Most health systems have developed a "primary level" of care whose functions include health promotion, disease prevention, managing new health issues, managing chronic conditions, and referring patients to hospital-based services when appropriate (see Chapter 2). This primary level serves as a consistent point of care for patients and provides continuity in health management including chronic disease management. As rates of chronic conditions rise across EU countries, managing these conditions at the primary level becomes increasingly important to improve health outcomes and control costs.

Asthma, chronic obstructive pulmonary disease (COPD) and congestive heart failure (CHF) are three widely prevalent chronic 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 (see indicator on "Asthma and COPD prevalence" in Chapter 3). 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 result in about 1.5 million hospitalisations annually in Europe (OECD, 2016).

Common to these three conditions is that effective treatment can be delivered at the primary care level. An effective primary care system should therefore be able to manage disease progression in people living with asthma, COPD or CHF and prevent expensive hospital admissions.

Figure 6.4 shows hospital admission rates for asthma and COPD together. Admission rates for asthma vary 11-fold across EU countries with Italy and Portugal reporting the lowest rates and Latvia and the Slovak Republic reporting rates over twice the EU average. High variation in admissions for COPD was also seen with an almost six-fold variation across EU countries, with Italy and Portugal reporting the lowest rates and Ireland and Hungary the highest rates. High admission rates are related to higher mortality rates for respiratory disease (see indicator on "Mortality from respiratory diseases" in Chapter 3).

Figure 6.5 shows the rates of admission for CHF for selected years. Like asthma and COPD, hospital admission rates for CHF showed high variability across EU member countries with over a five-fold difference between the United Kingdom and Poland in 2013. Along with the United Kingdom, Denmark, and Ireland reported the lowest rates, while Poland, Hungary and the Slovak Republic reported rates at least 40% higher than the EU average.

The majority of countries reported a reduction in admission rates for CHF and the EU average dropped slightly between 2008 and 2013. However, little progress has been seen in countries with high rates. A number of EU countries are taking steps to improve the quality of primary care and the small overall decrease may be representative of an improvement in this sector.

## **Definition and comparability**

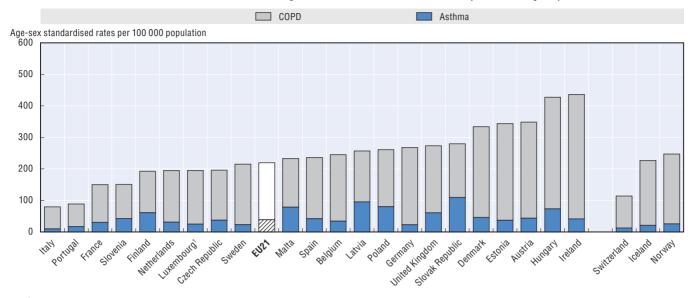
The indicators are defined as the number of hospital admissions with a primary diagnosis of asthma, COPD and CHF among people aged 15 years and over per 100 000 population. Rates were age-sex standardised to the 2010 OECD population aged 15 and over.

Disease prevalence may explain some, but 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 should be excluded from the calculations to avoid "double counting", not all countries can do this in practice. 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, it reduces asthma rates by less than 1% whereas for CHF the reduction is nearly 9%), the changes in the variation of rates across countries for each condition were minimal.

### Reference

OECD (2016), OECD Health Statistics 2016, OECD Publishing, Paris, www.oecd.org/health/healthdata.

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

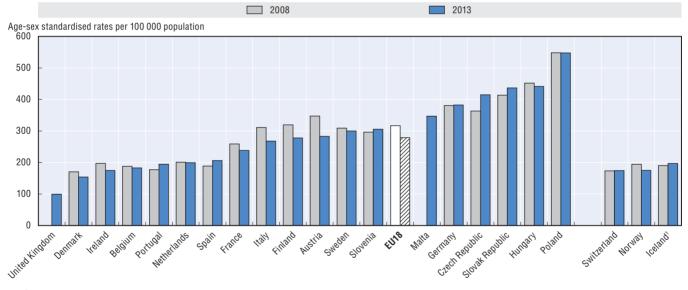


#### 1. Three-year average.

Source: OECD Health Statistics 2016.

StatLink http://dx.doi.org/10.1787/888933429394

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



1. Three-year average.

Source: OECD Health Statistics 2016.

StatLink http://dx.doi.org/10.1787/888933429407



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