

Life! program

The Life! App is a new application that provides an innovative way to determine a patient's eligibility for the Diabetes Victoria Life! program and have them enrolled within the program.

- The app's functionality includes a Cardiovascular Disease (CVD) risk calculation, an AUSDRISK calculation, and dynamic intervention options.
- The app checks the patient's details, including age, ethnicity, measurements, and clinical history, against three risk criteria to determine the patient's eligibility. The three criteria are related to age, Aboriginal or Torres Strait Islander background, cardiovascular disease absolute risk score, pre-existing conditions, and BMI.
- The app is equipped with a reset button that removes patient details from the app screen and a calculate button that computes the CVD and AUSDRISK risk scores, which are displayed in the middle panel.
- The final section of the app allows health providers to select one or multiple intervention options to promote health-related discussions and to provide medication and lifestyle recommendations based on the selected interventions.
- Finally, the app displays the risk criteria that are pertinent to the patient and allows health providers to open the Diabetes Victoria Life! Enrollment form to enroll the patient in the program.

Using the Life! App

When you open a patient in your clinical system, the Life! App will check the patient details (age, ethnicity, measurements, and clinical history) against the risk criteria provided by Diabetes Victoria and, depending on the patient, display the relevant eligibility criteria within the app. There are three possible criteria which determine a patient's eligibility for participation in the program:

Risk Criteria 1:

- 18 years **and**;
- AUSDRISK 12 **and**;
- BMI 25 kg/m² (if patient is of Asian background a BMI 23 kg/m²)

Risk Criteria 2:

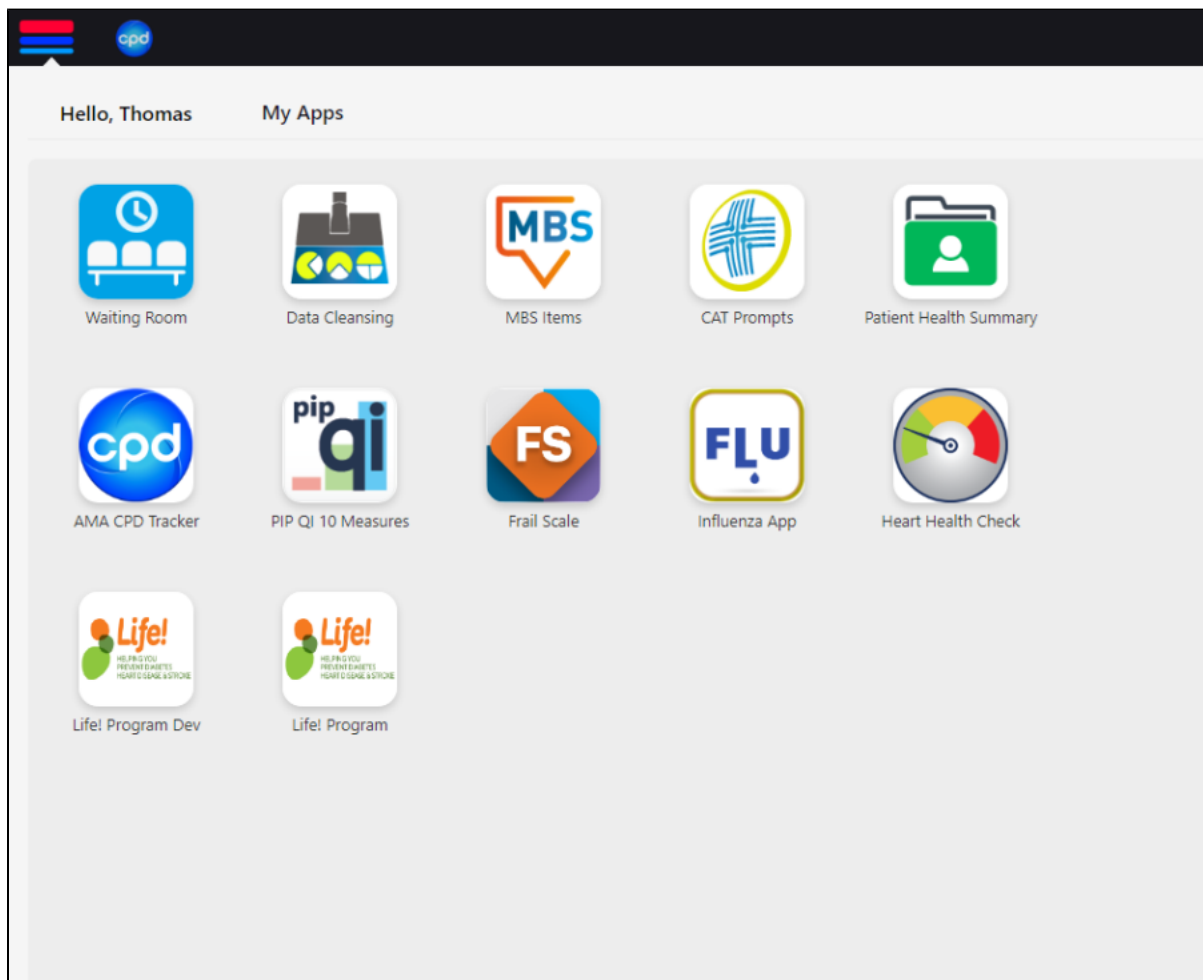
- 45 years **or**;
- Aboriginal or Torres Strait Islander 30 years **and**;
- Cardiovascular disease absolute risk score 10%

