

# Cardiovascular Disease and Diabetes: Policies for Better Health and Quality of Care

June 2015

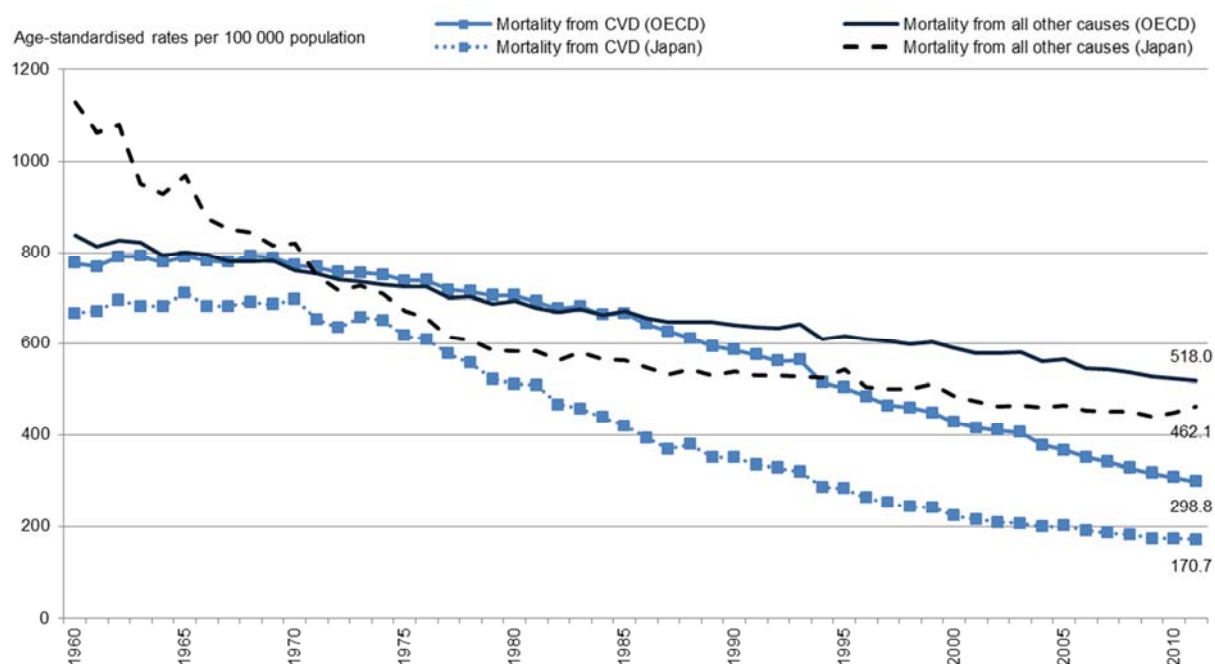


## Country Note – Japan

**Japan has been successful at reducing the mortality due to cardiovascular diseases (CVD) but there is room to reduce the burden of CVD and diabetes even more**

The CVD mortality has decreased over the past 50 years at a faster pace than the OECD average, reaching the lowest in the OECD at 171 per 100 000 population, 43% lower than the OECD average of 299 (Figure 1). However, potential years of life lost, a commonly used measure of premature mortality, at 807 per 100 000 population for diseases of the circulatory system in 2011, is 39% higher than the OECD average of 581 (by using the age limit of 70), suggesting that CVD-related deaths occur earlier in life than many other OECD countries. Patients with end-stage kidney failure (ESKF), often caused by diabetes and hypertension, are the highest in the OECD at 238 per 100 000 population while the average is 101.

**Figure 1. Mortality rates for cardiovascular diseases and all other causes of death in Japan and OECD countries**



Source: OECD Health Statistics.

