



A diabetes detection pilot program at a community setting in Western Sydney



Blacktown, in western Sydney, is a prominent diabetes **'hotspot'**.

The **prevalence rate of diabetes (13%)** is approximately **double** that of wealthier areas in the city's north and east.

The **burden of type 2 diabetes** comes at a cost in health and quality of life, as well as financial costs to the economy.

Total estimated annual cost

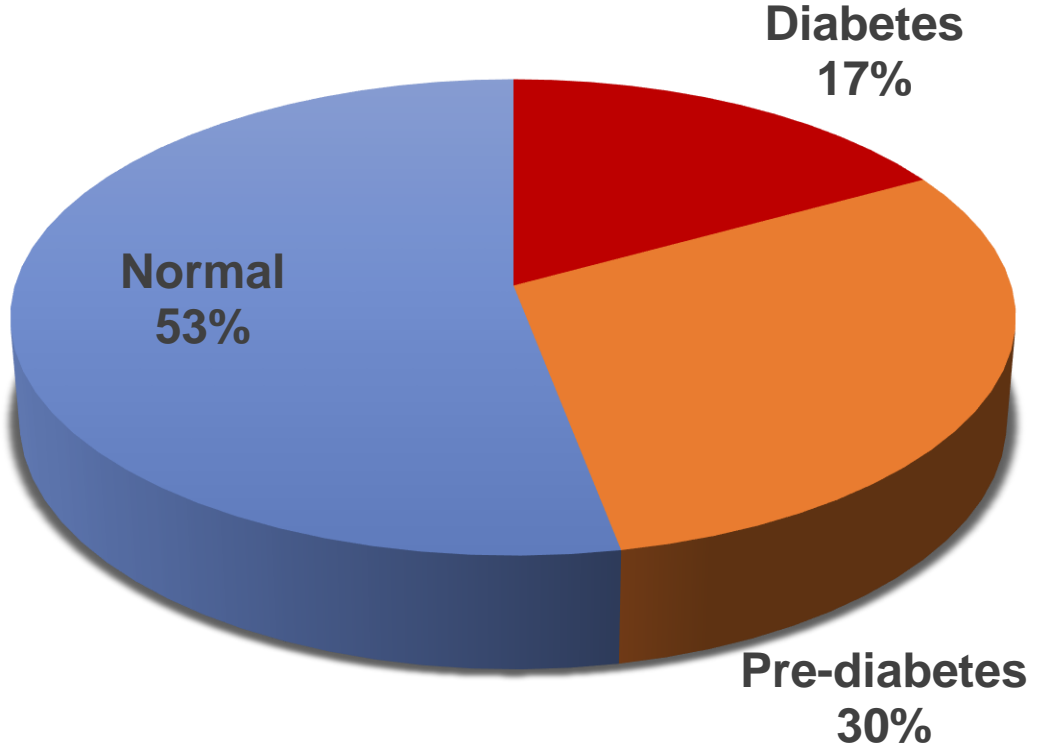
\$1.8b

It is estimated that there are currently over 91,000 people in western Sydney with diabetes. This brings the annual cost to \$1.8 billion

