Expenditure by disease and age

Attributing health care expenditure by disease and age is important for health policy makers in order to analyse resource allocations in the health care system. This information can also play a role in assessing the impact of population ageing and changing disease patterns on spending. Furthermore, the linking of health expenditures by disease to appropriate measures of outputs (e.g. hospital discharges by disease) and outcomes (e.g. survival rates after heart attack or cancer) helps in monitoring the performance of health care systems at a disease-based level (Heijink et al., 2006).

Figure 9.11 shows the distribution of hospital inpatient expenditure according to seven main diagnostic categories. These categories account for between 60% and 80% of all inpatient acute care expenditure across the group of countries. Circulatory diseases account for the highest share of inpatient spending in each of the countries except for Korea and the Netherlands, where spending on cancer and mental and behavioural disorders is the largest category, respectively. The differences between countries can be influenced by a number of factors, including demographic structure and disease patterns, as well as institutional arrangements and clinical guidelines for treating different diseases. For example, in the Netherlands, mental and behavioral disorders account for around 23% of all inpatient spending – around twice the level as that of Germany, Finland and Japan. This may be partly explained by the large number of acute mental health hospitals with very long average lengths of stay (OECD, 2015). Similarly, longer than average lengths of stay in Japan for some of the specific circulatory diseases such as cerebrovascular disease (stroke) might explain why more than 22% of hospital inpatient expenditures are allocated to the treatment of circulatory diseases. Discharges related to circulatory diseases only account for 12% of all discharges in Japan – a proportion similar to other countries.

Figure 9.12 compares expenditure by hospital discharge for circulatory diseases and cancers. Generally, the cost per discharge between these two main disease categories is similar in all countries, apart from Japan where spending per discharge for circulatory diseases is more than twice that of cancer. Japan has the highest expenditure per discharge compared to the other countries for circulatory disease, again due to the much longer lengths of stay, while the Netherlands has the highest expenditure per discharge for cancer treatment.

Different cost patterns can also be due partly to demographic factors. The allocation of current health spending by age group in the Czech Republic, Korea and the Netherlands in Figure 9.13 shows that the share of spending increases with age after an initial peak of spending linked to birth and early childhood illnesses. The share of current health spending remains relatively constant until around the 50 to 54 age group before increasing sharply as people grow older. As a result, a significant share of current health spending is consumed by elderly population. Those aged 65 and above consume around 60% of the current health spending on average in all three countries. In addition, in Korea and the Netherlands more than 20% of current health spending is accounted for by those aged 85 years and above, while in the Czech Republic the share is much lower. This may be explained by a lower level of long-term care spending in Czech Republic.

Definition and deviations

Expenditure by disease and age allocates current health expenditure by patient characteristics. Guidelines developed propose disease categories according to ICD-10. To ensure comparability between countries, expenditures are also linked to the System of Health Accounts (SHA) framework and a common methodology is proposed advocating primarily a top-down allocation of expenditures based on principal diagnosis. The main comparability issues relates to the treatment of non-allocated and non-disease-specific expenditures. In the former case this is due to data limitations (often in outpatient and pharmaceutical expenditure) and in the latter case mainly prevention and administration expenditure.

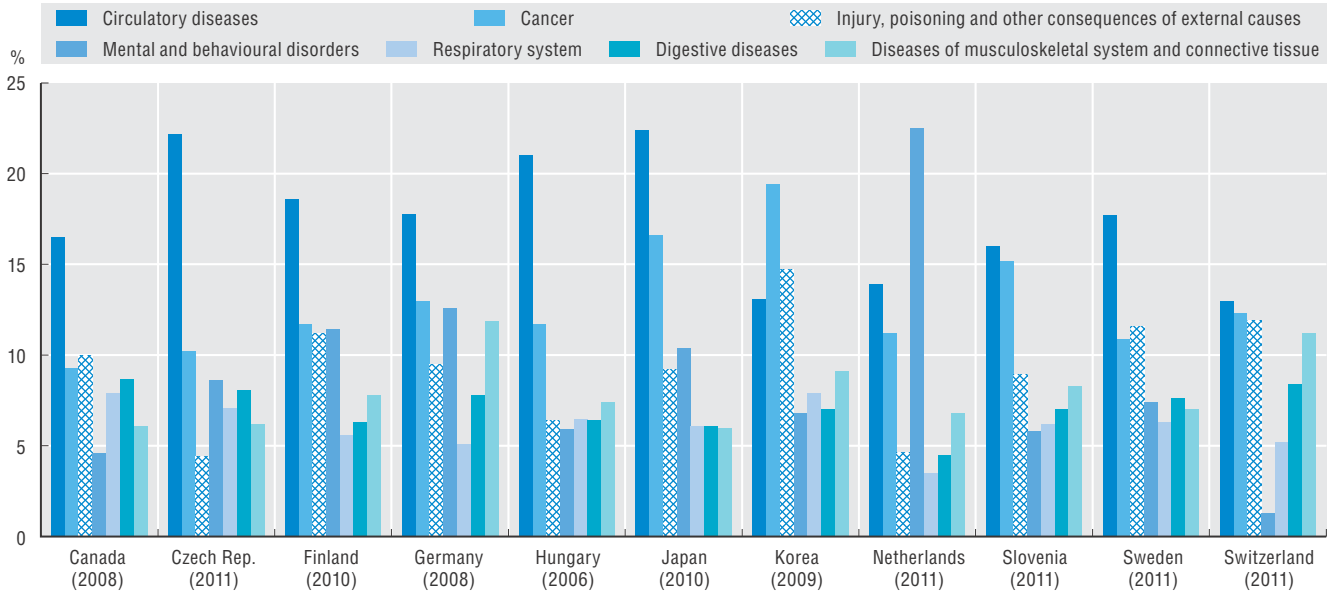
Note that the charts cover allocated spending only and the following country limitations apply. Canada excludes Quebec and mental health hospitals; the Czech Republic refers to expenditure by the Health Insurance Fund only; Germany refers to total hospital expenditure; and the Netherlands refers to curative care in general and specialty hospitals.

