

## Type 2 Diabetes in Young Aboriginal People Clinical

### Applicability

This policy applies to:

- All clinical employees
- Primary Health Care, NT Health
- Excludes all acute care services

### Policy statement

NT Health, through its Diabetes Network, is committed to a whole-system-approach to improving prevention, early detection and management of type 2 diabetes in Aboriginal young people (youth diabetes) in the Northern Territory (NT).

Evidence-based screening and management pathways for Aboriginal youth who are at risk of and/or living with diabetes, can significantly reduce the risk of serious health complications. Well-structured prevention and management of youth diabetes will significantly improve quality of life.

Throughout this policy the term Aboriginal should be taken to include Torres Strait Islander people.

### Policy suite

The following documents form the policy suite:

- [NT Health Clinical Governance Framework](#)
- [NT Health Strategic Plan 2023-2028](#)

### Principles

NT Health's approach is founded upon the following principles:

- We promote earlier intervention in Aboriginal youth who are at risk of developing type 2 diabetes; this is consistent with what is outlined in the Central Australian Rural Practitioners Association (CARPA) Standard Treatment Manual
- We ensure all at risk Aboriginal youth aged >10 years (or earlier if puberty commences earlier) be screened for type 2 diabetes if at least one other risk factor presents, such as:

- a) Acanthosis 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
- We ensure referral pathways for Aboriginal youth who are at risk of and/or living with diabetes are actioned in a timely manner

## Requirements

Refer to appendixes for the screening and management pathways and guideline for use.

- Appendix A: Screening pathway for type 2 diabetes in Aboriginal young people in the NT.
- Appendix B: Management pathway for NT Aboriginal young people ( $\leq 18$ ) diagnosed with diabetes.
- Appendix C: Screening and management pathway guide for type 2 diabetes in Aboriginal young people (18).

## Legislative or other authority

The following legislation and authority govern this Policy:

- Healthy Well and Thriving – The Northern Territory’s prevention and early intervention framework for chronic conditions 2024-2030
- [Implementation Plan for the Australian National Diabetes Strategy 2016–2020](#)
- [The Australian National Diabetes Strategy 2021-2030](#)

## Compliance

The NT Health compliance indicators for this Framework are set out below. These indicators are required to be met and regularly evaluated by the respective business unit or responsible officer.

Any instances of non-compliance should be reported on the branch or divisional risk register. Where staff or patient-related non-compliance occurs in the clinical settings register in the risk management system.

| Indicator             | Description  | Responsibility   |
|-----------------------|--|--|
| <b>Implementation</b> | Document will be available for all staff via the PGC.              | Health Policy Guidelines System Administrator                                    |
| <b>Review</b>         | Document will be reviewed every 3 years or earlier as required and | Preventive Health Strategy Unit, Public Health Division, Department of Health in |