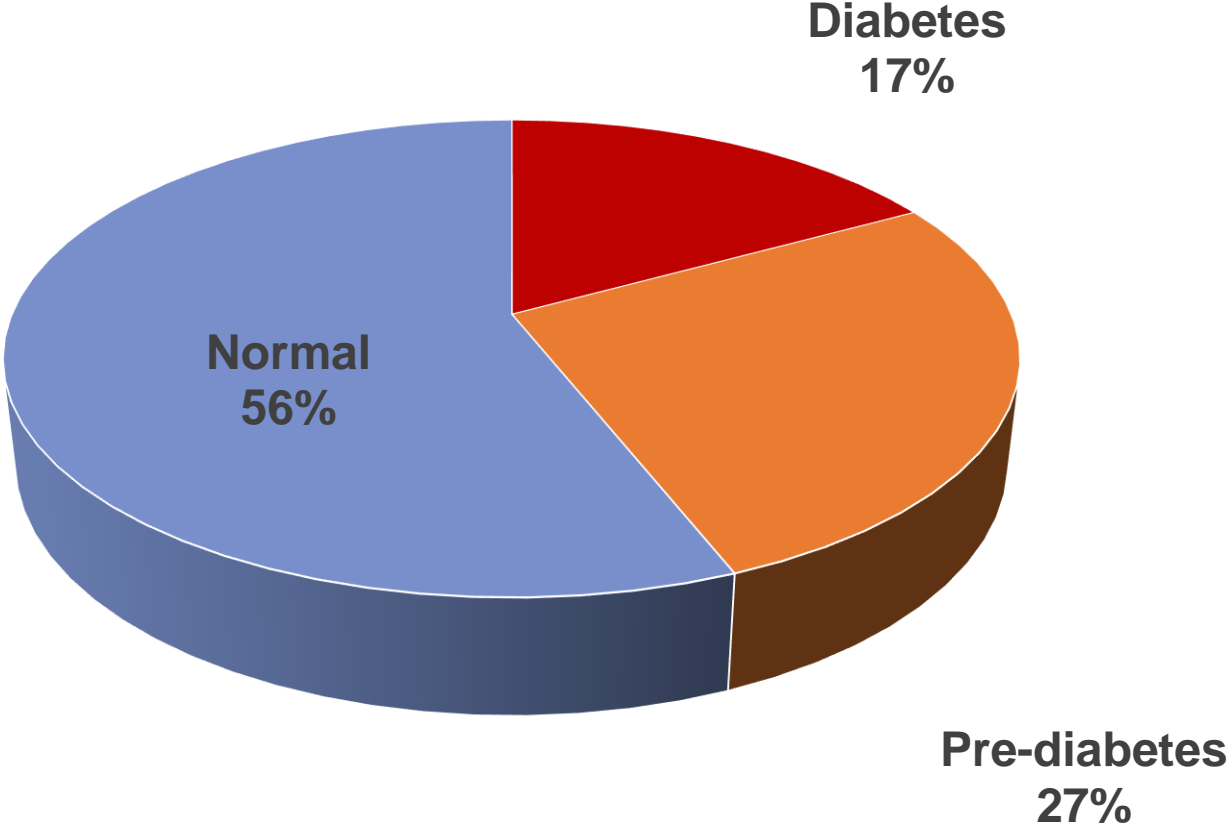
85% OF TYPE 2 DIABETES IS PREVENTABLE

Detection and Screening

ED - Blacktown & Mt Druitt Hospitals



General Practices in Western Sydney



Meyerowitz-Katz et al. 2018

Western Sydney **Changing Diabetes**

- ❑ Our aim - **Direct & Innovative community engagement.**
- ❑ In 2022 - Western Sydney Changing Diabetes (WSCD) Initiative. This is a collaborative effort between the **Workers Lifestyle Group (WLG), Novo Nordisk (NN) and Western Sydney Diabetes (WSD).**
- ❑ **Raise awareness in diabetes and promote healthier lifestyle.**



Workers
LIFESTYLE GROUP



Power of Early Detection and Prevention

- Promoted using **Blacktown workers club's** extensive network, also **Tamil festival**, **NAIDOC** and **Diabetes week**.
- Consent to have fingerpick blood taken by HCP and tested on the **Abbott Afinion** point-of-care analyser.



What did we do with the results? (using ADA classification for diabetes (>6.4%) and pre-diabetes (5.7-6.4%))

- 1. Normal (5.6%) and below** - WSD resources on lifestyle and wellbeing information shared.
- 2. Diabetes/pre-diabetes range, already diagnosed**: WSD resources shared, and letter sent with their GP.
- 3. Pre-diabetes range (5.7-6.4%), undiagnosed**: advised to book an appointment with their GP and given education on diabetes prevention.
- 4. Diabetes range (>6.4%) , undiagnosed**: Ask GP details and consent to communicate the results with their GP + detailed education on test result.

