Primary care is often the first contact point of people with health systems. Its functions include promoting health and preventing disease; managing new health complaints; treating the majority of uncomplicated cases; managing chronic conditions; and referring patients to hospital-based services when appropriate. A key aim of primary care is to keep people well by providing a consistent point of care over the long term, treating common conditions, tailoring and co-ordinating care for those with multiple health care needs, and supporting patients' self-management of their conditions. Good primary care has, therefore, the potential to improve health, reduce socio-economic inequalities in health and make health care systems people-centred, while making better use of health care resources (OECD, 2020[14]).

Asthma, chronic obstructive pulmonary disease (COPD) and congestive heart failure (CHF) are widely prevalent long-term conditions. Both asthma and COPD limit the ability to breathe: asthma symptoms are usually intermittent and reversible with treatment, while COPD is a progressive disease that mainly affects current or prior smokers. CHF is a serious medical condition in which the heart is unable to pump enough blood to meet the body’s needs. It is often caused by hypertension, diabetes or coronary heart disease. People with one of these three conditions are at risk of needing hospitalisation, and at higher risk of severe complications from COVID-19. Those with asthma and COPD, for example, are at higher risk of needing intensive care and a ventilator to help them breathe and/or of death from COVID-19 (CDC, 2021[15]). People with CHF are more likely to develop acute decompensation after COVID-19 infection (Rey et al., 2020[16]).

Common to all three conditions is that the evidence base for effective treatment is well established, and much of it can be delivered by primary care. A high-performing primary care system, where accessible and high-quality services are provided, can reduce acute deterioration in people living with asthma, COPD or CHF. This can reduce hospital admissions to treat these conditions, which are used as a marker of quality and access in primary care.

Figure 6.9 shows that hospital admission rates for asthma varied over 15-fold across OECD countries, with Iceland, Mexico, Italy and Colombia reporting the lowest rates and Latvia, Turkey and Poland reporting rates over twice the OECD average. Between 2009 and 2019, hospital admission rates for asthma decreased in many OECD countries – particularly in the Slovak Republic, Korea and Finland – and cross-country variation narrowed. Countries that were able to report 2020 admission rates showed general declines in admissions, with reductions of 50% between 2019 and 2020 in Lithuania and England (United Kingdom).

Hospital admission rates for COPD varied 8-fold across OECD countries, with Italy, Mexico and Chile reporting the lowest and Turkey, Ireland and Australia the highest rates (Figure 6.10). The average rate for OECD countries decreased from 194 admissions per 100 000 population in 2009 to 171 per 100 000 population in 2019. In 2020, the rates decreased in Austria, the Czech Republic, Ireland, Latvia, Lithuania, Portugal, the Slovak Republic and England (United Kingdom), and the decline was particularly large in England, Lithuania and Ireland.

Hospital admission rates for CHF varied 16-fold, as shown in Figure 6.11. Costa Rica, Mexico and Colombia had the lowest rates, while Poland, Lithuania and the Slovak Republic reported rates over twice the OECD average. While the average rate across OECD countries decreased between 2009 and 2019, the cross-country variation increased slightly. In 2020, the rates decreased in Austria, Lithuania (where the decline was particularly large), the Czech Republic, Portugal, the Slovak Republic and England (the United Kingdom), while rates were stable in Iceland and Ireland.

While observed improvements over the past decade may represent advances in the quality of primary care in some countries, investment in primary care may still not be happening quickly enough (OECD, 2017[17]), potentially resulting in unnecessary spending on high-cost hospital care (OECD, 2017[11]). General declines in hospital admissions in 2020 may reflect improved access to and quality of primary care to some extent, but they are also due to difficulties in accessing health care in the initial stage of the COVID-19 crisis and hesitancy among patients to seek regular care during the pandemic. On the other hand, OECD countries have adopted telemedicine and digital tools quickly to facilitate access (OECD, 2021[6]). The COVID-19 crisis has highlighted the importance of placing primary health care at the core of health systems, both to manage an unexpected surge in demand and to maintain continuous access to high-quality care for all (OECD, 2020[14]).

Definition and comparability

The indicators are defined as the number of hospital admissions with a primary diagnosis of asthma, COPD or CHF among people aged 15 years and over per 100 000 population. Rates are age- and sex-standardised to the 2010 OECD population aged 15 and over. Admissions resulting from a transfer from another hospital and where the patient dies during admission are excluded from the calculation, as these are considered unlikely to be avoidable. Disease prevalence and availability of hospital care may explain some, but not all, variations in cross-country rates. Differences in coding practices among countries may also affect the comparability of data. For example, the exclusion of transfers cannot be fully complied with by some countries. Differences in data coverage of the national hospital sector across countries may also influence rates.
Figure 6.9. Asthma hospital admission in adults, 2009, 2019 (or nearest year) and 2020

1. Three-year average. 2. 2020 estimate based on provisional 1 April to 30 September data from all jurisdictions except Quebec. 3. 2020 data are provisional and include England only.


StatLink https://stat.link/2q76hr

Figure 6.10. COPD hospital admission in adults, 2009, 2019 (or nearest year) and 2020

1. Three-year average. 2. 2020 estimate based on provisional 1 April to 30 September data from all jurisdictions except Quebec. 3. 2020 data are provisional and include England only. 4. Break in time-series in 2016, so changes between 2010 and 2019 need to be interpreted with care.


StatLink https://stat.link/unsj9h

Figure 6.11. Congestive heart failure hospital admission in adults, 2009, 2019 (or nearest year) and 2020

1. 2020 data are provisional and include England only. 2. Three-year average. 3. 2020 estimate based on provisional 1 April to 30 September data from all jurisdictions except Quebec.


StatLink https://stat.link/mz3lie