

Positive Cardiometabolic Health

An early intervention framework for adults with intellectual disability: Evidence Guide

This Evidence Guide should be read alongside the [Adult Positive Cardiometabolic Health Framework](#) (2026; herein referred to as the *Framework*). The *Framework* was developed by 3DN UNSW Sydney, part of the National Centre of Excellence in Intellectual Disability Health, in consultation with a steering committee consisting of clinical and lived experience experts. The Evidence Guide brings together key evidence sources - including clinical and public health guidelines and academic literature - that inform the recommendations aimed at improving cardiometabolic health outcomes for adults with intellectual disability.

People with intellectual disability experience substantially poorer health outcomes than the general population. This includes increased risks of preventable hospitalisations and twice the rate of potentially preventable death compared to the general population (Trollor et al., 2017; Weise et al., 2021). Cardiometabolic conditions are particularly common and a leading contributor to these outcomes (Trollor et al., 2017). More than one fifth of people with intellectual disability meet criteria for metabolic syndrome and are 20% more likely to have diabetes mellitus than the general population (Axmon et al., 2017; Vancampfort et al., 2020).

The Adult Framework has been developed to support health professionals working with adults with intellectual disability to provide high-quality, practical care. It emphasises person-centred care, fostering shared decision-making between individuals with intellectual disability, their families and support persons, and healthcare providers, through a framework for structured and individualised care.

The framework aligns with the [National Roadmap for Improving the Health of People with Intellectual Disability](#) (Australian Government, 2021).

The Framework was first developed in 2016 and has been reviewed and updated by 3DN UNSW Sydney in 2026. It was adapted from MindGardens (2023) "[Positive Cardiometabolic Health Resource: An early intervention framework for people of psychotropic medication](#)". This Evidence Guide relates specifically to the updated 2026 version. An equivalent [Adolescent Framework](#) has also been reviewed and updated.

The Positive Cardiometabolic Health for People with Intellectual Disability Project was funded by NSW Ministry of Health Mental Health Branch.

The Evidence in the Framework

The framework details cardiometabolic risk factors and associated interventions, based on clinical guidelines and recommendations. Links to key evidence used throughout this framework are listed by risk factor below:

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Adult

Lifestyle			Oral Health	Sleep		Weight		Glucose		Blood Pressure	Blood Lipids ^a	
Smoking	Physical Activity	Diet		Insomnia	OSA	Waist	BMI	Pre-diabetes	Diabetes			
Lifestyle advice including diet, physical activity, smoking prevention/cessation, sleep hygiene and dental hygiene to individual, family members and support people. Co-management of physical health with general practitioner is strongly recommended												
ACTION ZONE	Current smoker (tobacco, marijuana, vaping, shisha) Support person current smoker	< 150 minutes of physical activity per week sedentary week muscle strengthening activities Prolonged sedentary behaviour	Poor dietary intake	Poor oral health Irregular dental checks (> 12 months apart)	< 6 hours sleep; or > 11 hours sleep Daytime tiredness Co-occurring conditions causing insomnia Symptoms of OSA - Loud snoring - Stopping breathing during sleep	Waist circumference ≥ 80 cm females ≥ 94 cm males (≥ 90 cm) ^b	BMI ≥ 25 kg/m ² (≥ 23 kg/m ²) ^b	HbA1c 5.7 - 6.4% (39 - 47 mmol/mol) FBG ≥ 7.0 mmol/L ^c RBG ≥ 11.1 mmol/L AUSDRG ^c ≥ 12	HbA1c ≥ 6.5% (≥ 48 mmol/mol) FBG ≥ 7.0 mmol/L RBG ≥ 11.1 mmol/L AUSDRG ^c ≥ 12	≥ 140 mmHg systolic and/or ≥ 90 mmHg diastolic OR ≥ 120/80 mmHg if CVD risk present ^d	TC > 5.5 mmol/L LDL > 3.5 mmol/L TRIG > 1.7 mmol/L HDL < 1.5 mmol/L	
	Minimise off-label psychotropic prescribing & where possible, trial non-pharmacological interventions first. See reverse side for additional guidance on responsible psychotropic prescribing											
Actively involve family members and/or support people in interventions												
INTERVENTION	Individualised smoking cessation program Consider referral to Nicotine Treatment Specialist or quit programs	↑ Sedentary time ↓ Physical activity Individualised exercise program Consider referral to Exercise Physiologist or Occupational Therapist	↓ Discretionary foods and drinks and alcohol ≥ 5 serves of vegetables/legumes daily Consider co-occurring conditions affecting diet and refer to a Dietitian or other allied health as indicated ^e	Good oral hygiene education Treat infection/pain if appropriate Encourage annual dentist review Consider referrals to Dietitian as indicated	Refer to lifestyle interventions, promote weight loss and arrange multidisciplinary referrals							
				Refer to Psychologist or Sleep Physician Consider short-term pharmacotherapy if above insufficient	Refer for sleep study and / or to Sleep Physician	If lifestyle interventions unsuccessful > 3 months, consider metformin or GLP-1RA as an adjunct If BMI ≥ 30 kg/m ² or co-occurring conditions are present, consider intensive interventions and refer to specialist	Pre-diabetes education Consider referral to endocrinologist Metformin if lifestyle modification insufficient	Diabetes education Arrange endocrinologist and diabetes educator referral Screen for complications ^f and refer appropriately	DASH dietary modification, limit salt intake Blood pressure management education Consider antihypertensive therapy if above insufficient	Commence lipid lowering therapy if: - FBG criteria met and/or, - Lifestyle modification insufficient after 3 months		
TARGET	Smoking prevention or cessation	Physical activity guidelines met Reduced sedentary time	Balanced dietary intake	Good oral health Dental review every 6 - 12 months	6 - 11 hours sleep Improved daytime alertness Treated sleep condition	Waist circumference < 80 cm females < 94 cm males (< 90 cm) ^b	BMI 18.5 - 24.9 kg/m ² (< 23 kg/m ²) ^b	HbA1c < 5.7% (< 39 mmol/mol) FBG < 5.6 mmol/L	HbA1c < 7% (< 53 mmol/mol), or otherwise individually determined	< 140 mmHg systolic and/or < 90 mmHg diastolic OR < 120/80 mmHg if CVD risk present ^d	TC ≤ 5.5 mmol/L LDL ≤ 3.5 mmol/L TRIG ≤ 1.7 mmol/L HDL ≥ 1.5 mmol/L	

^aCertain medical conditions may affect intake. Relevant practitioners may include [Psychologists](#) (eating disorders, anxiety) or [Speech pathologists](#) (swallow assessment) | ^bCut-offs apply to Asian populations and recommended for Aboriginal and Torres Strait Islander populations | ^cAUSDRG tool not recommended for Aboriginal and Torres Strait Islander populations | ^d≥ 5.5 mmol/L for Aboriginal and Torres Strait Islander populations, ≥ 5.5 mmol/L during pregnancy | ^e7.0 mmol/L for overt diabetes in pregnancy | ^fNeuropathy, neuropathy, foot complications, chronic kidney disease, macrovascular complications | ^gIncluding pre-diabetes and diabetes | ^hSourced from [Victor Chang Cardiac Research Institute](#)

BMI: Body mass index | CVD: Cardiovascular disease | FBG: Fasting blood glucose
GLP1 RA: Glucagon-like peptide-1 receptor agonist | HbA1c: Glycated haemoglobin
HDL: High-density lipoprotein | LDL: Low-density lipoprotein | NRT: Nicotine replacement therapy | OSA: Obstructive sleep apnoea | PBS: Pharmaceutical Benefits Scheme
RBG: Random blood glucose | TC: Total cholesterol | TRIG: Triglycerides