February 2023 - July 2023

Total: 510 participants

24 - NAIDOC week, Riverstone NSW

59 - Tamil community event, Stanhope NSW

427- Blacktown Workers Club, 189 Diabetes week



Table 1 – Demographic information of total sample

	Normal	Prediabetes	Diabetes
All	(n=221)	(n=194)	(n=95)
Age	56.8 (19.2)	66.0 (13.5)	67.9 (12.8)
Aboriginal/Torres Strait Islander	21 (9.5%)	5 (2.6%)	3 (3.2%)
Ethnicity	(n=221)	(n=194)	(n=95)
European/Caucasian	105 (47.5%)	74 (38.1%)	30 (31.6%)
Asian	27 (12.2%)	47 (24.2%)	25 (26.3%)
Pacific Islander	-	5 (2.6%)	1 (1.1%)
Indian/Subcontinental	40 (18.1%)	49 (25.3%)	28 (29.5%)
African	7 (3.2%)	1 (0.5%)	-
Middle Eastern	11 (5.0%)	9 (4.6%)	5 (5.3%)
South American	1 (0.5%)	2 (1.0%)	-
History of Diabetes	(n=221)	(n=194)	(n=95)
No History	187 (84.6%)	104 (53.6%)	10 (10.5%)
Pre-Diabetes	22 (10.0%)	52 (26.8%)	11 (11.6%)
Diabetes	5 (2.3%)	38 (19.6%)	74 (77.9%)

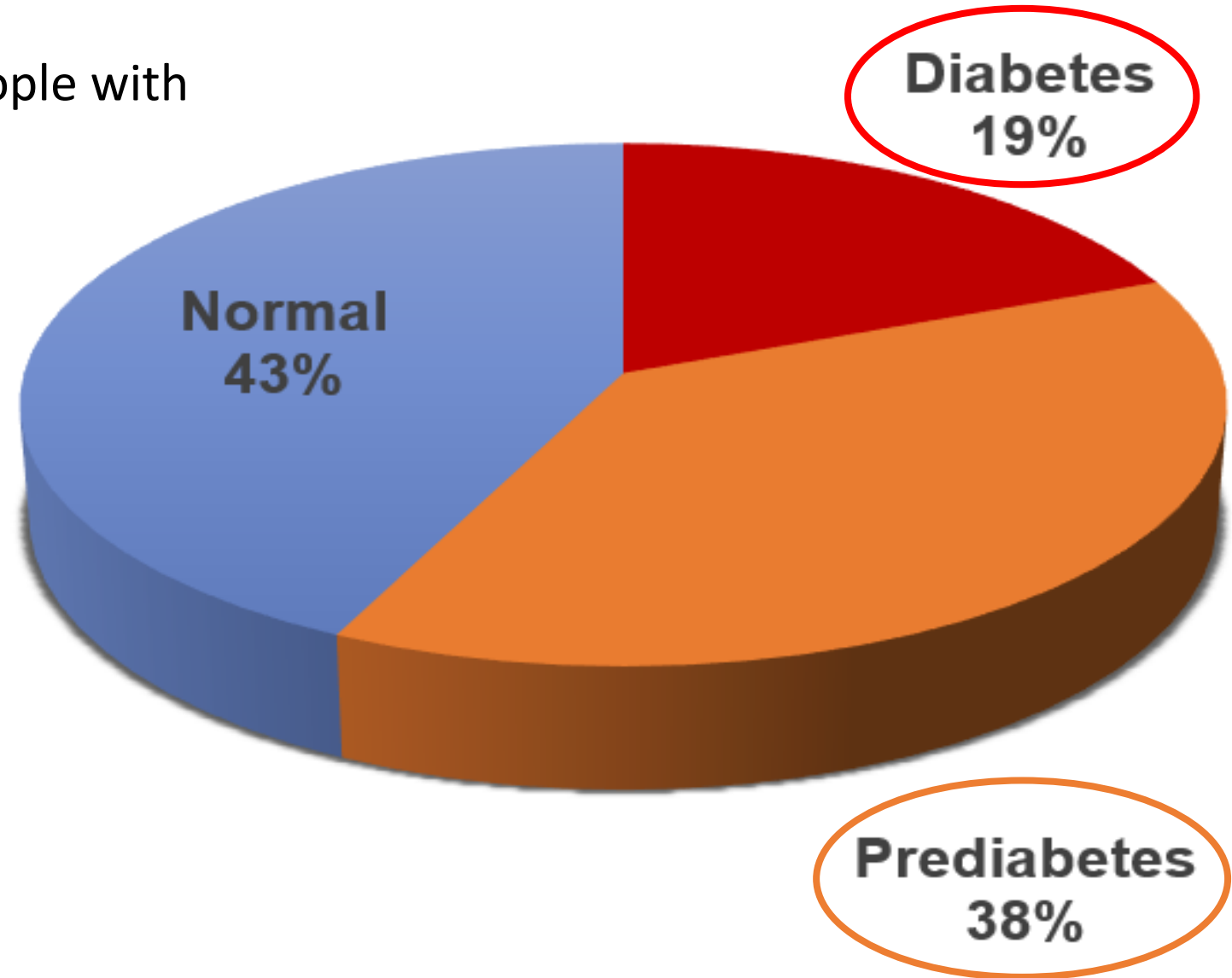
All values given as mean (standard deviation) or n (percentage)

