

## 1.1. Average length of stay for a normal delivery (E-2)

### 1.1.1. Documentation sheet

<b>Description</b>	Average length of stay for normal delivery (single spontaneous delivery)
<b>Calculation</b>	<b>Numerator:</b> total length of stay of all hospitalisations for single spontaneous delivery. <b>Denominator:</b> total number of discharges for single spontaneous delivery.
<b>Rationale</b>	<p>The length of stay (LOS) after a normal delivery is determined in a large part by factors of organisation and care provider characteristics and in a lesser extent by clinical patient characteristics (95% of the vaginal deliveries [APR-DRG=560] have a minor or moderate severity in 2020, TCT data). A KCE report proposed a new model of integrated care for the mother and the new-born, in which the postpartum care would occur mostly at home and hence would reduce the length of hospitalisation.<sup>1</sup> An average length of stay trend analysis has been published in another KCE report: the LOS is expected to drop further.<sup>2</sup> Budgetary decisions have automatically shortened the LOS by half a day in 2015, while 7 pilot projects have been launched to test the feasibility of home postpartum care.<sup>3,4</sup></p> <p>Average length of stay after normal delivery is an indicator to benchmark efficiency of health care systems, and is reported by the OECD.<sup>5</sup></p>
<b>Data source</b>	RHM – MZG (FPS Health, Food Chain Safety and Environment)
<b>Technical definitions</b>	<p>Average length of stay (ALOS) is calculated by dividing the number of days stayed (from the date of admission in an in-patient institution) by the number of discharges.</p> <p>Diagnostic chapters (using principal diagnosis) have been defined according to the International Classification of Diseases, 9<sup>th</sup> revision and 10<sup>th</sup> revision. The OECD website offers a mapping list between both classifications.<sup>6,a</sup> The OECD uses the ICD-9-CM code 650 'Normal Delivery' and the ICD-10-CM code O80 'Encounter for full-term uncomplicated delivery' ("Delivery requiring minimal or no assistance, with or without episiotomy, without foetal manipulation [e.g., rotation version] or instrumentation [forceps] of a spontaneous, cephalic, vaginal, full-term, single, live-born infant.").</p>
<b>International comparability</b>	<p>The OECD definition of single spontaneous delivery was adopted.</p> <p>Several countries included in the OECD comparison use different methodologies to calculate the average length of stay. Some countries may include same day separations (counted either as 0 or 1 day), thereby resulting in an under-estimation of average length of stay compared with countries that exclude them. Also, some countries may only include data related to general hospitals, while others might include data also for specialised hospitals (generally involving higher length of stays than in general hospitals). Caution should be exercised when making international comparisons due to the possibility that countries may provide data for different types of institutions.</p>
<b>Limitations</b>	Change from ICD-9 to ICD-10 classification has resulted in a break in the series of RHM – MZG data from 2016 on (and no 2015 data available).
<b>Dimension</b>	Efficiency; variability of care
<b>Related indicators</b>	Caesarean section rate (QA-8)

<sup>a</sup> <https://stats.oecd.org/fileview2.aspx?IDFile=e477970b-3024-4188-8dc6-13f3db201846>

### 1.1.2. Results

#### Belgium

The average length of stay (ALOS) for a normal delivery decreased from 4.09 days in 2010 to 2.69 days in 2021 (see Table 1). In 2000, the national ALOS was 4.96.7 Change of classification (from ICD-9 to ICD-10) resulted in the absence of data in 2015 and a break in the series between 2014 and 2016.

