

Screening pathway for type 2 diabetes in Aboriginal young people and Management pathways for NT Aboriginal young people (<18yo) diagnosed with diabetes

The Northern Territory Diabetes Network developed these guidelines in 2019 by collaboration and consensus between primary health care services (including both NT Health and community controlled sites), remote medical practitioners, diabetes educators, dietitians, paediatricians and endocrinologists. The agreed pathway is based on NT prevalence data, with concern regarding the recent increase in prevalence among Aboriginal young people (52% increase in diabetes in 15-24 year old young people from 2014 to 2018), as well as local experience and national expert opinion. It is supported by the 2012 national consensus statement (Azzopardi P et al, 2012. MJA 197 (1): 32-36) regarding the diagnosis, screening, management and prevention of type 2 diabetes in young Indigenous Australians living in rural and remote areas. The screening approach from 10 years of age in those with risk factors also matches what is used internationally, such as that outlined in the 2018 International Society for Paediatric and Adolescent Diabetes clinical practice consensus guideline (Zietler, P. et al. 2018 Ped Diabetes 19(Suppl. 27): 28-46), and the 2020 American Diabetes Association standards of medical care in diabetes for children and adolescents (ADA 2020. Diabetes Care 43(Suppl 1): S163-182).

Consistent with this international guidance, please note that the NT Diabetes Network pathway differs in several ways from that outlined in CARPA.

1. HbA1c \geq 6.5% (48mmol/mol) can be used to diagnose diabetes in young people aged <18 years, this can be a point of care sample.
2. All Aboriginal children aged \geq 10 years (or earlier if puberty commences earlier) should be screened for type 2 diabetes if at least one other risk factor is present.
 - a. Acanathosis nigricans
 - b. Overweight or obesity (BMI Z score \geq 1 and/or waist circumference to height ratio \geq 0.5)
 - c. Maternal history of diabetes in pregnancy
 - d. First degree relative with type 2 diabetes (parent or sibling)
 - e. Dyslipidaemia
 - f. Using psychotropic medications
3. While an oral glucose tolerance test is preferred where HbA1c is borderline, as this allows definitive diagnosis, the pathway acknowledges that this is not always possible.
4. The pathway emphasises the need for early intensive support from the primary health care team as we increasingly understand that type 2 diabetes in young people has different pathophysiology and has a poorer treatment response and prognosis than later onset diabetes, as well as being associated with earlier microvascular and macrovascular complications. Metformin and insulin are currently the only medications licensed in this age group and require active titration and close support to be effective and reach glycaemic target of HbA1c<6.5% (48mmol/mol).