Risk Criteria 3:

- 18 years **and**;
- One or more of the following pre-existing conditions –
 - CVD
 - CKD
 - GDM
 - PCOS
 - Pre-diabetes
 - Familial Hypercholesterolemia
 - Serum total cholesterol > 7.5mmol/L
 - Syst BP of 180 mmHg or Diastolic BP 110mmHg.

First Time Access

Open Topbar App home page and Select the Life! Program.



Once application is open, the Terms and Conditions will pop-up, once accepted the app will notify you of eligible patients when they are open in the CIS.

✕

Terms and Conditions

- The *Life!* Program which is available through the software known as Topbar, or such other successor title as is produced by Pen CS Pty Ltd.
- To be used by general practitioners for the purpose of providing general information which may assist general practitioners to identify patients who may have one or more of the following
 - A. High risk of diabetes: ≥ 18 years, with an AUDRISK of ≥ 12 and BMI ≥ 25 kg/m² – if patient is of Asian descent BMI ≥ 23 kg/m² is accepted
 - B. medium-High risk of Cardiovascular Disease (CVD): ≥ 45 years or ≥ 30 years if of Aboriginal and/or Torres Strait Islander descent and have an Absolute Risk Score of $\geq 10\%$, and/or
 - C. diagnosis of one or more of the following: cardiovascular disease, gestational diabetes, chronic kidney disease, pre-diabetes, polycystic ovarian syndrome, familial hypercholesterolaemia, serum total cholesterol > 7.5 mmol/L, and systolic blood pressure (BP) ≥ 180 mmHg or diastolic BP ≥ 110 mmHg
- Adapted from the following studies:
 - Heart Foundation www.heartfoundation.org.au/your-heart/heart-conditions
 - Kidney Health www.kidney.org.au/your-kidneys/detect/kidney-disease/defining-chronic-kidney-disease
 - Diabetes Australia www.diabetesaustralia.com.au/pre-diabetes
 - Diabetes Australia www.ndss.com.au/understanding-pre-diabetes
 - Royal Australian College of General Practitioners LTD (RACGP) www.racgp.org.au/your-practice/guidelines/redbook/8-prevention-of-vascular-and-metabolic-disease/84-type-2-diabetes/
 - RACGP www.racgp.org.au/your-practice/guidelines/diabetes/3-screening-risk-assessment-case-finding-and-diagnosis/33-impaired-fasting-glucose-or-impaired-glucose-tolerance/
 - Familial Hypercholesterolemia Australasia Network www.athero.org.au/fh/patients/diagnosis/
 - Heart Foundation www.heartfoundation.org.au/for-professionals/clinical-information/hypertension
 - Jean Hailes for Women's Health www.jeanhailes.org.au/health-a-z/pcos
 - RACGP www.racgp.org.au/your-practice/guidelines/diabetes/3-screening-risk-assessment-case-finding-and-diagnosis/33-impaired-fasting-glucose-or-impaired-glucose-tolerance/
 - RACGP www.racgp.org.au/your-practice/guidelines/diabetes/3-screening-risk-assessment-case-finding-and-diagnosis/33-case-finding-in-patients-with