References

Heijink, R., M.A. Koopmanschap and J.J. Polder (2006), *International Comparison of Cost of Illness*, RIVM, Bilthoven.

OECD (2015), *Addressing Dementia: The OECD Response*, OECD Health Policy Studies, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264231726-en*.

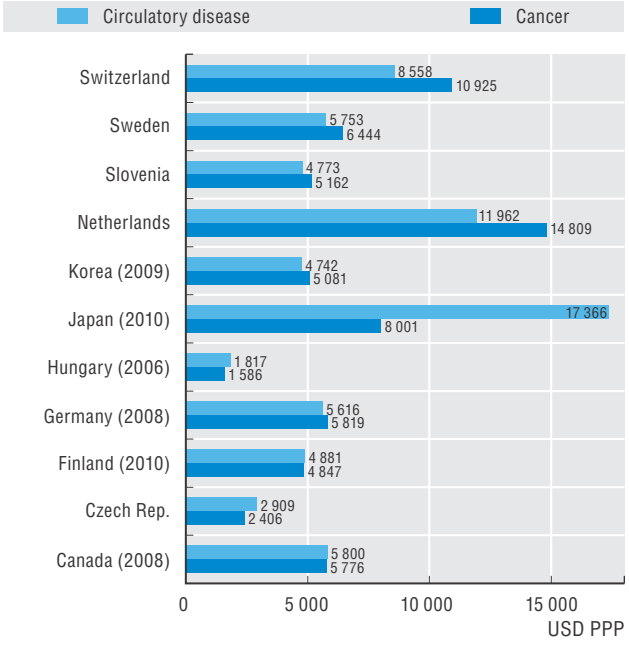
9.11. Share of hospital inpatient expenditures by main diagnostic category, 2011 (or nearest year)



Source: OECD Expenditure by Disease, Age and Gender Database.

StatLink http://dx.doi.org/10.1787/888933281298

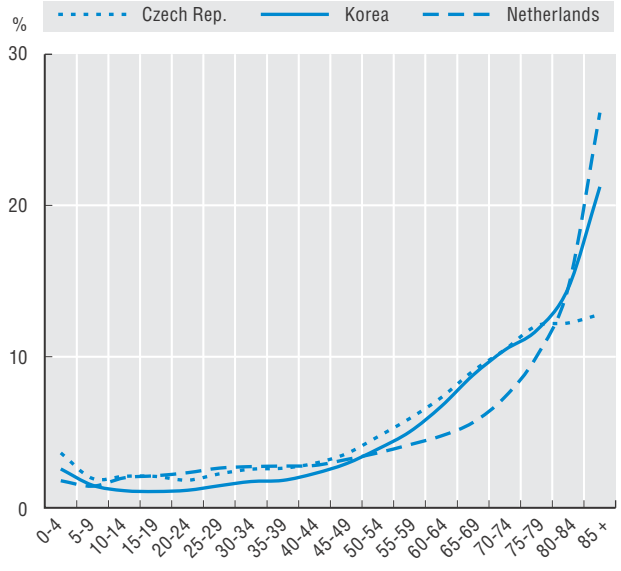
9.12. Expenditure per hospital discharge for two diagnostic categories, 2011 (or nearest year)



Source: OECD Expenditure by Disease, Age and Gender Database.

StatLink http://dx.doi.org/10.1787/888933281298

9.13. Share of current health spending by age group, 2011 (or nearest year)



Source: OECD Expenditure by Disease, Age and Gender Database.

StatLink http://dx.doi.org/10.1787/888933281298

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