The Australian Vision for Early T1D Screening

Dorota Pawlak, PhD Chief Scientific Officer BT1D Australia









Breakthrough T1D
Type 1 Diabetes
Clinical Research
Network

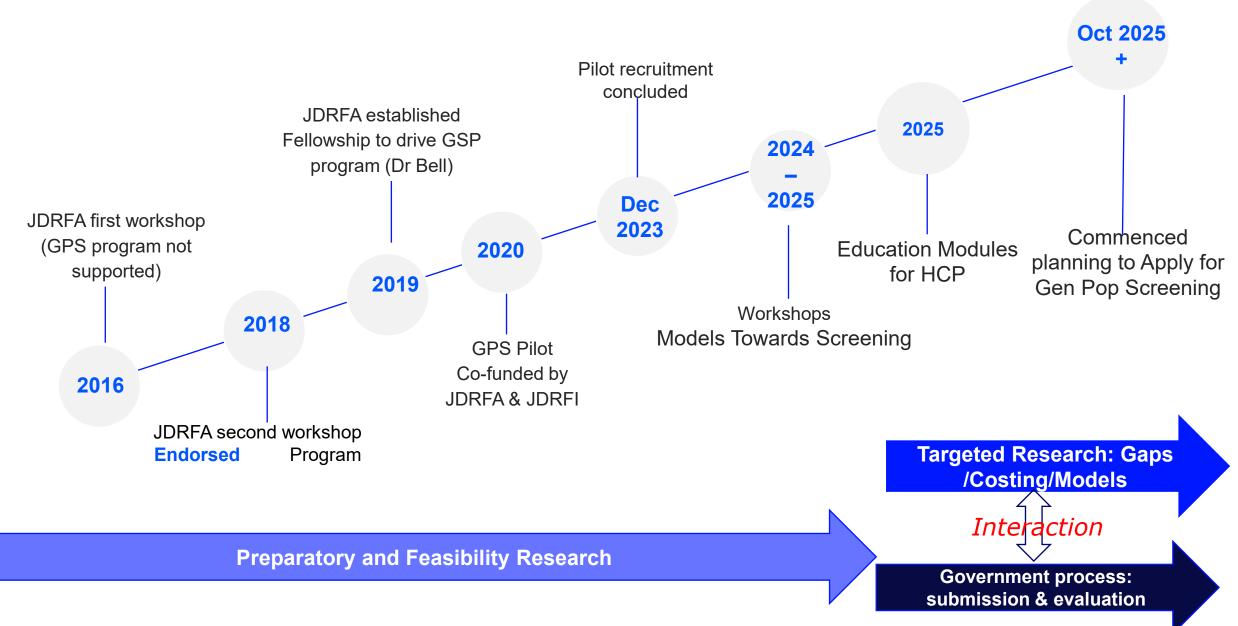
T1DCRN

The T1DCRN was initially launched in June 2010 with \$5m from the Australian Government, followed by further \$110m of continued investment.

This established the highly successful virtual research network, aimed to drive better health outcomes for people with T1D, bringing beneficial change to health practice and increasing research collaboration nationally and internationally.



T1DCRN journey towards T1D universal screening in Au

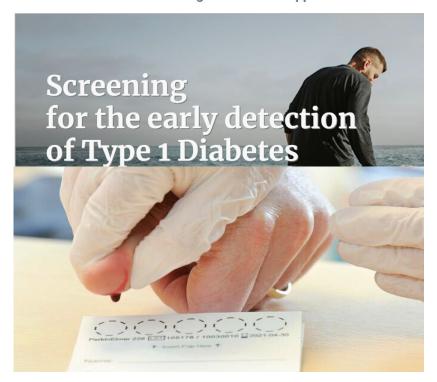


Early Detection Programs in Australia T1D (as of 2025)

For Individuals with Family History (Ongoing)



Getting Involved Support Us About Us Resource



General Population Screening Pilot (recruitment ended in 2023)



TYPE 1 DIABETES **National** Screening Pilot

Where can I find more information?