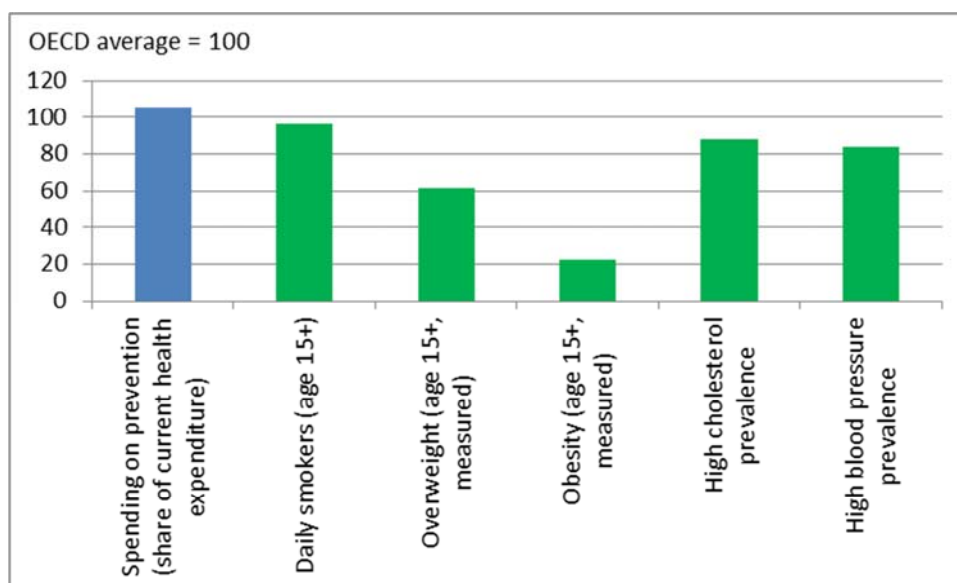
Although kidney transplant is an effective treatment and a viable alternative to dialysis for many ESKF patients, less than 1% of ESKF patients received a kidney transplant in 2011 while in Iceland and the Netherlands, the rate was over 60%.

### The Japanese population generally has a healthy lifestyle except for male smoking

Figure 2 shows that for all indicators of prevention and lifestyle, Japan performs better than the OECD average. The prevalence of overweight and obesity, risk factors for CVD and diabetes, are 21.4% and 4.1%, much lower than the OECD averages of 34.6% and 18.0% respectively and they have decreased slightly in recent years while many OECD countries struggle to do so. The reported prevalence of high cholesterol and high blood

pressure, at 15.8% and 21.5%, is also lower than the OECD average of 18.0% and 25.6% each. Spending on prevention is 3.0% of current health expenditure, slightly higher than the OECD average of 2.9%.

**Figure 2. Prevention and healthy lifestyle related to CVD and diabetes in Japan, 2011 (or nearest year), OECD average = 100**



Note: a bar in blue refers to an indicator in which an evaluation needs to be done together with other indicators, and a bar in green refers to the value better than the OECD average.

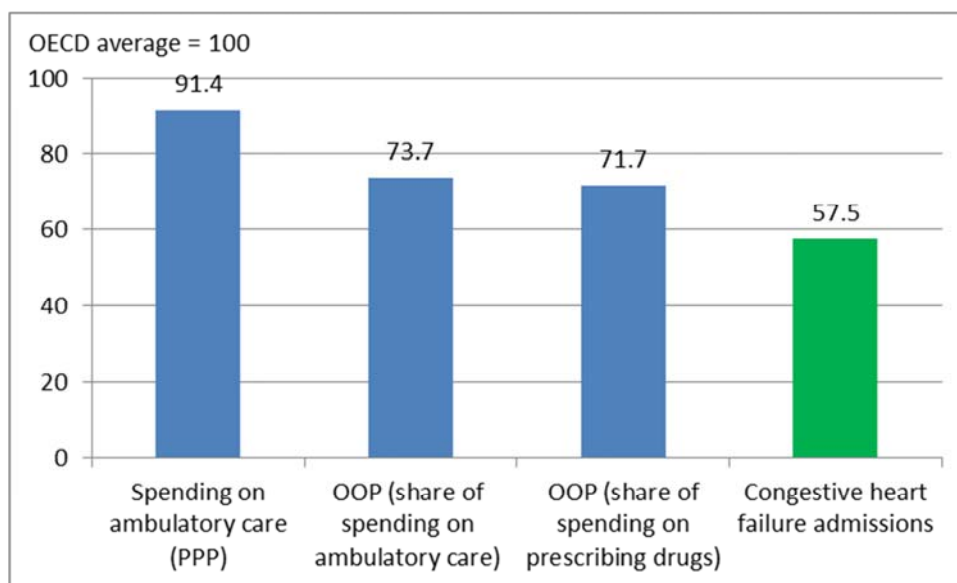
Source: OECD Health Statistics.

