Amputations evidence

There are more than 4,400 amputations every year in Australia as a result of diabetes.¹

This is the second highest rate in the developed world.²

In 2005, more than 1,000 people with diabetes died as a direct result of foot ulcers and lower limb wounds – around 8% of all diabetes related deaths.³

Every year there are 10,000 hospital admissions in Australia for diabetes-related foot ulcers in Australia – many of these end with people having a limb, or part of a limb, amputated.⁴

Recent data suggests rates of diabetes-related amputations increased by over 30% between 1998 and 2011 – clearly this is unsustainable.⁵

Experts estimate diabetic foot disease costs Australia around $875 million every single year.⁶

The average cost of a diabetes-related limb amputation is around $23,555, and an additional annual spend of $6,065 every year afterwards. Over five years a diabetes related amputation costs the health system almost $50,000 and that doesn’t include social costs.⁷

Recent new research suggests investing in evidence-based care for Australians with diabetic foot ulcers could save around $2.7 billion over five years. That is around $9,000 per person aged under 75 and $12,000 per person aged over 75 (both over five years).⁸

Patients with diabetic foot ulcers have morbidity and mortality rates on par with aggressive forms of cancer.⁹

Diabetes complications – like diabetic foot ulcers – massively increases the cost of providing healthcare to people with diabetes. For instance, the cost of providing healthcare to someone who has had a diabetic foot ulcer is more than five times higher (5.4) than providing healthcare to someone who doesn’t have a foot ulcer.¹⁰

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⁶ Based on research from the Australian Diabetic Foot Network.
Limb amputations are threatening to bankrupt our hospital system. People with diabetes hospitalised for lower limb amputation have longer stays in hospital than other diabetes-related conditions. The average length of stay is around 26 days.\textsuperscript{11}

Research shows it is possible to reduce preventable amputations and hospitalisation by as much between 24 to 90%.\textsuperscript{12}

Around 85% of diabetes related amputations are preventable if wounds are detected early and managed appropriately.\textsuperscript{13}

**Amputations state-by-state**

*These figures are based on a percentage of total NDSS registrants in each state. They should not be used for state-by-state comparisons.*

<table>
<thead>
<tr>
<th>State</th>
<th>Figures</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT:</td>
<td>57</td>
</tr>
<tr>
<td>NSW:</td>
<td>1,450</td>
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<tr>
<td>NT:</td>
<td>52</td>
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<td>QLD:</td>
<td>821</td>
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<td>SA:</td>
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<td>TAS:</td>
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<td>VIC:</td>
<td>1,108</td>
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<td>WA:</td>
<td>439</td>
</tr>
</tbody>
</table>

**Aboriginal and Torres Strait Islander statistics**

Aboriginal and Torre Strait Islander Australians with diabetes are 38 times more likely to undergo a major leg amputation compared to non-Indigenous Australians with diabetes. They are also 27 times more likely to undergo a minor leg amputation.\textsuperscript{14}

Nearly all (98%) of amputations in Aboriginal and Torres Strait Islander people are related to diabetes.\textsuperscript{15}

**Caring for your feet - Individual**

According to the Annual Cycle of Care for Diabetes Management people with diabetes should have their feet checked by a professional twice a year.\textsuperscript{16}

People with diabetes should check their feet every day for signs of redness, ulcers, unusual swelling, blisters, ingrown nails, bruising or cuts.\textsuperscript{17}

You should seek medical treatment within 7 days if you see broken skin between your toes, calluses, corns, changes in foot shape, cracked skin or changes in nail colours.\textsuperscript{18}

All diabetes-related foot ulcers should be managed by a doctor and a podiatrist and/or wound care nurse.

Good foot healthcare requires removing dead, damaged or infected tissue, dressing wounds appropriately, ensuring pressure in feet is distributed evenly and managing blood glucose levels.

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\textsuperscript{14} Norman PE, Schoen DE, Gurr JM, Kolybaba ML. High rates of amputation among Indigenous people in Western Australia [letter]. Med J Aust 2010; 192: 421.
\textsuperscript{15} Norman PE, Schoen DE, Gurr JM, Kolybaba ML. High rates of amputation among Indigenous people in Western Australia [letter]. Med J Aust 2010; 192: 421.
Care for your feet – health sector reforms

Too many Australians are slipping through the cracks and missing out on vital foot checks because they don’t understand what they need to look after their feet.