Decline
Accept

Overview of the Life! App

Diabetes Victoria - Life! QA

Age

45

Gender

Male

Smoking

Yes

Alcohol

No

Blood pressure

Systolic

90

mmHg

HbA1c

67

mmol/mol

BMI

30.0

kg/m²

Cholesterol

Total cholesterol

5

mmol/L

HDL

0.5

mmol/L

LDL

34

mmol/L

Triglycerides Status

56

mg/dL

Fasting Blood Glucose

45

mg/dL

ECG LVH

Yes

Diabetes

No

List of Relevant Pre-Existing Conditions

Pre-Existing Conditions

List of Diagnoses

Active Patient Diagnoses

Diabetes Risk Assessment

AUSDRISK Calculation

RESET

CALCULATE

CVD Risk Score

Cardiovascular Risk Assessment

CURRENT RISK AT AGE 45

FUTURE RISK AT AGE 50

Risk of heart attack/stroke in the next 5 years

10%

You are at moderate risk of a heart attack or stroke in the next 5 years.

Diabetes Risk Score

AUSDRISK Score

Risk of developing diabetes in the next 5 years

Your AUSDRISK Score is 4

Low risk (0 to 5)

Approximately one person in every 100 will develop diabetes. This means you are at low risk of developing type 2 diabetes within five years. It is important you continue to maintain a healthy lifestyle.

Dynamic Intervention Options

Intervention Options and Benefits

STOP SMOKING

REDUCE BLOOD PRESSURE

IMPROVE DIET

REDUCE CHOLESTEROL

INCREASE PHYSICAL ACTIVITY

Decision Aid - 5 year CVD Risk Management Guidelines

Please select an intervention option above.

Lifestyle

Medication

Recommendations

Recommendations

Patient Eligibility

Risk Criteria Triggered

age >= 18 years AND AUSDRISK >= 12 AND BMI >= 25 kg/m2 (if patient is of Asian background a BMI >= 23 kg/m2)

Patient Enrolment Form

ENROLL

This risk assessment is adapted from the CVD Check Calculator, The Australian Type 2 Diabetes Risk Assessment Tool (AUSDRISK) and Guidelines for the Management of Absolute Cardiovascular Disease Risk. This information should be verified by the healthcare provider.

Windows Taskbar: Bp Premier, Kon MBS2UT3Ful..., A Eligibility, B Eligibility, C Eligibility, Exclusion Exclusion, PCS Topbar

Details of the Life! App Functionality

CVD Risk Calculation

The top left section of the home page houses the patient details required for the Cardiovascular Disease (CVD) risk calculation.

Absolute Cardiovascular Risk Calculator

Age

45

Gender

Male

Smoking

Yes

Alcohol

No

Blood pressure

Systolic

90

mmHg

HbA1c

67

mmol/mol

BMI

30.0

kg/m²

Cholesterol

Total cholesterol

5

mmol/L

HDL

0.5

mmol/L

LDL

34

mmol/L

Triglycerides Status

56

mg/dL

Fasting Blood Glucose

45

mg/dL

ECG LVH

Yes

Diabetes

No

Once consent has been provided by both health care provider and patient, these details will pre-fill from the opened Clinical Information Software (CIS) and patient clinical file.