However, male smoking, at 32.4%, is much higher than the OECD average of 26.0% while the rate for women is 9.7%, compared to the OECD average of 16.5%.

**Limited data availability does not allow a comprehensive assessment of access to and quality of primary care in Japan**

Available data on the performance of primary care are limited for international comparison. Financial access to primary care is good (Figure 3). Spending on ambulatory care in 2010 is 631 USD PPP on a per capita basis, slightly lower than the OECD average of 691 in 2011, and the out-of-pocket payment (OOP) is much lower than the OECD average. Hospital admissions for chronic conditions such as diabetes and congestive heart failure can be avoided if high-quality primary care is provided. There are 1.4 hospital admissions with congestive heart failure per 1 000 population, compared to the OECD average of 2.4, so the quality of primary care to these patients appears to be good. But avoidable hospital admissions are not known for diabetes. Most OECD countries also monitor the level and trend of GPs per capita and a few could also evaluate prescribing patterns among patients with elevated CVD risks, but these data are not available in Japan for primary care planning and evaluation.

**Figure 3. Primary care related to CVD and diabetes in Japan, 2011 (or nearest year), OECD average = 100**



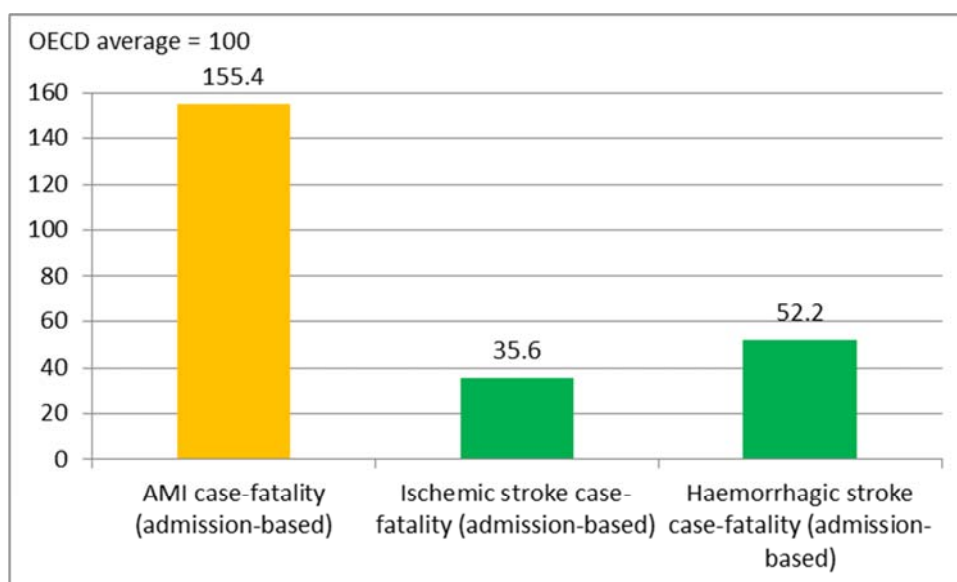
Note: a bar in blue refers to an indicator in which an evaluation needs to be done together with other indicators a bar in green refers to the value better than the OECD average.

