



DARK SHADOW

OF TYPE 2 DIABETES

More than just blood glucose control

PEOPLE WITH
TYPE 2 DIABETES HAVE A

60%
HIGHER RISK
OF DEVELOPING DEMENTIA



The burden of diabetes complications casts a *dark shadow* across the body. We need greater education and support for people with type 2 diabetes, and their GPs.

Professor Jonathan Shaw
Head of Clinical Diabetes and Population Health

PEOPLE WITH
TYPE 2 DIABETES ARE

UP TO
8 times
MORE LIKELY
TO EXPERIENCE
HEART FAILURE

PEOPLE WITH
TYPE 2 DIABETES ARE

twice
AS LIKELY
TO DEVELOP SEVERAL
TYPES OF CANCER

**TYPE 2 DIABETES –
INCREASED CANCER RISK**

BREAST
CANCER — **20%** greater risk

BOWEL
CANCER — **50%** higher chance

ENDOMETRIAL
CANCER — **twice** as likely to develop

LIVER
CANCER — **twice** as likely to develop

PANCREATIC
CANCER — **2-3** times more likely to develop

**A 45-YEAR-OLD
WITH DIABETES WILL LIVE**

6 years
LESS

**THAN A PERSON
WITHOUT DIABETES**

Overview

Diabetes remains one of the greatest contemporary health challenges. The numbers of people with diabetes are measured in the hundreds of millions globally, and the list of organ systems adversely affected by diabetes continues to grow.

In 2017, we released *The Dark Heart of Type 2 Diabetes* report. This report summarised what was known about the various effects of diabetes on the heart, and provided an estimate of how many lives could be saved if the new class of sodium–glucose co-transporter-2 (SGLT2) inhibitor drugs was used more widely. The report sought to highlight aspects of the effects of diabetes that are not always well-recognised and thereby to increase awareness and improve outcomes for people with type 2 diabetes.

The success of *Dark Heart* in raising these issues prompted us to use a similar format to expand into some of the other complications of diabetes. In this *Dark Shadow* report, we provide up to date information on the impact of diabetes on a broader range of complications. We bring the latest information on the major microvascular complications – those caused by damage to the small blood vessels, such as kidney disease, eye disease and amputations – as well as the major macrovascular complications – those caused by damage to the large blood vessels, such as strokes, heart attacks and heart failure. We also delve into a number of the other ‘non-traditional’ complications, including cancer, dementia and liver disease. Wherever possible, we provide information directly relevant to Australia.

Similar to *Dark Heart*, we also look at opportunities to improve outcomes. The last few years has seen a flurry of publications of major trials showing benefits of novel glucose-lowering drugs on both cardiovascular and renal outcomes, such as heart failure, stroke and kidney disease. Importantly, these benefits did not result from lowering blood glucose, but arose from other, as yet inadequately understood, mechanisms. In this report, we summarise the published literature on the benefits of these agents. Finally, we estimate the potential population-wide benefits of increasing the uptake of these agents among those at highest risk.

However, not everything is about the latest discoveries. As has been documented repeatedly in many areas of health, there is underuse of interventions whose benefits have already been established over many years. This implementation gap remains wide in type 2 diabetes, and so this report also provides estimates for how many cardiovascular deaths could be prevented if there if there was better use of existing cholesterol lowering medications - statins - and blood pressure lowering medications - ACE inhibitors and angiotensin receptor blockers.

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