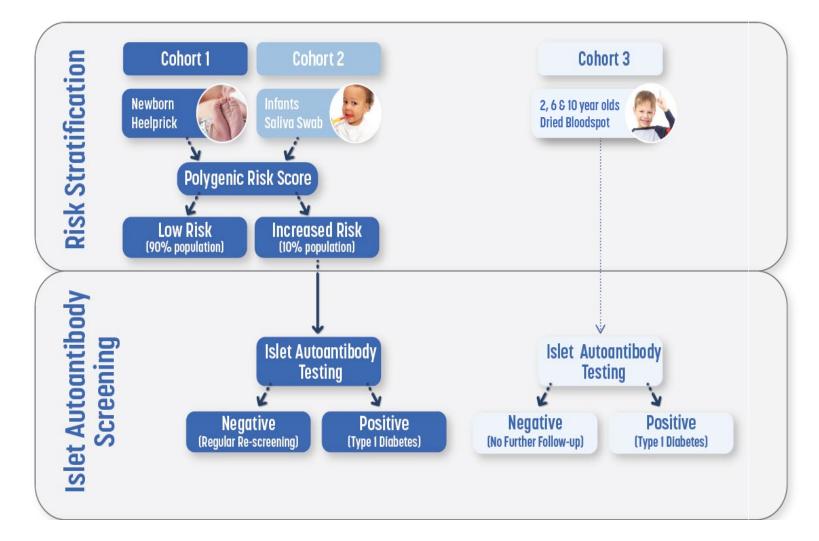


answer your questions 1800 505 909





Pilot for the Australian T1D National Screening Program





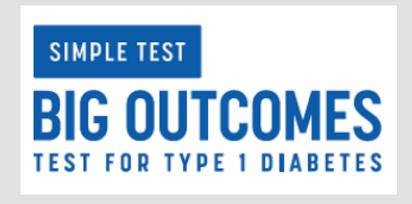
Dr Kirstine Bell

- □ 6700 participants registered across the three cohorts
- Manuscript with Pilot Results Submitted for Publication
- ☐ Health Economic analysis publication accepted

Protocol Published - Diabetic Medicine 2024, Bell KJ et al



Is it the right time to consider application for general population screening in Australia?





The importance of screening in public health setting

- The purpose of screening is to identify people in an **apparently healthy population** who are at higher risk of a health problem or condition.
- This can enable early treatments or interventions, and thereby reduce the incidence and/or mortality of the health problem or condition within the population.
- Screening is intended for all people, in an identified target population, who do not have symptoms of the disease or condition being screened for.
- The process can identify:
 - a pre-disease abnormality
 - early disease
 - disease risk markers.



National Screening Programs, uptake & impact (AU)

BreastScreen AUSTRALIA A joint Australian, State and Territory Government Program	Introduced in 1991 Uptake 50%	40% reduction in mortality since 1994
NATIONAL CERVICAL SCREENING PROGRAM A joint Australian, State and Territory Government Program	Screening introduced in 1991, HPV Vaccination in 2007 Uptake: Screening 73%; Vaccination 82%	75% reduction in mortality (1982-2022) on track to eliminate cervical cancer by 2035
NATIONAL BOWELCANCER SCREENING PROGRAM	Introduced in 2006; followed from pilot program 2002-2004 Uptake 40%	33% reduction in mortality (2021 – 2024)
NATIONAL LUNG CANCER SCREENING PROGRAM	Introduced July 2025, high risk individuals Uptake too early to assess	Impact too early to assess
Newborn Hearing Screening	Initially state-based rollout; 2000 in WA, 2002 in NSW; Nationally in 2004 Uptake 97%;	Impact not measured
Newborn Bloodspot Screening	Introduced in 1960s; it is run by states (inconsistent which conditions are included) Funding for expansion 2022-2028 Uptake 99%	Impact not assessed



Process for evaluation of new screening programs



Evaluation framework is based on Wilson & Jungner



POPULATION BASED SCREENING FRAMEWORK Operated August 2018



Population Based Screening Framework

- Introduced in 2006
- Revised in 2018
- Currently under revision with anticipated release in 2026
 - Morbidity
 - PROMs
 - Genomics



Health Minister Decision informed by Expert Committee

Medical Services Advisory Committee (MSAC)

Independent Committee to advise the government ie: Federal Health Minister on public funding for health services including screening

- Minimum timeframe from submission to FIRST decision is 16 months
- A positive recommendation from MSAC is not a guarantee of Ministerial approval and subsequent release of funding from Treasury for formal implementation
- There is no precedence for screening for a chronic condition in Australia

Key input requirements are complex:

(Guidelines Document is 309 pages long)

- Clinical Evidence
- Economic Evidence including PRO
- Evidence of Value of Knowing (ie Risk and harms)
- Stakeholder acceptance
- Consumer acceptance
- Health Care Resources use
- Cost of Change

Etc....





Advancing Public Health Policy

Clinical evidence meets the momentum in willingness to change health policy



- Social Strategy
- Political Will
 - Public Understanding
 - Government Support

- Strength of Evidence
- Clinical Effectiveness
- Economic Benefit



The best time to plant a tree was 20 years ago.

