches. In particular, large scale policies or programs will require multiple phases, approaches, governance structures, and/or methodologies to enable credible evaluation outcomes and to ensure that Aboriginal and Torres Strait Islander stakeholders and communities are engaged, either directly or through representatives. A CSIRO-led example is the development of a national framework for assessing the benefits of Indigenous cultural fire

management, which focused on co-benefits with Indigenous communities (Maclean, Robinson, & Costello, 2018).

The Strategy and Guide include references to agencies ensuring they have access to the skills they require to undertake or commission evaluations that are consistent with the Strategy (Action 4), to partner effectively with Aboriginal and Torres Strait Islander people and organisations, and to ensure evaluators are culturally and technically competent (Section 3 of the Guide). Agencies would benefit from having more detailed guidance on how they can assess whether these requirements have been met. There is a substantial quantity of examples, tools and publications on cultural competence in evaluation practice, from Australia (Australasian Evaluation Society, 2020; Lawton, Hamilton & Jackson, 2020; Williams, 2020), and internationally, including Canada (Shepherd & Graham, 2020), New Zealand (Aotearoa New Zealand Evaluation Association, 2011; Wehipeihana, 2019) and the United States (American Evaluation Association, 2011). In addition, CSIRO has been developing its organisational capacity to build genuine research partnerships with Indigenous organisations for some time (Davies, 2008), with a recent example being a partnership between CSIRO's Australian eHealth Research Centre and the Queensland Aboriginal and Islander Health Council on a mobile health scoping project for screening, managing, and preventing Cardiovascular Disease in Indigenous communities (see <https://www.csiro.au/en/Research/BF/Areas/Digital-health/Developing-mobile-health-solutions/Improving-access-to-CVD-therapy?ref=/CSIRO/Website/Research/Health/Digital-health/Mobile-health/Improving-access-to-CVD-therapy>).

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