

## NHMRC Public Call - Research priorities in Aboriginal and Torres Strait Islander health

### Submission from the Australasian College of Dermatologists

Submission date 02/09/2016

#### Specific Questions

To assist the assessment of research topics, please provide a brief statement in response to the following questions:

- 1. What is the research priority (a significant research knowledge gap or unmet need) you are nominating? How would a TCR in this area greatly advance our understanding of this issue? (200 word maximum)**

According to the ABS 2014-15 *National Health Survey*, 1.06 million people in Australia suffer from a long-term condition of the skin or subcutaneous tissue, equating to over 4.5% of the Australian population.<sup>1</sup> That chronic skin disorders are so highly prevalent in the Australian community is reinforced by findings from the AIHW 2011 *Burden of Disease* study, which showed that the non-fatal burden of skin disorders is considerable, ranking 6<sup>th</sup> of the 17 disease groups.<sup>2</sup> Disease estimates for Aboriginal and Torres Strait Islander people, expected to be released by the end of 2016, will help to define particular gaps with respect to skin disease burden.<sup>3</sup>

Currently, there is a paucity of information on incidence, morbidity and health system utilisation due to skin disease in Indigenous communities, particularly non-infectious diseases, with the limited data available sourced from small observational and retrospective studies.<sup>4</sup> Importantly, information on effective skin disease management strategies including addressing cultural and linguistic barriers to diagnosis, treatment and compliance is even scarcer. This substantial gap in knowledge of skin disease in Indigenous people, including aetiology, epidemiology and management, makes this a highly appropriate research priority with potential to improve clinical and quality of life outcomes and reduce health system burden.

- 2. What are the relevant Australian Government Priorities, and/or Ministerially-agreed State and Territory health research priorities linked to your nominated priority? (200 word maximum)**

This proposed priority aligns with the Federal Government's Science and Research Health Priority.<sup>5</sup> A TCR for skin disease in Aboriginal and Torres Strait Islanders will address the following Practical Challenges:

1. Better models of health care and services that improve outcomes, reduce disparities for disadvantaged and vulnerable groups, increase efficiency and provide greater value for a given expenditure.
2. Better health outcomes for Indigenous people, with strategies for both urban and regional communities

3. Effective technologies for individuals to manage their own health care, for example, using mobile apps, remote monitoring and online access to therapies.

**3. How would a TCR in this area contribute to Aboriginal and Torres Strait Islander health and improve health outcomes for the individual and/or community? (200 word maximum)**

Evidence from observational studies and anecdotal reports suggest that the incidence of non-infectious skin conditions vary between Indigenous and non-Indigenous Australians.<sup>4</sup> While psoriasis, the most common across the broader population (reported by 2.7%), is anecdotally considered to be less prevalent in Indigenous communities, others such as systemic lupus erythematosus may be more common (2.1- to 3.8-fold higher prevalence).<sup>1,4</sup> There is a range of conditions for which data is almost non-existent, such as vitiligo, neo-natal lupus, scleroderma and acne.<sup>4</sup> In contrast, infectious diseases such as streptococcal pyoderma and scabies are endemic in certain remote Indigenous communities and are known to be a significant public health issue.<sup>6</sup>

The current lack of robust data on dermatological conditions prevents evidence-based strategies, aimed to improve chronic skin disease outcomes in Indigenous communities in both urban and regional/remote settings, to be devised and implemented on a larger scale. A broader program of research into infectious and non-infectious skin disease will help to: establish much-needed epidemiological data; identify cultural barriers impacting diagnosis and treatment, including cultural perceptions of skin disease and their causes; and determine and overcome barriers to accessing health services and PBS treatments, including a role for tele dermatology to support outreach services in regional/remote communities.

**4. How will the TCR reduce the burden of disease on the health system and Australian economy? (200 word maximum)**

Burden of skin disease estimates for Aboriginal and Torres Strait Islander people will help to shed light on the most relevant skin diseases impacting Indigenous communities. These estimates, taken with potential outcomes from this proposed TCR, will help to guide training and education of the health workforce with respect to improving diagnostic capabilities and treatment approaches for chronic skin conditions in Indigenous communities. In addition, mapping of areas in need according to epidemiological data will provide justification for jurisdictions to adequately and appropriately service communities most at risk, guide dermatology outpatient service planning and inform telehealth models of dermatological service delivery. Research outcomes from this TCR could also identify targeted strategies for culturally-sensitive consumer and community education on causes of skin conditions, hygiene practices and the importance of treatment compliance.

**5. Are there any reports or findings that support your nomination for the suggested topic? (200 word maximum)**

As discussed, there is a lack of information on skin conditions in Aboriginal and Torres Strait Islanders. The most recent systematic review published on non-infectious skin diseases (Heyes et al. **Non-infectious skin diseases in Indigenous Australians.** *AJD.* 2014; 55(3):176-184)<sup>4</sup> clearly describes the limitations of available evidence. Without robust epidemiological data,

development and implementation of strategies to address disparities in skin health outcomes and planning of dermatological service provision is drastically hindered.

## References

1. Australian Bureau of Statistics. National Health Survey: First Results, 2014-15. <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.001~2014-15~Main%20Features~Key%20findings~1>. Accessed August 2016.
2. AIHW 2016. Australian Burden of Disease Study: impact and causes of illness and death in Australia 2011. Australian Burden of Disease Study series no. 3. Cat. no. BOD 4. Canberra: AIHW.
3. AIHW. Burden of Disease. <http://www.aihw.gov.au/burden-of-disease/>. Accessed August 2016.
4. Heyes C, Tait C, Toholka R, Gebauer K. Non-infectious skin disease in Indigenous Australians. *Australas J Dermatol*. 2014 Aug;55(3):176-84.
5. Australian Government Science and Research Priorities: Health – Capability Statement. 2015. <http://www.science.gov.au/scienceGov/ScienceAndResearchPriorities/Pages/Health.aspx>. Accessed August 2016.
6. McMeniman E1, Holden L, Kearns T, Clucas DB, Carapetis JR, Currie BJ, Connors C, Andrews RM. Skin disease in the first two years of life in Aboriginal children in East Arnhem Land. *Australas J Dermatol*. 2011 Nov;52(4):270-3.