List of Relevant Pre-Existing Conditions

This section is a static list of pre-existing conditions that form the majority of the third risk criteria, this is in the app for quick reference by the user.

Pre-Existing Conditions

One or more of the following pre-existing conditions

- CVD
- CKD
- GDM
- PCOS
- Pre-diabetes
- Familial Hypercholesterolemia
- Serum total cholesterol > 7.5mmol/L
- Syst BP of ≥ 180 mmHg or Diastolic BP ≥ 110 mmHg

Active Patient Diagnoses

This section is a dynamic list of diagnoses as per the selected patient's clinical file. This section should always show the active conditions a patient has in their file.

List of Diagnoses

Any current Active Diagnosis should be listed here

- Coronary heart disease

AUSDRISK Calculation

The final section on the left panel of the app home page is reserved for the AUSDRISK calculation. This is of course the Australian Type 2 Diabetes Risk Assessment Tool, and is comprised of a short list of questions to assess the risk of developing type 2 diabetes over the next 5 years.

Diabetes Risk Assessment



These questions relate to your risk factors for diabetes.

Are you of Aboriginal, Torres Strait Islander, Pacific Islander or Maori descent?

☐ Yes ☐ No

Where were you born? ▼

Have either of your parents, or any of your siblings been diagnosed with diabetes (type 1 or type 2)?

☐ Yes ☐ No

Have you ever been found to have high blood glucose (sugar) (for example, in a health examination, during an illness, during pregnancy)?

☐ Yes ☐ No

Are you currently taking medication for high blood pressure?

☐ Yes ☐ No

Lifestyle factors

Do you smoke cigarettes or any other tobacco products on a daily basis?

☐ Yes ☐ No

Do you eat vegetables or fruit every day?

☐ Yes ☒ No

On average, would you say you do at least 2.5 hours of physical activity per week (for example, 30 minutes a day on 5 or more days a week)?

☐ Yes ☒ No

Waist measurement (in cm)

Waist circumference

Waist to be measured below the ribs (usually at the navel level) and while standing.

Where the information is available within the CIS it will be pulled into and pre-filled in the app.

The Buttons

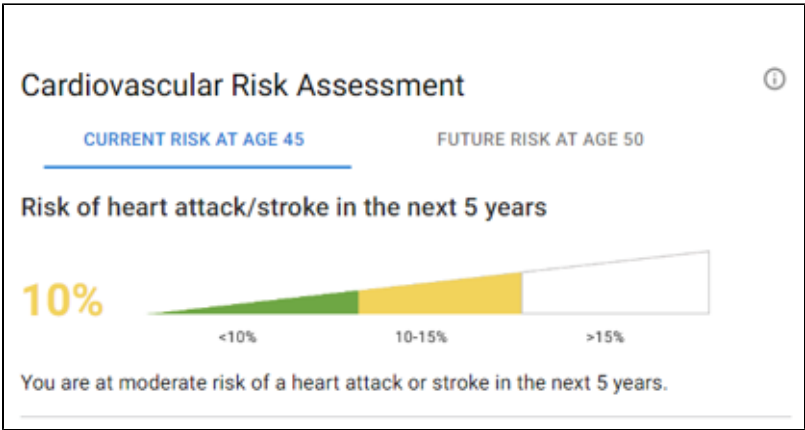
The Reset button will wipe the patient details recorded from the app home page.



The Calculate button will take the information provided in both the CVD and AUSDRISK sections and calculate the risk scores respectively for both measures for display in the next panel over.