Significance of diabetes in our CALD communities



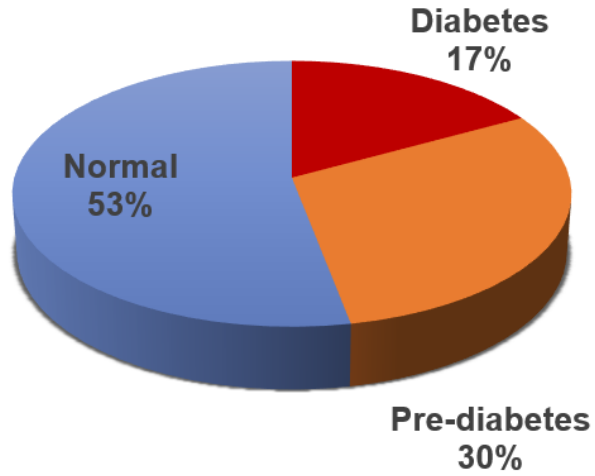
Results: 510 participants

Figure 1: Proportion of people with test results (n=510)

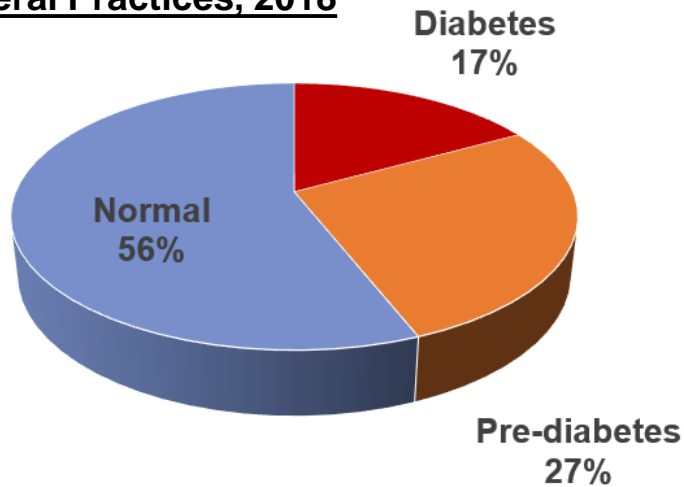


REFLECTION

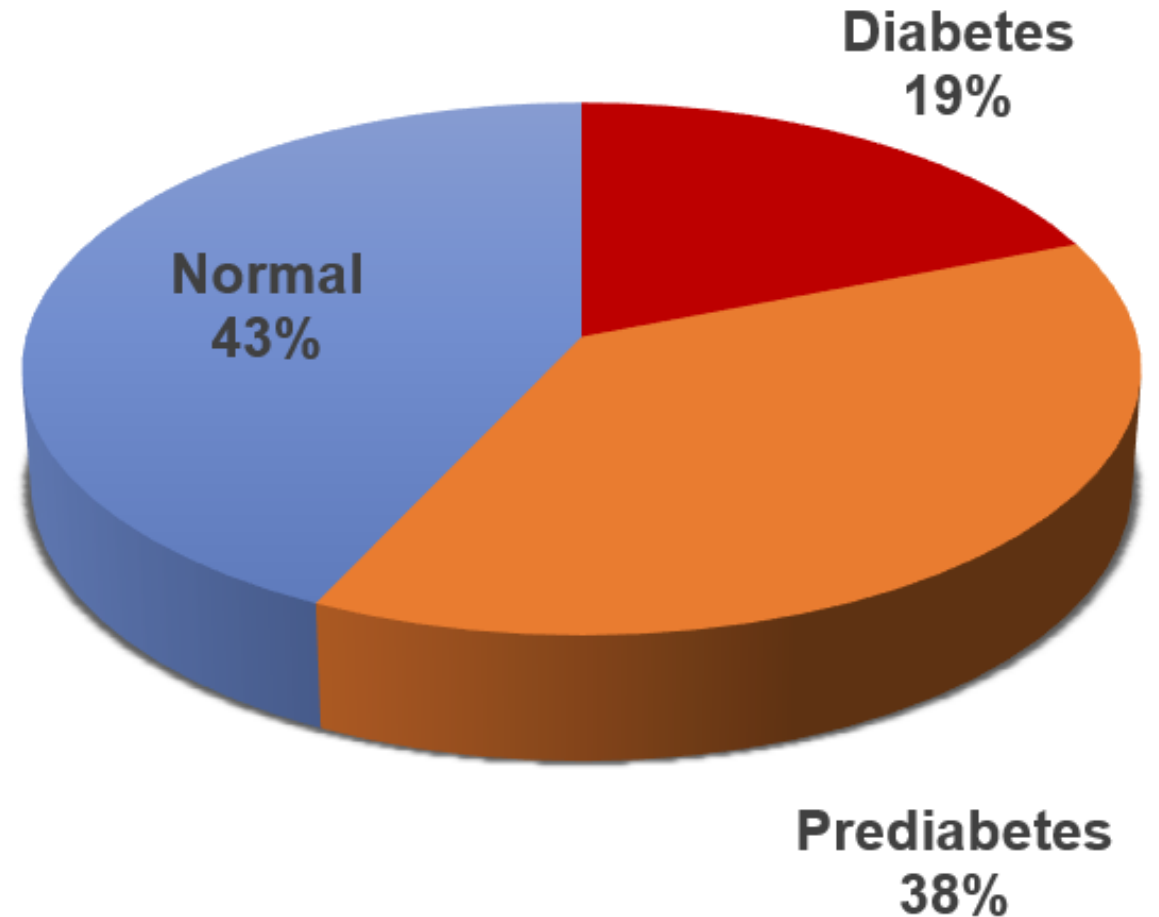
ED - Blacktown & Mt Druitt Hospitals, 2018