Source: OECD Health Statistics; Diabetes prevalence: IDF (2013), IDF Diabetes Atlas, 6th Edition, International Diabetes Federation, Brussels, [www.idf.org/diabetesatlas/previouseditions](http://www.idf.org/diabetesatlas/previouseditions).

#### Quality of acute care is mixed

According to the currently available data in Japan, the quality of acute care is good for stroke but not for heart attack (Figure 4). Based on the survey data (other countries use administrative data), 30-day case-fatality rates for patients admitted to hospitals with Ischemic and Haemorrhagic stroke are much lower than the OECD average (3.0% and 11.8%, compared to 8.4% and 22.6%) but the case-fatality rate for Acute Myocardial Infarction (AMI), at 12.2%, is much higher than the OECD average of 7.9%.

**Figure 4. Acute care related to CVD and diabetes in Japan, 2011 (or nearest year), OECD average = 100**



Note: a bar in green refers to the value better than the OECD average while a bar in orange refers to the value worse than the OECD average.

Source: OECD Health Statistics.

Due to the lack of data except for spending, resources in and access to acute care in relation to CVD and diabetes are not well known. Despite the relatively low mortality rate, CVD accounts for 22% of total hospital spending, much higher than the OECD average of 17%. Based on the data available from nine OECD countries, Japan spends the highest on CVD and diabetes in hospital settings; 202 USD PPP per capita for CVD and 23 USD PPP per capita for diabetes, compared with, for example, 112 USD PPP and 6 USD PPP respectively in Sweden. Data on the volume of procedures such as percutaneous transluminal coronary angioplasty (PTCA) and coronary artery bypass graft (CABG) and the number of specialists such as cardiologists and neurologists are not available for international comparisons.

### **Primary care and health information systems need to be developed further**

Japan can further strengthen primary care and governance across the full pathway of CVD and diabetes care. Across OECD countries, benchmarking and monitoring are becoming more common place in primary care. They are also using a variety of policy instrument to improve the quality of services along the entire pathway, such as through the introduction of integrated care models, financial incentives for improved quality and performance, benchmarking and target setting. For example, France developed a monitoring framework for AMI to promote effective operation and interaction of many relevant parts of the health system and delivery of better care over the full pathway.

Japan can strengthen health information infrastructure not only for international benchmarking but also to promote high-quality care for CVD and diabetes across providers. For example, Denmark has made better use of electronic patient records and shown notable improvements in primary care quality. The system includes data on diagnoses, procedures, prescribed drugs and laboratory results and automatically derives information that can be used to benchmark GP practice against other practices and to improve patient care as it enables the identification of patients treated sub-optimally.

Japan can consider ways to increase kidney transplants for ESRF patients. In Japan, the number of dialysis per population is the highest in the OECD due to low out-of-pocket payment and highly effective and established clinical standards for dialysis. Given the speed of super-ageing population, however, this heavy reliance on dialysis may not be sustainable for the health system and also health financing. In recent years, some efforts are being made to increase the number of kidney transplants and some hospitals have adopted Donor Action. Other OECD countries have increased access to kidney transplants by reforming the legal framework requiring explicit consent for organ donation, eligibility criteria for organ donation, rules around the use of kidney from incompatible donor/recipient pairs and the cost associated with organ donation and establishing standardised procedures required for organ donation in the critical care unit of hospitals.

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#### **Useful links**

Read the report online, access the press release, country notes, and data at:

<http://www.oecd.org/health/cardiovascular-disease-and-diabetes-policies-for-better-health-and-quality-of-care-9789264233010-en.htm>

OECD Health: [www.oecd.org/health](http://www.oecd.org/health)

OECD Reviews of Health Care Quality: Japan – Raising Standards (forthcoming):

<http://www.oecd.org/els/health-systems/health-care-quality-reviews.htm>