CVD Risk Score

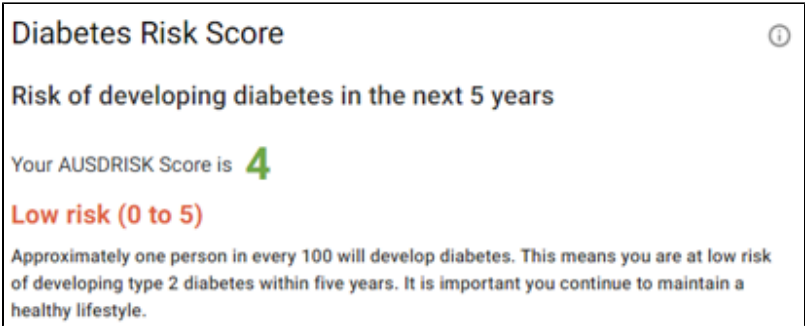
The middle panel shows both CVD and AUSDRISK calculated risk scores. The CVD risk score is calculated as per the Australian Absolute Cardiovascular Disease Risk Calculator. It determines the patients risk as an individual of getting CVD.



The risk score visualized here in this section shows less than 10% as low risk, 10-15% as moderate risk, and 15% and above as high risk of developing CVD within the next 5 years.

AUSDRISK Score

The next section in this middle panel is reserved for risk score in relation to Type 2 diabetes as measured by AUSDRISK. This measure uses a combination of age, ethnicity, waist circumference and physical activity to develop a 5 year risk score for developing diabetes.



The scoring system for AUSDRISK is as follows; score of 5 or less is considered low risk (1/100 develop diabetes); 6-11 intermediate risk (1/50 develop diabetes) and; 12 and over as high risk (1/14 develop diabetes).

Dynamic Intervention Options

The final section of the app begins with some intervention options that dynamically interact with the medication and lifestyle recommendations section below it.

Intervention Options and Benefits

<input type="checkbox"/> STOP SMOKING	<input type="checkbox"/> REDUCE BLOOD PRESSURE	Target
<input type="checkbox"/> IMPROVE DIET	<input type="checkbox"/> REDUCE CHOLESTEROL	Target
<input type="checkbox"/> INCREASE PHYSICAL ACTIVITY		

The app will allow the selection of one or multiple of the above intervention options to promote health related discussions between health provider and patient and exemplify the outcomes of this interventions on the patients health should they be followed.

Medication & Lifestyle Recommendations

The Medication and Lifestyle recommendations are based on the health interventions chosen by the provider/user. If no interventions are chosen, this section will remain blank. With each new intervention selected a new action item will populate.

Decision Aid - 5 year CVD Risk Management Guidelines

Please select an intervention option above.

Lifestyle Recommendations	Medication Recommendations
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For example, should a patient who smokes agree to try and quit, the provider would toggle on the "Stop Smoking" button, which will both adjust the risk score for the patient, and provide recommendations for the patient. Under lifestyle it may suggest providing advice and pharmacotherapy for smoking cessation support. While, under medication it would advise it's not necessarily widely recommended and may populate a reminder about withdrawal therapy for people who make profound lifestyle changes.

Risk Criteria Triggered

As mentioned at the start of this document there are three primary risk criteria that determine a patient's eligibility for enrolment in the Life! Program. Depending on which of the three are pertinent to the patient being seen, they will display towards the bottom of this right panel.

Patient Eligibility

Age \geq 18 years AND one or more of the following pre-existing conditions – CVD, CKD, GDM, PCOS, Pre-diabetes, Familial Hypercholesterolemia, Serum Total Cholesterol $>$ 7.5mmol/L, Syst BP of \geq 180 mmHg or Diastolic BP \geq 110mmHg

Should the patient be eligible for enrolment due to more than one criterion being fulfilled then the app will display each criteria triggered.

Patient Enrolment Form

Finally, should the patient be eligible and willing to take part, the health care provider can select the enroll button to open the Diabetes Victoria Life! Enrollment form.