General Practices, 2018



Detection in Community Setting in Western Sydney, 2023



Granular breakdown of people with diabetes participants revealed:

HbA1c (%)	Number	Percentage
<7%	82	56%
7-7.9%	29	20%
8-8.9%	27	18%
9%+	8	5%
Total	146	100%

44%



HbA1c of less than 7% is considered well-controlled for people with diabetes

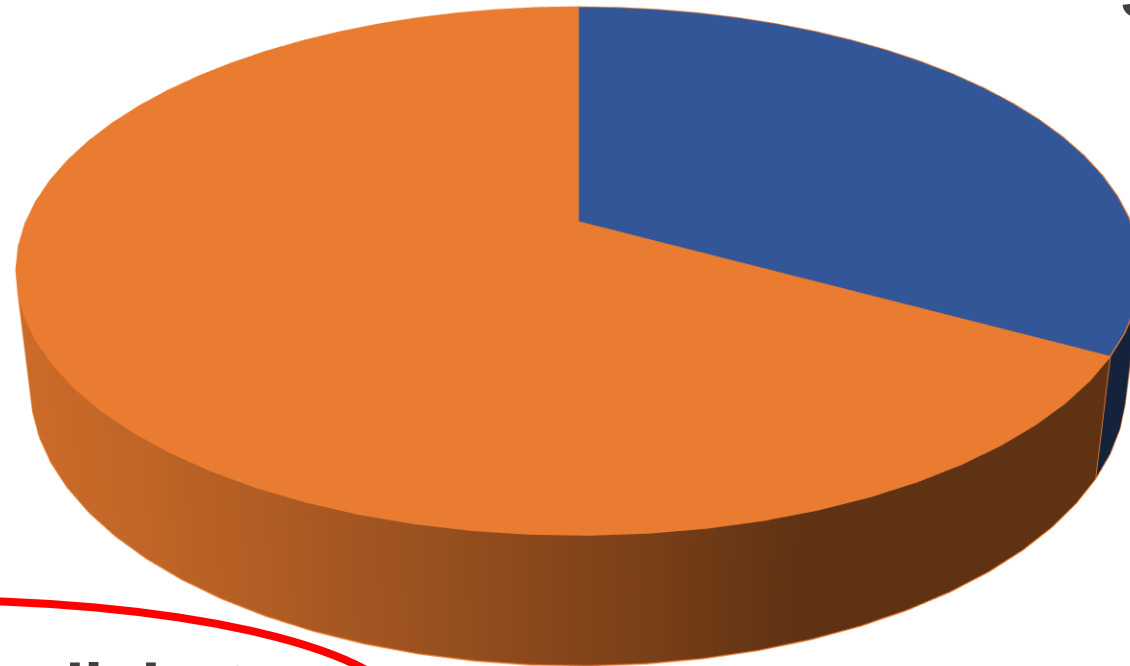
21 people - new diagnosis of diabetes



Hidden burden of Prediabetes

Figure 2: Proportion of people with HbA1c 5.7-6.4% by prior knowledge of prediabetes (n=156)

