Avoidable hospital admissions

Most health systems have developed a "primary level" of care whose functions include health promotion and disease prevention, managing new health complaints, as well as long-term conditions and referring patients to hospital-based services when appropriate. A key aim is to keep people well, by providing a consistent point of care over the longer-term, tailoring and co-ordinating care for those with multiple health care needs and supporting the patient in self-education and self-management.

Asthma, chronic obstructive pulmonary disease (COPD) and congestive heart failure (CHF) are three widely prevalent long-term conditions. Both asthma and COPD limit the ability to breathe: asthma symptoms are usually intermittent and reversible with treatment, whilst COPD is a progressive disease that almost exclusively affects current or prior smokers. Asthma affects an estimated 235 million people worldwide (WHO, 2013). More than 3 million people died of COPD in 2012, which is equal to 6% of all deaths globally that year (WHO, 2015). CHF is a serious medical condition in which the heart is unable to pump enough blood to meet the body's needs. CHF is often caused by hypertension, diabetes or coronary heart disease. Heart failure is estimated to affect over 26 million people worldwide resulting in more than 1 million hospitalisations annually in both the United States and Europe.

Common to all three conditions is the fact that the evidence base for effective treatment is well established and much of it can be delivered at a primary care level. A high-performing primary care system can reduce acute deterioration in people living with asthma, COPD or CHF and prevent their admission to hospital.

Figure 8.1 shows hospital admission rates for asthma and COPD together, given the physiological relationship between the two conditions. Admission rates for asthma vary 11-fold across countries with Italy, Switzerland and Mexico reporting the lowest rates and Korea, United States and the Slovak Republic reporting rates over twice the OECD average. International variation in admissions for COPD is 17-fold across OECD countries, with Japan and Italy reporting the lowest rates and Hungary and Ireland the highest rates. Combined, there is a lower 8-fold variation across countries for the two respiratory conditions. Hospital admission rates for CHF vary 7-fold, as shown in Figure 8.2. Mexico, United Kingdom and Korea have the lowest rates, while the Slovak Republic, Hungary and Poland report rates at least 1.8 times the OECD average.

The majority of countries report a reduction in admission rates for CHF over recent years. This may represent an improvement in the quality of primary care. The approaches countries are taking to improve the quality of primary care have been described in a series of country reviews undertaken by OECD. Israel's *Quality Indicators for Community Health Care program* provides an example of how publicly reported information on care is used to incentivise providers to develop better services (OECD, 2012).

Definition and comparability

The indicators are defined as the number of hospital admissions with a primary diagnosis of asthma, COPD and CHF among people aged 15 years and over per 100 000 population. Rates were age-sex standardised to the 2010 OECD population aged 15 and over.

Disease prevalence may explain some, not all, variations in cross-country rates. Differences in coding practices among countries and the definition of an admission may also affect the comparability of data. For example, while the transfer of patients from one hospital to another is required to be excluded from the calculations to avoid "double counting", this cannot be fully complied with by some countries. There is also a risk that countries that do not have the capacity to track patients through the system do not identify all relevant admissions due to changes in diagnosis coding on transfer between hospitals. The impact of excluding admissions where death occurred has been investigated, given these admissions are less likely to be avoidable. The results reveal that while the impact on the indicator rate varies across conditions (e.g. on average, reduced asthma rates by less than 1% whereas for CHF it was nearly 9%), the changes in the variation of rates across countries for each condition was minimal.