Patient Enrolment Form

Patient details

Referral Date:

Name:

Address:

Phone:

Email:

DOB: Gender:

Country of birth:

Cultural background:

Does your patient speak English? ☐ Yes ☐ No

What is the main language spoken at home?

Aboriginal or Torres Strait Islander descent: ☐ Yes ☐ No

Past medical history

Current smoker: ☐ Yes ☐ No

Blood pressure: systolic/ diastolic

Waist circumference (cm):

→ **Life! program exclusion criteria:** • Diabetes • Pregnancy • Active Cancer • Cardiovascular Disease (CVD) diagnosis in the last 3 months
It is important to consider the suitability of the Life! program for each individual.

Patient eligibility

Choose one of the following **A OR B OR C:**

☐ **A** → OR

≥ 18 years and AUSDRISK ≥ 12 and BMI ≥ 25 kg/m² (if patient self-identifies as being of Asian background a BMI ≥ 23 kg/m² is accepted)*

AUSDRISK Score:

Height (cm):

Weight (kg):

BMI:

MBS items apply for a health assessment 701, 703, 705, 707, 715

☐ **B** → OR

45 years or over, or ≥ 30 years and of Aboriginal and/or Torres Strait Islander descent and have an Absolute Risk score of ≥ 10% when referred by a GP clinic.

CVD risk score:

The following time-based MBS item applies for a heart health check: 699, 177

☐ **C**

≥ 18 years with one or more of the following pre-existing conditions (Please tick ✓ and document):

☐ Cardiovascular Disease*

☐ Gestational Diabetes

☐ Chronic Kidney Disease

☐ Pre-diabetes (IFG or IGT)

☐ Polycystic Ovary Syndrome

☐ Familial Hypercholesterolemia

☐ Serum total cholesterol > 7.5mmol/L (initial reading):

☐ Syst BP of ≥ 180 mmHg or Diast BP ≥ 110mmHg (reading):

For further information or clarification, please refer to the definitions page.

Referrer details

Name:

Clinic:

Address:

Phone:

Fax:

Email:

By signing this form, you agree that you have explained to your patient and, in your opinion, they understand that Diabetes Victoria collects their personal information for the purposes of Life! program registration, administration, participation, monitoring and evaluation.

Signature:

Completing the referral

✓ Tick to confirm

☐ Yes, patient consents to be enrolled in the program

☐ Blood pathology report within 12 months of referral date*

☐ Fasting blood glucose

☐ Lipid Profile (TC/TRIG/HDL/LDL)

☐ Completed AUSDRISK form is using criteria A

☐ Diabetes excluded*

☐ Yes, patient is happy for Life! to contact them for research or about their experience in the program.

☐ Yes, patient is happy for Life! to contact them to discuss participation in social marketing activities.

* For further information or clarification, please refer to the definitions page.

Return completed referral to:

Email: life@diabetesvic.org.au

Fax: 03 9667 1757

Mail: Diabetes Victoria – 570 Elizabeth Street, Melbourne VIC 3000

Phone: 03 8648 1880

Data Collection at Diabetes Victoria Diabetes Victoria is the leading charity and peak consumer body working to reduce the impact of diabetes. Data will be collected by Diabetes Victoria on all individuals referred to the Life! program. To maintain the confidentiality of your personal information, we comply with all Commonwealth and State privacy legislation. A copy of our Privacy Policy is available upon request. Your information will be used to assess the effectiveness of the Life! program. It will be stored in a secure database and only accessible by the organisation providing the Life! course and management of the Life! program.

Diabetes Victoria ABN 47 008 529 461

The majority of information on this form can, and will, be pre-filled from the app to ensure no double handling in the process. Once the provider and patient are both happy with the contents of the form the user can select the print option on the form. This will prompt a final challenge screen for the provider to pop-up and confirm patient consent has been provided. Once the check box is ticked the user can complete the workflow and save locally to send to Diabetes Victoria how they see fit (whether singly or in bulk).