Aware of prediabetes
33%



Unaware of prediabetes
67%

Western Sydney Diabetes
Beating Diabetes Together

HEALTHY LIVING OPTIONS FOR WESTERN SYDNEY

AFFORDABLE FOOD EDITION

phn WESTERN SYDNEY
An Australian Government Initiative

pwc

d diabetes nsw & act

NSW GOVERNMENT

Western Sydney Diabetes
Beating Diabetes Together

HEALTHY LIVING OPTIONS

Healthy Recipe Book

ADAPTED FROM THE CSIRO LOW-CARB DIET PLAN

phn WESTERN SYDNEY
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d diabetes australia

NSW GOVERNMENT

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HEALTHY LIVING OPTIONS

Out & About

WESTERN SYDNEY DIRECTORY

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Western Sydney Diabetes
Beating Diabetes Together

HEALTHY LIVING OPTIONS FOR WESTERN SYDNEY

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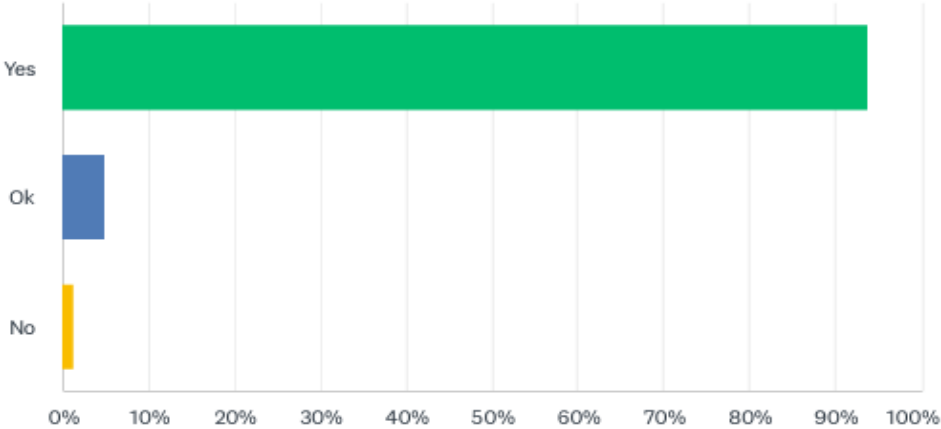
□ Educational resources on healthy recipes, physical activity, community-based activities




□ Facilitated referrals to GPs for additional consultations and management

Participant Survey

Q1 Did you find the diabetes detection program useful?

Answered: 81 Skipped: 0



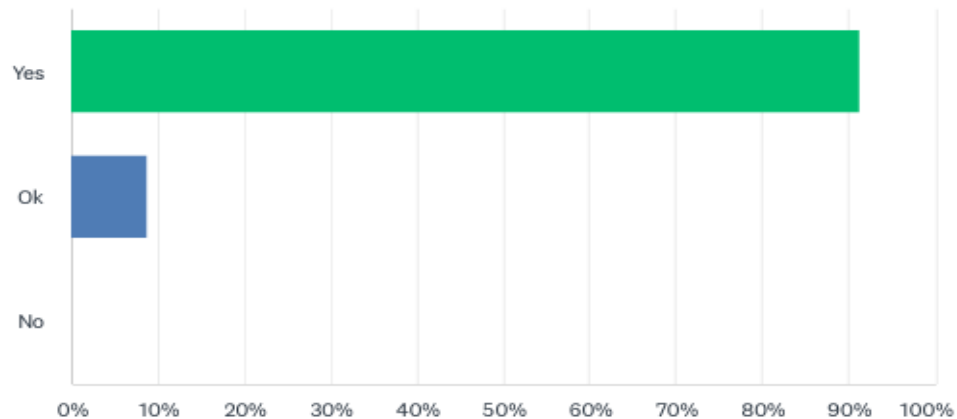
ANSWER CHOICES	RESPONSES
 Yes	93.83% 76
 Ok	4.94% 4
 No	1.23% 1
TOTAL	81




Tell us in a few words what you thought about your experience:

- ✓ IT WAS EASY
- ✓ QUICK, Painless, Informative
- ✓ Good experience, done quickly, friendly staff

Q2 Did you find the conversations, booklets and information sheets provided to you useful?