#### Regional comparison

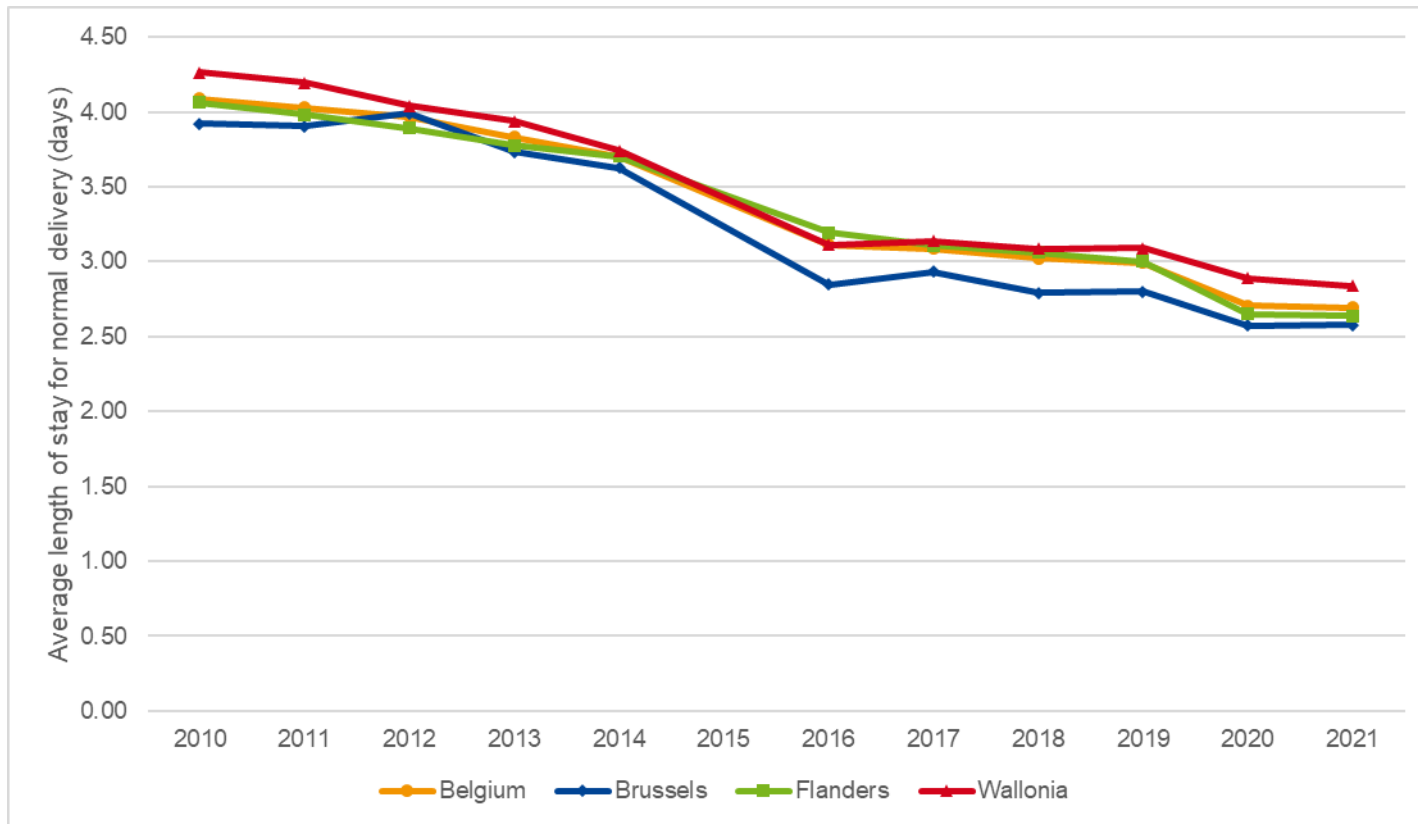
Regional results are similar, Brussels having the shortest average length of stay (in 2021: Brussels: 2.58 days, Flanders: 2.64 days and Wallonia 2.84 days). The difference between Flanders and Brussels has decreased in 2020 (see Figure 1).

**Table 1 – Average length of stay for a normal delivery, by year and hospital region (2021)**

Variable	Category	Average length of stay (days)
<b>Year</b>	2010	4.09
	2011	4.03
	2012	3.97
	2013	3.83
	2014	3.70
	2015	
	2016	3.11
	2017	3.09
	2018	3.02
	2019	2.99
	2020	2.71
	2021	2.69
<b>Data 2021 by region</b>		
<b>Region</b>	Brussels	2.58
	Flanders	2.64
	Wallonia	2.84

Source: RHM – MZG (FPS Public health)

**Figure 1 - Average length of stay for a normal delivery by hospital region (2010-2021)**



Source: RHM – MZG (FPS Public health)

### International comparison

Belgium average length of stay for normal delivery had decreased faster than other European countries until 2020: ALOS in Belgium is now the same as the average in Europe-11 (2.7 days, see Figure 2).

Figure 2 – Average length of stay for normal delivery: international comparison (2010-2021)



Source: OECD Health data 2023

**Impact of COVID-19 pandemic**

The average length of stay fell from 2019 (2.99 days) to 2020 (2.71 days) and has remained stable in 2021 (2.69 days). This can at least partially be

explained by the measures taken during the Covid-19 pandemic, such as early discharge or restricted visits.<sup>8</sup>

## Key points

- **The length of stay for a normal delivery decreased from 5 days in 2000 to 2.7 days in 2021, with small differences between regions: Brussels has the lowest average length of stay (2.58 days) compared to Flanders (2.64 days) and Wallonia (2.84 days).**
- **The average is almost the same as the EU-11 average in 2021 (2.7 days), while it was 1 day longer than the EU average in 2012 (but caution is needed with this comparison, as the method to calculate length of stay may differ between countries).**

## References

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