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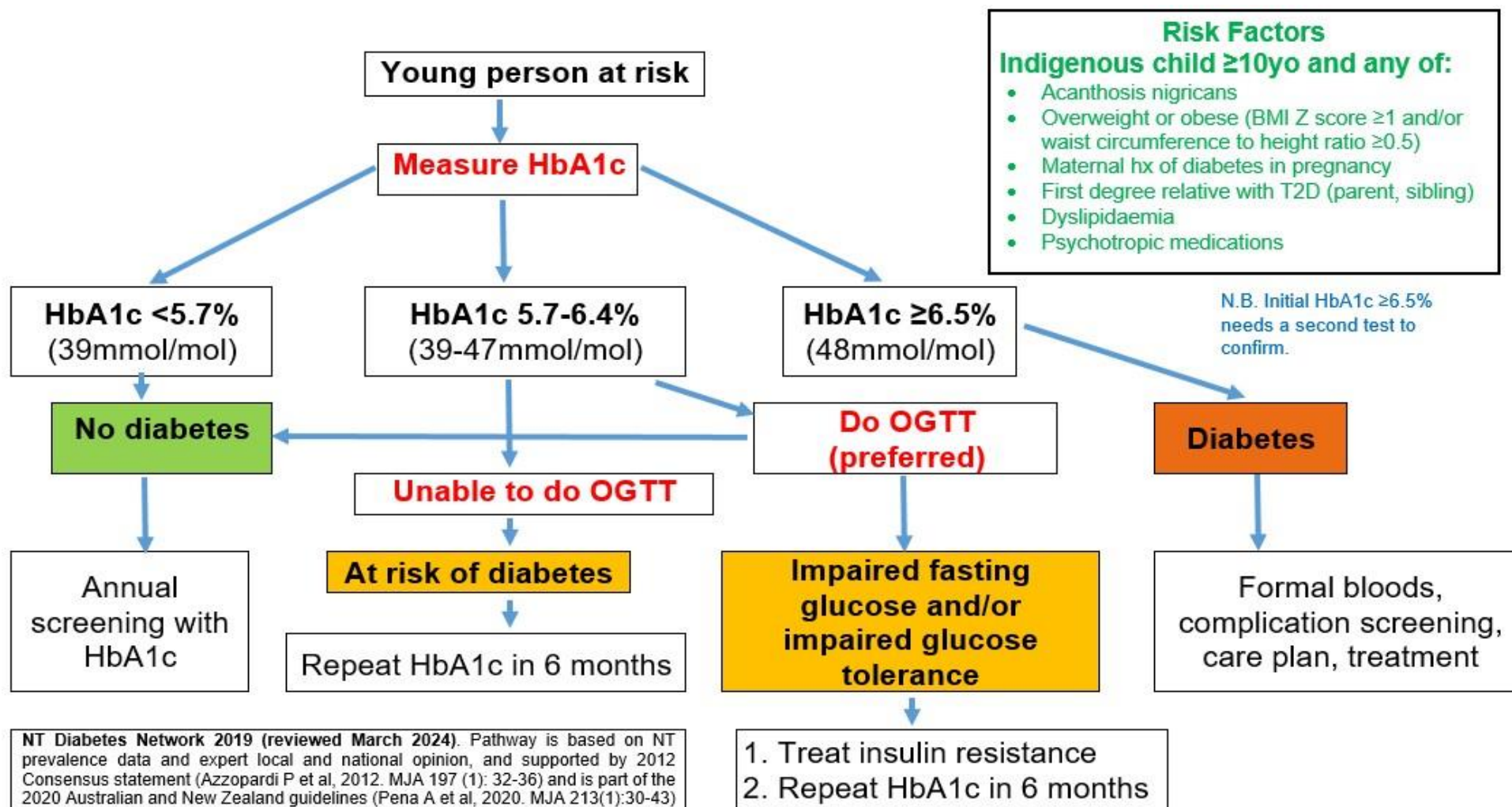
| Indicator         | Description   | Responsibility                                      |
|-------------------|---|---|
|                   | identified by lead clinicians following agreed implementation.  | collaboration with the NT Diabetes Clinical Network |
| <b>Compliance</b> | Ongoing use of the screening and management tools for youth diabetes is part of the continuous quality improvement (CQI) process. | Health services                                     |

## Definitions

| Term         | Definition   |
|--------------|--|
| CARPA        | Central Australian Rural Practitioners Association   |
| NT           | Northern Territory   |
| Policy       | A statement of mandatory principles that clearly reflects the organisation's mission and direction. A policy mandates the organisational action and governs the conduct of people and activities to achieve a particular outcome (NT Health Policy Development Procedure).   |
| Policy suite | A collection of documents on a specific subject matter that is corporate or clinical in nature, in order of hierarchy as per the document pyramid in the Policy Governance Framework Model. A policy suite would usually consist of a parent policy and be supported by a procedure and/or guideline (NT Health Policy Development Procedure). |