The second-best time is now

A Chinese Proverb





Important milestones with relevance towards T1D Screening Policy



Global Perspective

Published Consensus Guidance for monitoring individuals with islet autoantibody-positive pre-stage 3 type 1 diabetes

Diabetes Care. American Diabetes Consensus Guidance for Monitoring Individuals With Islet Autoantibody—Positive Pre-Stage 3 Type 1 Diabetes

- **EASD 2025:**
 - Recommendation population-based screening for T1D through testing for AAbs

- ➤ Italy 2023: legislation to establish a nationwide, screening program for T1D and celiac disease in children/ adolescents aged 1-17 years
- 2025: Breakthrough T1D Submission to USPSTF
- ➤ Globally over 600,000 children in general population were screened for early T1D
- First therapy to delay Stage 3 approved in 2022

Important milestones with relevance towards T1D Screening Policy



National Perspective

- Federal Government assigns screening as a priority for diabetes
 - ➤ July 2024: Parliamentary Inquiry into Diabetes: The State of Diabetes Mellitus in Australia in 2024

R4: The Committee recommends that the Australian Government explores the potential for effective national screening programs for all forms of diabetes

Stakeholder Support: 2024-25 BT1D (AU) formed Early T1D Working Group (Co-Chaired by Prof Jennifer Couper and Dr Dorota Pawlak) comprised of all major diabetes organisation in AU

Changes in legislation

- ➤ September 2025: Legislation to ban the use of adverse genetic testing results in life insurance; (2007 legislation to ban using genomics data in private health insurance)
- > National Program and Data Collection
 - ➤ 2025: Data Analysis for Pilot for Australian T1D Diabetes National Screening Program Completed
- ➤ **Potential for Therapy:** January 2025: Sanofi filed application to TGA for Teplizumab approval

Two Pillar Approach towards National Health Screening Program in T1D

> 2025: Breakthrough T1D in Australia

- Received \$50M funding for continuation of T1D Clinical Research Network
- Funding comes from Chronic Conditions Section of the Dep of Health, Federal Government

One of the key KPI:

Develop a prevention screening pilot program for T1D in children



- > Pillar 1: Implementation Research
 - 2026: Comprehensive National Program for Screening, Monitoring and Interventions

Pillar 2: Policy Platform

➤ BT1D AU partners with Axis Health Co. (Sciences and Healthcare Consultancy) to progress application submission to MSAC for universal screening for T1D in 2027



Pillar 1: Australia-wide unique, coordinated approach towards T1D screening, monitoring & intervention





Type 1 Screen¹

- Community screening of T1D relatives 2-35 years old
- 145 IA-positive screens¹





Hospital

- First degree relative with T1D ENDIA graduates >10 years
- 110 IA positive ongoing



Eligible children and

National Screening Pilot³

 General population screening of 6–12 year olds – 2026 –



Dr Kirstine Bell



Prof John Wentworth

Associated studies

QuEST – family experiences⁴

TRACE-TID - continuous glucose

monitoring⁵

Early TID Monitoring Program

autoantibody lab

(8 centres [7 paediatric] & National Data Registry)⁶

• Health service delivery data

The Royal Central islet

- Clinical and metabolic outcomes
- Fidelity to international guidelines

Disease-modifying trials to preserve insulin production⁷



AUSTRALASIAN
TYPE 1 DIABETES
IMMUNOTHERAPY
COLLABORATIVE



Dr Aveni Haynes

ENDIA, Environmental Determinants of Islet Autoimmunity; IA, islet antibodies; T1D, type 1 diabetes

1. Type1Screen. Screening for Type 1 Diabetes. Available at: https://type1screen.org/
2. Walker GJ, et al. JAMA Pediatr. 2025;179:568-570. 3. Bell KJ, et al. Diabet Med. 2024;41:e15419. 4. Couper et al. Breakthrough T1D International study in progress. 5. TRACE T1D. Launching TRACE T1D. Available at: https://diabetes.thekids.org.au/news-and-events/trace-t1d/
6. Breakthrough T1D. New guidance set to change the way we diagnose type 1 diabetes. Available at: https://breakthroughtld.org.au/news/new-guidance-for-early-stage-t1d/
7. ATIC. Clinical trials. Available at: https://atic.svi.edu.au/clinical-trials/.





Profs John Wentworth &Thomas Kay

Pillar 2: Political Will Assessment Partnership with health consultancy to establish a Roadmap for Screening Program in T1D

Data & **MSAC** Feasibility Program Design Stakeholder Infrastructure Stream Mapping Stream Stream Stream **Detailed Patient Journey Diabetes Ecosystem** Health Technology Completeness of Data for Mapping **MSAC** Assessment - Systematic Awareness 2026 Evidence Review Assessment of precedence Attitudes Assessment of gaps in clinical services Previous fail/success Public Health Lens - Gaps Support in National & Global Plans/Trends in Federal Critical Decision Centres evidence Health Care Reform outside diabetes Strategy Development & Gaps Reduction - Dynamic Process Interacting with Research 2026 2027 MSAC Submission Process Commences



