



## Co-design of youth-friendly, culturally appropriate models of care with Aboriginal and Torres Strait Islander children and youth with type 2 diabetes

### Project overview:

Rates of type 2 diabetes among Aboriginal and Torres Strait Islander children and young people are increasing and have been documented as twenty-fold higher than for non-Indigenous young people. Youth onset diabetes can have serious complications, significantly impair quality of life, and reduce life expectancy. Managing youth type 2 diabetes (YT2D) can be challenging in a complex environment and research has indicated that there are opportunities to enhance support models to enhance the management of this condition. From work undertaken in 2019 with young people, their families and health professionals, we have some understanding about what needs to change and what might work. This project aims to work with young people, their communities and health services to address youth type 2 diabetes and support a better future for these young people. This project is funded until December 2023 and spans across four regions: the Kimberley, Far North Queensland and the Northern Territory's Top End and Central Australia. It sits within the DIABETES across the LIFECOURSE: Northern Australia Partnership.

### Vision:

To collaboratively develop and evaluate innovative ways of enhancing support for young Aboriginal and Torres Strait Islander people (10-25 years) with type 2 diabetes across Northern Australia.

### Aims:

1. Build awareness, support networks and advocacy efforts for type 2 diabetes amongst youth, in communities and in health systems.
2. Improve diabetes knowledge.
  - a. Increase diabetes knowledge for youth and their families and communities through the development of age and culturally appropriate educational resources and initiatives.
  - b. Increase health professional knowledge through education, development and promotion of guidelines and clinical pathways.
3. Enhance and develop relevant support systems for the management of youth type 2 diabetes.
  - a. Enhance support for young people and their families to manage type 2 diabetes.
  - b. Support health professionals to engage effectively with youth to deliver relevant and meaningful health messages and education.
4. Positively influence self-rated quality of life (including Social and Emotional Wellbeing outcomes) through the development of new ways of providing health services and supports for young Aboriginal and Torres Strait Islander people with type 2 diabetes.



### Approaches:

This co-design project will work with:

- Aboriginal and Torres Strait Islander youth with YT2D and their families/support people to raise awareness around YT2D, develop peer support strategies for culturally and age-appropriate diabetes management, and develop relevant educational resources.
- Health professionals to identify opportunities to enhance the management of YT2D for Aboriginal and Torres Strait Islander people. This will include activities such as: developing clinician networks, adapting local referral pathways for YT2D, promoting screening and management guidelines for YT2D, identifying regional priorities at the systems level and developing information resources to support clinical care. A series of education sessions will be developed and made available to health professionals across Northern Australia to improve knowledge and confidence in managing YT2.
- Communities, to raise awareness about YT2D through a social media campaign.

### Inclusion criteria:

There are three groups of participants included in this project, namely:

- *Youth*: Aboriginal and Torres Strait Islander people with type 2 diabetes aged 10-25 years and family members, guardians, care givers and support people of youth participants.
- *Health Professionals*: Health professionals involved in clinical management of youth type 2 diabetes.
- *The broader community*: First Nations members of communities in participating study sites.

### Methods:

Young people will be invited to contribute to this project by a health professional when attending their clinic appointment with participating services, and by schools participating in the project. Initial invitations to participate in the project will be made to a young person with type 2 diabetes together with their guardians/carers/support people. If no guardian/carer/support person can be identified, then the initial approach will be to the young person, who will be given the option of involving relevant family members or support people in the project. Individual guardians/carers/ support people of young people with type 2 diabetes may also be approached directly by health professionals (who know both the young person and guardian/carer/support person) about participation in the study.

Young people who consent to the project, can subsequently choose to be involved in the following ways:

1. By undertaking several questionnaires (including; Child and Youth Resilience Measure, PedsQL & aPHQ9, physical behaviour and social-demographic survey), participating in a short interview and agreeing to have their medical record data accessed at baseline and after the co-design component.
2. By participating in individual and/or group co-design activities.
3. By participating in interviews with project staff.

Family and support people will also be approached and invited to be involved during the informed consent process with young people. For those who consent, they can subsequently choose to be involved in the following ways:

1. By participating in interviews with project staff to share their experiences of looking after a child or young person with type 2 diabetes.
2. By participating in co-design activities together with young people.
3. By being present to support young people to be involved in the youth activities.



Health professionals who are involved in the management of youth with type 2 diabetes will be invited to be involvement in the project in the following ways:

1. Participating in a regional working group that could complete activities including: adaption of local referral pathways for YT2D, promotion of screening and management guidelines for YT2D, collaborating in the creation of other resources to support YT2D management, completion of a Systems Assessment Tool (SAT) to identify regional priorities for YT2D.
2. Participate in the series of continuing professional development sessions created by Menzies on YT2D.

**Key outputs:**

- The development and production of culturally appropriate diabetes management, education and support resources for young people and their support networks
- Screening and Management Guidelines (adapted to context of each region)
- Referral pathways (adapted to each region)
- Education sessions for health professionals on managing YT2D, eg webinar series
- Educational resources for Health Professionals (including multiple online presentations and podcasts)
- New peer support approaches to diabetes education and management
- An awareness-raising campaign about YT2D
- Clinician networks

**Primary outcome:**

Enhanced models of care developed, piloted, and evaluated for Aboriginal and Torres Strait Islander children and young people in Northern Australia.

If you have any questions about the project, please contact:

**Project Manager**

Anthony Gunther  
Menzies School of Health Research  
[anthony.gunther@menzies.edu.au](mailto:anthony.gunther@menzies.edu.au)  
Ph: (08) 8946 8673

**Co-Lead**

Renae Kirkham  
Menzies School of Health Research  
[renae.kirkham@menzies.edu.au](mailto:renae.kirkham@menzies.edu.au)  
Ph: (08) 8946 8693