Lifestyle

- Smoking
 - [“Smoking, Nutrition, Alcohol, Physical activity \(SNAP\) Guidelines”](#), Royal Australian College of General Practitioners, 2015
 - [“Supporting smoking and vaping cessation: A guide for health professionals”](#), Royal Australian College of General Practitioners, 2024.
- Physical Activity
 - [“24-hour movement guidelines for all Australians: Recommendations for People with disability”](#), Australian Government, 2026
- Diet
 - [“Eat for Health: Recommended number of serves for adults”](#), Australian Government

- [*"Eat for Health: Discretionary Food and drink choices"*](#), Australian Government
- [*"Nutrition Issues in Intellectual Disability"*](#), Dietitians Australia, 2020

Oral Health

- [*"Oral Health and Intellectual Disability"*](#), Australian Dental Association, 2019
- [*"Heart disease and oral health fact sheet"*](#), New South Wales Health, 2025
- [*"Practice Alert: Oral Health"*](#), National Disability Insurance Scheme Quality and safeguards Commission, 2023

Sleep

- [*"Insomnia Management"*](#), Australian Journal of General Practice, 2019
- [*"Sleep Hygiene: Good Sleep Habits"*](#), Sleep Health Foundation, 2024

Weight

- [*"Australian Obesity Management Algorithm"*](#), Australian Diabetes Society, 2022

Glucose

- [*"Fact Sheet: Understanding pre-diabetes"*](#), National Diabetes Services Scheme, 2022
- [*"Fact Sheet: Understanding type 2 diabetes"*](#), National Diabetes Services Scheme, 2025
- [*"The Australian Type 2 Diabetes Risk Assessment Tool \(AUSDRISK\)"*](#), Australian Government, 2022
- [*"Australian Type 2 Diabetes Glycaemic Management Algorithm"*](#), National Diabetes Services Scheme, 2024

Blood Pressure

- [*"DASH \(Dietary Approaches to Stop Hypertension\) diet to prevent and control hypertension"*](#) Royal Australian College of General Practitioners, 2015
- [*"Blood Pressure and your heart"*](#), Heart Foundation
- [*"Guidelines for the diagnosis and management of hypertension in adults"*](#), Heart Foundation, 2016

Blood Lipids

- [*"Practical guide to pharmacological lipid management"*](#), Heart Foundation, 2023
- [*"PBD-Eligibility Criteria for Cholesterol Lowering Medicines"*](#), Australian Government, 2006

- [*"Guidelines on the management of blood cholesterol"*](#), American Heart Association, 2018

Additional references:

- Sex specific risk factors
 - [*"Australian Pregnancy Care Guidelines"*](#), Australian Living Evidence Collaboration, 2026
 - [*"Cardiovascular risk and menopause"*](#), Australasian Menopause Society, 2023
 - [*"Management of obesity, gestational diabetes, and hypertension in pregnancy: College statements"*](#), The Royal Australian and New Zealand College of Obstetricians and Gynaecologists, 2021
- Psychotropic medicines
 - [*"Psychotropics medicines in cognitive disability or impairment Clinical Care Standard"*](#), Australian Commission on Safety and Quality in Health Care, 2024
 - [*"Therapeutic Guidelines: Consent, capacity and decision making for people with Developmental disability"*](#), Therapeutic Guidelines, 2021
 - [*"Therapeutic Guidelines: Challenging behaviours in a person with developmental disability"*](#), Therapeutic Guidelines, 2021
- Other Topics
 - [*"Ensuring Consent"*](#), Council for Intellectual Disability
 - [*"National Aboriginal and Torres Strait Islander Health Plan"*](#), Australian Government, 2021
 - [*"Comprehensive Health Assessment Program \(CHAP\)"*](#), Australian Government, 2024
 - [*"Cultural responsiveness in general practice"*](#), Royal Australian College of General Practitioners, 2023
 - [*"National Roadmap for Improving the Health of People with Intellectual Disability"*](#), Australian Government, 2021