## Appendices

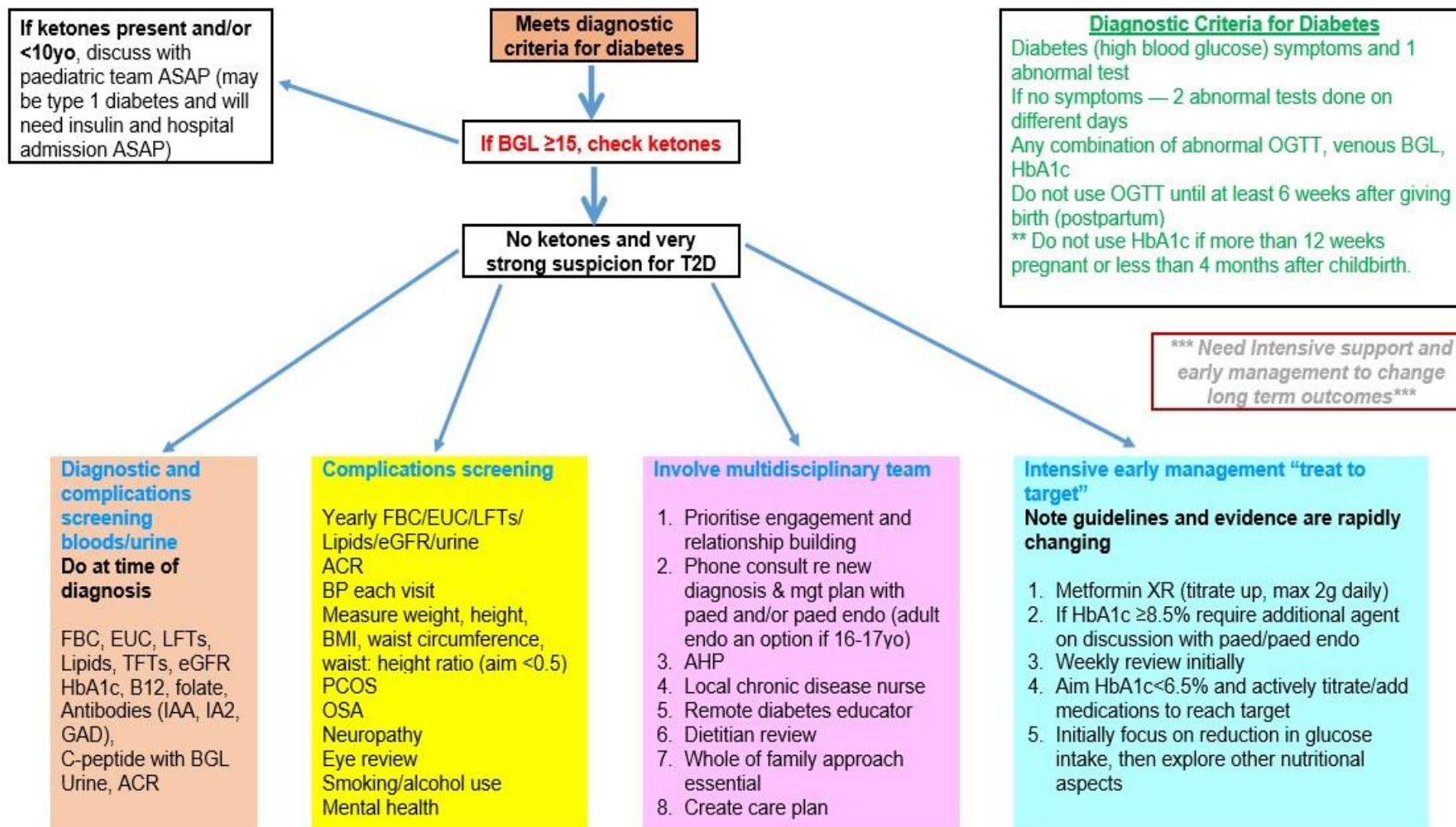
### Appendix A - Screening pathway for type 2 diabetes in Aboriginal young people in the NT



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Appendix B – Management pathway for NT Aboriginal young people (<18) diagnosed with diabetes



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## Appendix C - Screening & management pathway guide for type 2 diabetes in Aboriginal young people (<18)

The NT 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 pathway has been accepted as the Australian and New Zealand standard for all Indigenous children and included in the Australian and New Zealand 2020 guidelines for management of type 2 diabetes in children and adolescents (Pena A et al, 2020. MJA 213(1):30-43).

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 2022 International Society for Paediatric and Adolescent Diabetes clinical practice consensus guideline (Shah, A. et al. 2022. Ped Diabetes 23(7):872-902), 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).

Please note that the NT Diabetes Network pathway is consistent with that outlined in the CARPA Standard Treatment Manual.

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. Youth-onset type 2 diabetes is also associated with shame and stigma, and with poorer mental health. There are limited medications licensed in this age group and the

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evidence regarding the use of various diabetes medications in youth is evolving. True engagement, active titration and close support is required to reach glycaemic target of HbA1c<6.5% (48mmol/mol).

## Appendix D: Reference

- 2020 American Diabetes Association standards of medical care in diabetes for children and adolescents (ADA 2020. Diabetes Care 43(Suppl 1): S163-182).
- Australian and New Zealand 2020 guidelines for management of type 2 diabetes in children and adolescents (Pena A et al, 2020. MJA 213(1):30-43).
- 2022 International Society for Paediatric and Adolescent Diabetes clinical practice consensus guideline (Shah, A. et al. 2022. Ped Diabetes 23(7):872-902).
- 2012 Australian consensus statement for type 2 diabetes in young Indigenous Australians in rural and remote areas (Azzopardi P et al, 2012. MJA 197 (1): 32-36)



## Document history

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## National Safety and Quality Health Standards

| National Safety and Quality Health Service standards                              |   |   |   |   |  |   |   |
|---|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |  |
| Clinical Governance   | Partnering with Consumers   | Preventing and Controlling Healthcare Associated Infection                        | Medication Safety   | Comprehensive Care  | Communicating for Safety   | Blood Management  | Recognising & Responding to Acute Deterioration                                     |
| <input checked="" type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>  | <input checked="" type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>  |

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