Better self management education helps people understand the risk of amputation and what they can do to check their own feet.

We need to increase access to services like diabetes educators, podiatrists, and other allied health services to ensure people can get the support they need.

We need to implement standard models of multi-disciplinary foot care teams across the nation. At the moment we have one team for every one million Australians, we need to lift that to about one team for every one hundred thousand Australian.

Success stories

In Western Australia the Fremantle Diabetes Study observed a 70% fall in rates of amputation over a 15 year period. This was achieved by ensuring better access to health services including coordinated multidisciplinary care and better education.19

Improved models of care have helped drive a 20% reduction in diabetes foot-related hospitalisations and amputations within five years.20

General statistics

Diabetes is the single biggest challenge confronting Australia’s health system in the 21st century.

Diabetes is estimated to cost the Australian economy around $14.6 billion per annum.21

Nationwide prevalence:

<table>
<thead>
<tr>
<th>Type</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1 diabetes</td>
<td>118,845</td>
</tr>
<tr>
<td>Type 2 diabetes</td>
<td>1,092,040</td>
</tr>
<tr>
<td>Gestational</td>
<td>37,348</td>
</tr>
<tr>
<td>Other</td>
<td>7,837</td>
</tr>
<tr>
<td>Total</td>
<td>1,256,070</td>
</tr>
</tbody>
</table>

Around 1.7 million Australians have diabetes. This includes all types of diagnosed diabetes (1.2 known and registered) as well as silent, undiagnosed type 2 diabetes (up to 500,000 estimated).

An estimated 2 million Australians have pre-diabetes and are at high risk of developing type 2 diabetes in coming years.

Evidence shows type 2 diabetes can be prevented in up to 58% of high risk cases.

280 Australians develop diabetes every day. That’s one person every five minutes.

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22 National Diabetes Services Scheme figures. - June 2017
Internationally
Globally, there are more than 415 million people living with all types of diabetes. That is around one in 11 adults.\textsuperscript{23}
Globally around $673 million is spent on diabetes - around 12 per cent of global health expenditure.\textsuperscript{24}
There are around 5 million deaths per annum for diabetes and related conditions – that is one person every six seconds.\textsuperscript{25}
By 2040, the International Diabetes Federation estimates diabetes-related health spending will top $800 billion.\textsuperscript{26}
By 2040, more than 642 million people will be living with diabetes, around 10 per cent of all adults.\textsuperscript{27}

The seriousness of diabetes
There is no such thing as ‘mild' diabetes.
All types of diabetes are serious, progressive and complex diseases which can have a major impact on quality of life and life-expectancy.
Early diagnosis, optimal treatment and effective ongoing support and management reduce the risk of diabetes-related complications.

Diabetes:
- is the leading cause of blindness in adults\textsuperscript{28}
- is a leading cause of kidney failure and dialysis\textsuperscript{29}
- is the leading cause of preventable limb amputations\textsuperscript{30}
- increases the risk of heart attacks and stroke by up to four times.\textsuperscript{31}

Types of diabetes

Type 1 diabetes is a serious, autoimmune condition in which the cells in the pancreas that produce insulin are destroyed. Type 1 diabetes can occur at any age but it generally occurs in children and young adults. Type 1 diabetes is not linked to lifestyle factors, it cannot be cured and it cannot be prevented.

Type 2 diabetes is a serious, progressive and complex condition in which the body becomes resistant to the normal effects of insulin and/or gradually loses the capacity to produce enough insulin. We don’t know what causes type 2 diabetes, however it is associated with both genetic and modifiable lifestyle risk factors.

Gestational diabetes is a form of diabetes that occurs in about 5-10 per cent of pregnancies and usually disappears after birth. It significantly increases a woman’s risk of developing type 2 diabetes in the future.

\textsuperscript{24} Ibid.
\textsuperscript{25} Ibid.
\textsuperscript{26} Ibid.
\textsuperscript{27} Ibid.
\textsuperscript{30} Ibid.
\textsuperscript{31} Ibid.