Answered: 81 Skipped: 0



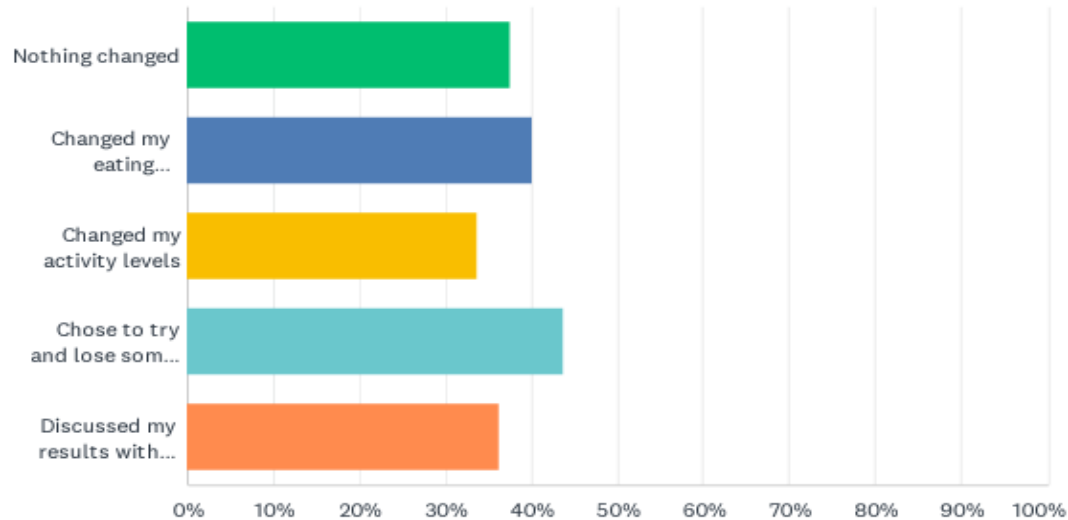
ANSWER CHOICES	RESPONSES
 Yes	91.36% 74
 Ok	8.64% 7
 No	0.00% 0
TOTAL	81

Tell us in a few words what you thought about the information given:

- ✓ I found the information very informative
- ✓ Good information re: local activities and places to go
- ✓ It is always great to receive resources relating to your health that is accessible and equitable to all

Q3 Based on the result provided to you, what actions did you take? (Tick all that applies)

Answered: 80 Skipped: 1



ANSWER CHOICES	RESPONSES
Nothing changed	37.50% 30
Changed my eating selections	40.00% 32
Changed my activity levels	33.75% 27
Chose to try and lose some weight	43.75% 35
Discussed my results with my GP or other healthcare provider	36.25% 29
Total Respondents: 80	

Tell us in a few words what you did differently:

- ✓ Changed my eating habits, more physical activity
- ✓ Used the recipes and enrolled to No Money No Time, gave my GP my results
- ✓ I am taking a wholistic approach to not getting diabetes and this test is the Start

KNOWING IS EMPOWERING

- ❑ Overwhelming Positive feedback
- ❑ **1/3 engaged** with their **GP** after receiving the results
- ❑ **2/3** of participants **took actionable steps**



Blacktown Workers Club helping members fight the diabetes epidemic / 9 News Australia

KEY LEARNINGS:

- ❑ This **hands-on approach**, underlined by **real-time HbA1c testing**, allowed **meaningful interactions** between HCP and participant and acted as a **catalyst for change**.
- ❑ **Visibility** played a pivotal role in the project's success.



Why is early detection important?

The data underscores a concerning trend:

- ❑ More than half of the participants have HbA1c suggestive of **prediabetes and diabetes**.
- ❑ More than half of the participants with prediabetes did **NOT** know about it.

EARLY DETECTION IS KEY!!

Western Sydney
**Changing
Diabetes**



TAKING THE HEAT OUT OF OUR DIABETES HOTSPOT

- ❑ Pilot for a larger scale diabetes detection
- ❑ Benefit the community as a whole
- ❑ Extend diabetes detection and education in harder-to-reach communities.
- ❑ Focus on grassroots mobilisation, merging and aligning public + private efforts = lasting community enhancements in the fight against diabetes.



Changing Red to Blue



Blacktown

Western Sydney
Changing
Diabetes

**THANK
YOU!**

