Diabetes care

Diabetes is a chronic disease that occurs when the body's ability to regulate excessive glucose levels in the blood is lost. Across the OECD countries, diabetes is a leading cause of cardiovascular disease, blindness, kidney failure, and lower limb amputation. Globally it is estimated that over 380 million people had diabetes in 2014 and by 2035 it is projected that close to 600 million people will have the condition. Diabetes caused close to 5 million deaths in 2014 (IDF, 2014). Many countries have established comprehensive approaches to diabetes care, but there are indications that more can be done to prevent the disease (OECD, 2014). Cholesterol-lowering drugs and medications to reduce blood pressure are recommended in most national guidelines for the care of diabetes patients (see indicator "Prescribing in primary care" in Chapter 8)

Poor control of the level of glucose in the blood over the short term can lead to vomiting, dehydration and even cause coma, whereas sustained high levels of blood glucose over a number of years can result in serious diseases with ongoing consequences for a person's health and wellbeing. For example, diabetes can cause nerve damage and poor blood circulation over time. These problems make the feet vulnerable to skin ulcers that can deteriorate quickly and be difficult to treat. An ulcer that does not heal can cause severe damage to tissues and bone over time and can eventually require amputation of a toe, foot or part of a leg. Proper diabetes management and careful foot care can prevent foot ulcers. Ongoing management of diabetes usually involves a considerable amount of self-care, and therefore, advice and education are central to the primary care of people with diabetes. Effective control of blood glucose levels through routine monitoring, dietary modification and regular exercise can reduce the onset of serious complications and the need for hospitalisation.

Figure 8.3 shows the avoidable hospital admissions for diabetes. The international variation in the rates is nearly 8-fold, with Italy, Switzerland and Spain reporting the lowest rates and Austria, Korea and Mexico reporting rates at least two times that of the OECD average. Prevalence of diabetes may explain some of the variation in diabetes admission rates. A positive relationship can be demonstrated between hospital admissions for the general population and diabetes-related hospital admissions, providing some indication that overall access to hospital care can also play a role in explaining the level of hospital care among the diabetic population (OECD, 2015).

Hospital admissions for major lower extremity amputation (i.e. surgical removal of lower limb, including leg or foot) reflect the long-term quality of diabetes care. Figure 8.4 shows the rates of major lower extremity amputation in adults with diabetes. In the left panel the rates based on the general population are presented. The international variation in rates is over 14-fold, with Korea and Italy reporting rates lower than 3 per 100 000 general population and Israel, Slovenia and Portugal reporting rates above 10. Rates based on the estimated diabetic population are presented in the right panel. The rates based on the diabetic population are on average 9-fold higher than for the general population and display differences in the ranking of countries, providing an indication that differences in disease prevalence across countries may explain some, but not all, cross-country variation.

Definition and comparability

The indicator for diabetes hospital admission is defined as the number of hospital admissions with a primary diagnosis of diabetes among people aged 15 years and over per 100 000 population. The indicator for major lower extremity amputation in adults with diabetes is defined as the number of discharges of people aged 15 years and over per 100 000 population, for the general population and the estimated diabetic population. Rates for both indicators were age-sex standardised to the 2010 OECD population aged 15 and over.

Differences in data definition and coding practices between countries may affect the comparability of data. For example, coding of diabetes as a principal diagnosis versus a secondary diagnosis varies across countries. This is more pronounced for diabetes than other conditions, given that in many cases admission is for the secondary complications of diabetes rather than diabetes itself. Diabetes population estimates used to calculate amputation indicator rates were self-reported by countries. Subject to further data development, the use of diabetes population estimates to standardise the indicator rates will be considered in the future.

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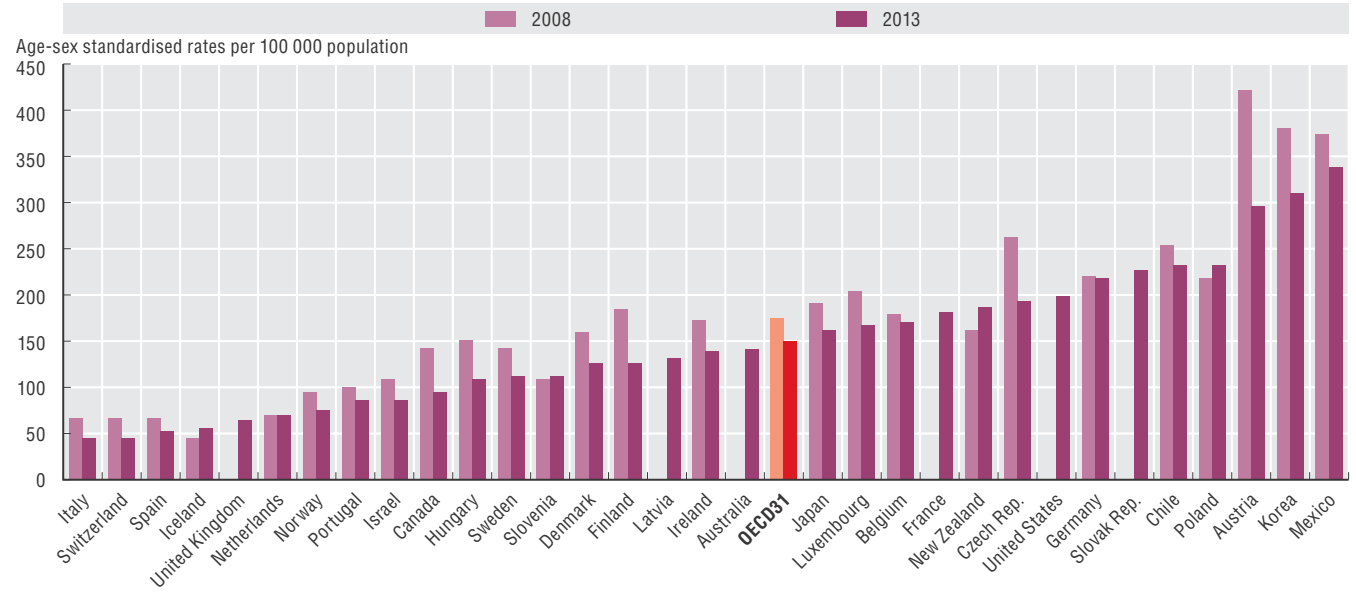
8.3. Diabetes hospital admission in adults, 2008 and 2013 (or nearest years)



Note: Three-year average for Iceland and Luxembourg.
Source: OECD Health Statistics 2015, *http://dx.doi.org/10.1787/health-data-en.*

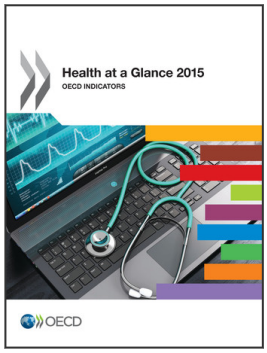
StatLink http://dx.doi.org/10.1787/888933281111

8.4. Major lower extremity amputation in adults with diabetes, 2013 (or nearest year)

Note: Three-year average for Iceland and Luxembourg.
Source: OECD Health Statistics 2015, *http://dx.doi.org/10.1787/health-data-en.*

StatLink http://dx.doi.org/10.1787/888933281111

Information on data for Israel: *http://oe.cd/israel-disclaimer*



From:

Health at a Glance 2015

OECD Indicators

Access the complete publication at:

https://doi.org/10.1787/health_glance-2015-en

Please cite this chapter as:

OECD (2015), "Diabetes care", in *Health at a Glance 2015: OECD Indicators*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/health_glance-2015-45-en

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