

### Average length of stay in hospitals

The average length of stay in hospitals is often regarded as an indicator of efficiency in health service delivery. All else being equal, a shorter stay will reduce the cost per discharge and will shift care from inpatient to less expensive settings. Longer stays can be a sign of poor care coordination, resulting in some patients waiting unnecessarily in hospital until rehabilitation or long-term care can be arranged. At the same time, some patients may be discharged too early, when staying in hospital longer could have improved their health outcomes or reduced chances of re-admission.

In 2017, the average length of stay in hospitals was slightly less than 8 days across OECD countries (Figure 9.9). Mexico and Turkey had the shortest stays, with patients staying for about 4 days on average in hospitals. Korea and Japan had the longest stays, averaging over 16 days per patient. Since 2000, the average length of stay has decreased in most countries; the most significant declines occurred in Japan, Finland, Switzerland, the United Kingdom, Israel and the Netherlands. The only country with a large increase was Korea (from around 15 days in 2002 to 18.5 in 2017) – but this reflects in part an increase in the role of ‘long-term care’ hospitals whose function is similar to nursing homes or long-term care facilities.

Focusing on specific diseases or conditions can remove some of the effect of different case mix and severity. Across OECD countries, the average length of stay for a normal delivery was 2.9 days in 2017 (Figure 9.10). It reached over 4 days in Hungary, the Slovak Republic and the Czech Republic, and was less than 2 in Mexico, the United Kingdom, Canada, Iceland and the Netherlands. Length of stay for normal deliveries has decreased since 2000 in most countries, most notably in those with long stays such as the Slovak Republic and Czech Republic.

For acute myocardial infarction (AMI), the average length of stay ranged from 11 days or over in Chile and Korea to about 4 or under in Norway, Denmark and Sweden (Figure 9.11). The OECD average stood at 6.6 days, three days shorter than in 2000. The average length of stay for AMI decreased in all countries except Chile (where it increased by more than 3 days).

Apart from disparities in the average length of stay due to case mix, other factors including payment structures can explain cross-country variations. In particular, the introduction of prospective payment systems that encourage providers to reduce the cost of episodes in care, such as diagnosis-related groups (DRG), has been credited for the reduction in the average length of stay in hospitals.

France, Austria and Sweden are among the countries that have moved to DRG payment structures, and in doing so have experienced a decrease in the average length of stay.

Results from a recent OECD study highlight the significance of a number of hospital characteristics on the average length of stay in hospitals. Specifically, hospitals with many beds (higher than 200) are associated with a longer length of stay, while a bed occupancy rate of 70% or more is associated with a shorter length of stay (Lorenzoni and Marino, 2017[1]).

#### Definition and comparability

Average length of stay refers to the average number of days patients spend in hospital. It is generally measured by dividing the total number of days stayed by all inpatients during a year by the number of admissions or discharges. Day cases are excluded.

Data cover all inpatient cases (including not only curative/acute care cases) for most countries, with the exceptions of Canada, Japan and the Netherlands, where data refer to average length of stay for curative/acute care or in acute care hospitals only (resulting in an under estimation).

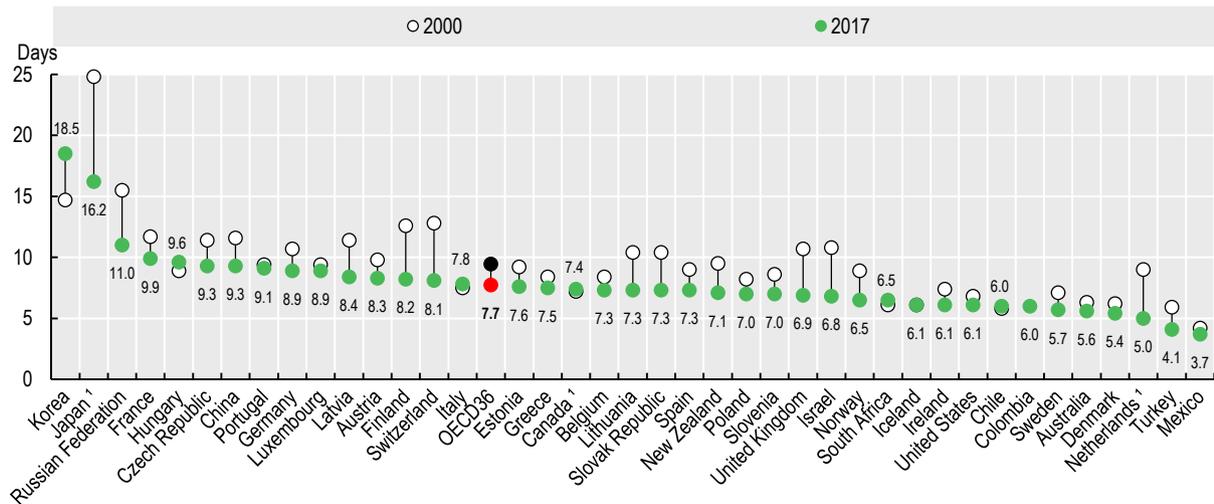
Healthy babies born in hospitals are excluded from hospital discharge rates in several countries (e.g. Australia, Austria, Canada, Chile, Estonia, Finland, France, Greece, Ireland, Lithuania, Luxembourg, Mexico and Norway), resulting in a slight over-estimation of the length of stay (e.g. the inclusion of healthy newborns would reduce the average length of stay by 0.5 days in Canada). These comprise around 3-10% of all discharges.