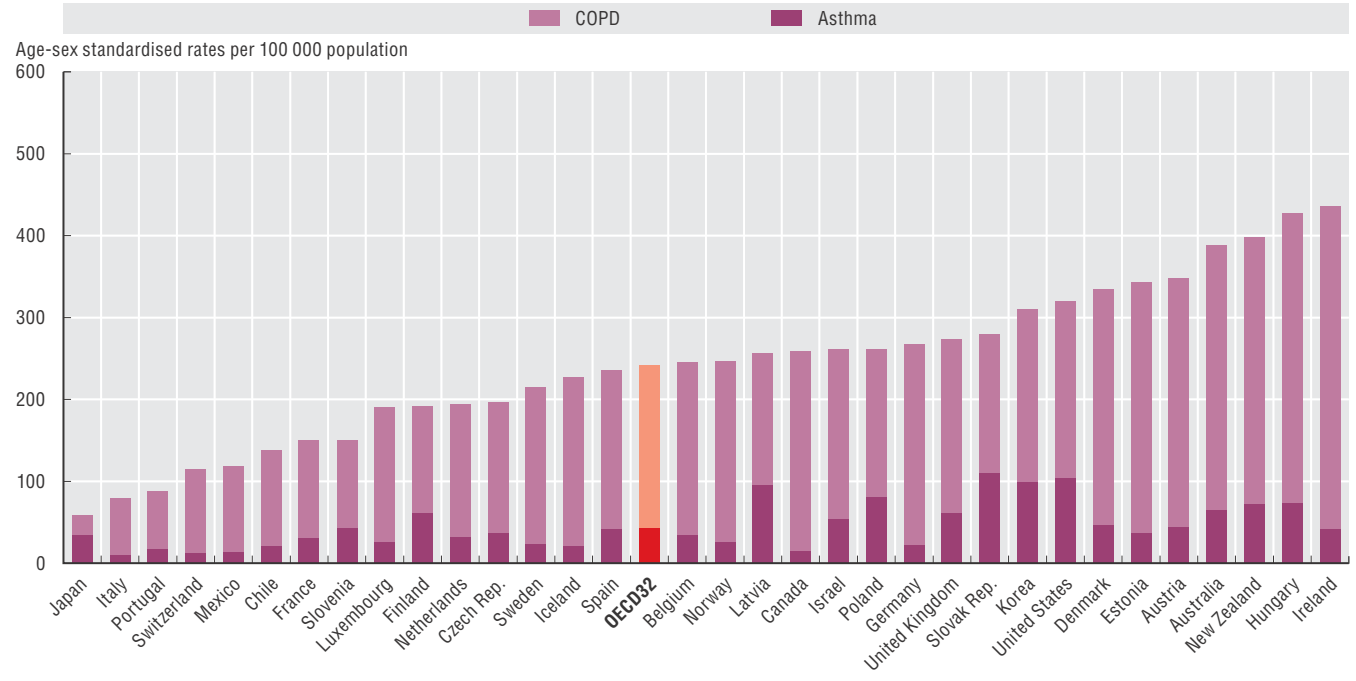
References

OECD (2012), *OECD Reviews of Health Care Quality: Israel 2012: Raising Standards*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264029941-en*.

WHO (2015), "Chronic Obstructive Pulmonary Disease (COPD)", *Fact Sheet No. 315*, *www.who.int/mediacentre/factsheets/fs315/en/*.

WHO (2013), "Asthma", *Fact Sheet No. 307*, *www.who.int/mediacentre/factsheets/fs307/en/*.

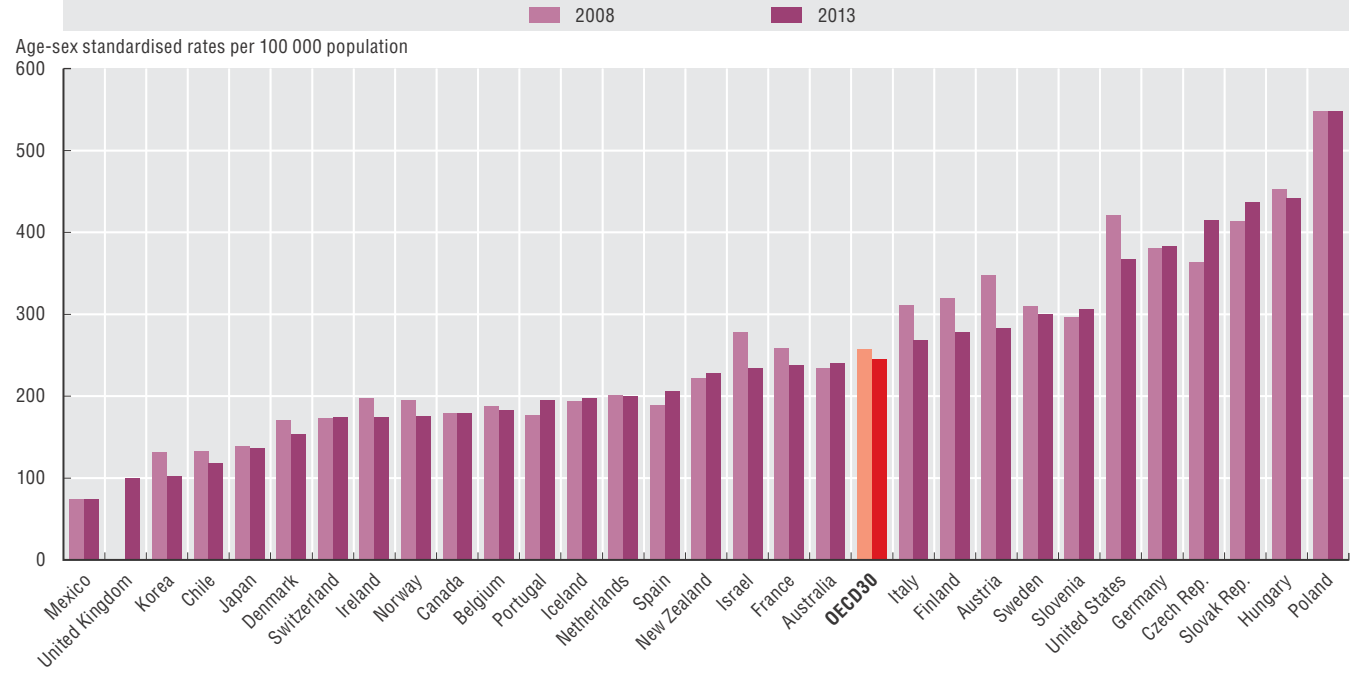
8.1. Asthma and COPD hospital admission in adults, 2013 (or nearest year)



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/10.1787/888933281105

8.2. Congestive heart failure hospital admission in adults, 2008 and 2013 (or nearest years)



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

StatLink http://dx.doi.org/10.1787/888933281105

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