Data for normal delivery refer to ICD-10 code O80, and for AMI to ICD-10 codes I21-I22.

#### References

- [1] Lorenzoni, L. and A. Marino (2017), “Understanding variations in hospital length of stay and cost: Results of a pilot project”, *OECD Health Working Papers*, No. 94, OECD Publishing, Paris, <https://dx.doi.org/10.1787/ae3a5ce9-en>.
- [2] OECD (2017). *Tackling Wasteful Spending in Health*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264266414-en>.

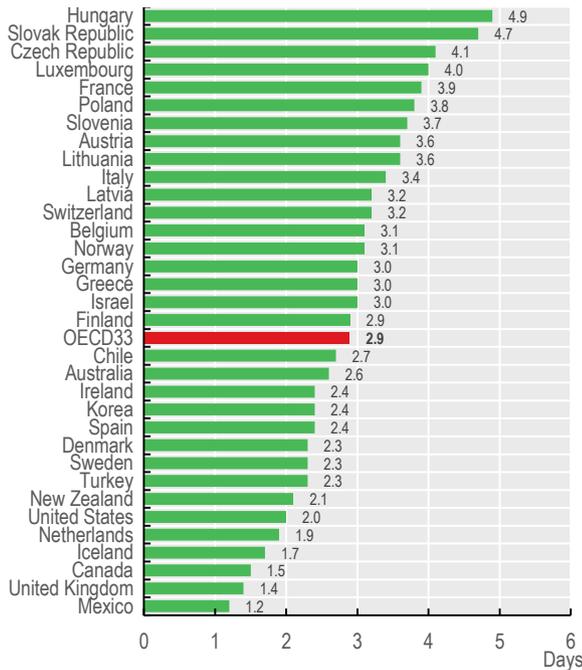
Figure 9.9. Average length of stay in hospital, 2000 and 2017 (or nearest year)



1. Data refer to average length of stay for curative (acute) care (resulting in an under-estimation). In Japan, the average length of stay for all inpatient care was 28 days in 2017 (down from 39 days in 2000).  
Source: OECD Health Statistics 2019.

StatLink <https://doi.org/10.1787/888934017785>

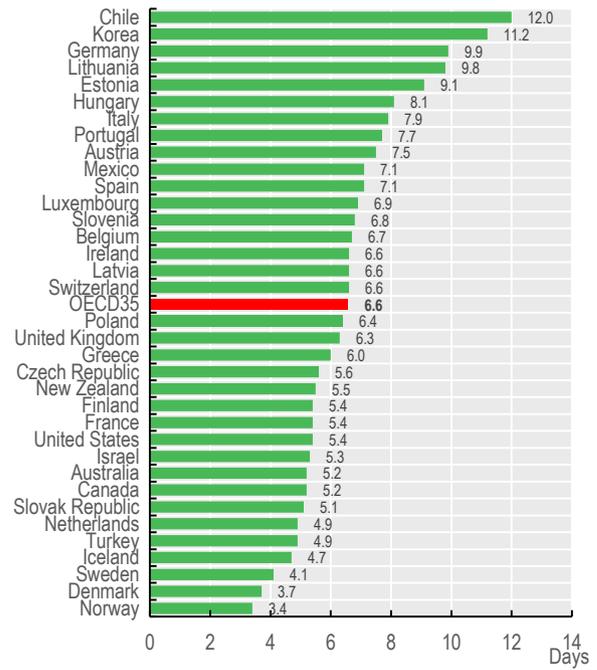
Figure 9.10. Average length of stay for normal delivery, 2017 (or nearest year)



Source: OECD Health Statistics 2019.

StatLink <https://doi.org/10.1787/888934017804>

Figure 9.11. Average length of stay for acute myocardial infarction, 2017 (or nearest year)



Source: OECD Health Statistics 2019.

StatLink <https://doi.org/10.1787/888934017823>



**From:**  
**Health at a Glance 2019**  
OECD Indicators

**Access the complete publication at:**  
<https://doi.org/10.1787/4dd50c09-en>

**Please cite this chapter as:**

OECD (2019), "Average length of stay in hospitals", in *Health at a Glance 2019: OECD Indicators*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/0d8bb30a-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.