

## 1.1. One-day surgical admissions (E-1)

### 1.1.1. Documentation sheet

<b>Description</b>	Surgical day care admissions as a percentage of all hospital admissions for surgery
<b>Calculation</b>	<b>Numerator:</b> number of stays in surgical day care ('one day surgery') <b>Denominator:</b> number of surgical stays
<b>Rationale</b>	Carrying out elective procedures as day cases where clinical circumstances allow (e.g. inguinal hernia repair, circumcision, cataract surgery, etc.) saves money on bed occupancy and nursing care. It is therefore considered an indicator of efficiency. Since the surgical day case rate has an influence on the system's capacity to provide and maintain infrastructure, it is also considered an indicator of sustainability. The majority of Belgian hospitals (97 out of 103 in September 2022, source : FPS Public Health) have a dedicated one-day surgical unit. The recognition of these units is regulated by the Royal Decree of 25 November 1997 <sup>a</sup> . Two KCE reports examined the financing of one-day surgical units, and proposed some recommendations, specifically for one-day surgery <sup>1</sup> and more generally for the financing system of hospitals. <sup>2</sup>
<b>Data source</b>	RHM – MZG (FPS Public Health); OECD
<b>Technical definitions</b>	<b>Numerator:</b> Surgical day care were selected using the type of hospitalisation. <u>Before 2008</u> , HOSPTYP1 (file STAYHOSP) = 'D' (for Day care) and the flag for surgical stay in APR-DRG, RPOFM (file STAYXTRA) = 'P' (for procedure). <u>From 2008</u> , A2_HOSPTYPE_FAC (file STAYHOSP) = 'D' or 'C' and MorS_15 (file STAYXTRA) = 'P' <b>Denominator:</b> Stays with a surgical APR-DRG were selected with the flag for surgical APR-DRG. <b>Day surgery patient:</b> A patient having an elective surgical intervention that requires a full operating theatre facility, excluding an office intervention, Who is admitted and discharged on the same day. <b>Inpatient:</b> A patient admitted into a hospital, public or private, who is not discharged on the day of admission. <b>Outpatient:</b> A patient having an intervention in a doctor's consulting room or office (i.e. not in a full operating theatre facility), which can be outside or inside the hospital premises. <sup>3</sup>
<b>International comparability</b>	None (see limitations section below).
<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). OECD presents the % of day care cases for a selection of surgical interventions. <sup>4</sup> Caution is needed when comparing results across countries, as there is no single international classification of procedures, different methods are used to count surgical procedures, there are differences in data coverage across countries, reporting is not the same in various facilities and there are differences in perspectives. <sup>3</sup> RHM – MZG data only include inpatient and day surgery stays. OECD data include outpatient surgery when available.

<sup>a</sup> Royal decree of 25 November 1997 establishing the standards that the "surgical day hospitalisation" function must meet in order to be recognised, Belgian official journal 5 December 1997

<b>Dimension</b>	Efficiency, Sustainability
<b>Related indicators</b>	Number of acute care bed days per inhabitant
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### 1.1.2. Results

#### Belgium

The Belgian surgical day care admission percentage grew from 47.7% in 2010 to 49.5% in 2021 (Table 1).

There is a large variability across the interventions: Table 2 shows a selection of surgical interventions whose day care admission percentage is reported to OECD<sup>b</sup>. The decrease in cataract from 2017 on is due to a switch to outpatient cases, the proportion of inpatient cases is still slowly decreasing (from 4% in 2017 to 3% in 2021). For appendectomy, there are no inpatient cases recorded, the other cases are outpatient cases (slowly rising from 0.7% in 2010 to 2% in 2021).

While some interventions reach a high (80% and over) percentage of cases performed in day surgery (appendectomy and cataract), some other

interventions remain relatively low, i.e. under 20% (compared to other countries, for instance laparoscopic cholecystectomy have ca. 50% in UK and France). The proportion of interventions performed in day surgery is highly dependent on whether the intervention is included in the “list A” and hence benefits from a one day lump sum.<sup>1,3</sup> The “list A” includes procedures (selected by billing codes) that are subject to a supplementary financing; this list has been reviewed in 2022<sup>c</sup> and changes have been published and are effective since 1 January 2023<sup>d</sup>. Other factors can also influence on the setting of the surgery (inpatient or day-surgery patient) such as age of the patient or comorbidities.

#### Regional comparison

Wallonia shows lower rates (45.1% in 2021), compared to Flanders (52.0%) and Brussels (46.7%), see Figure 1.

<sup>b</sup> <https://stats.oecd.org/Index.aspx?ThemeTreeId=9>

<sup>c</sup> <https://organesdeconcertation.sante.belgique.be/fr/documents/cfehd562-2-avis-du-cfeh-sur-le-financement-de-hopital-de-jour-annexe-proposition-de-liste>

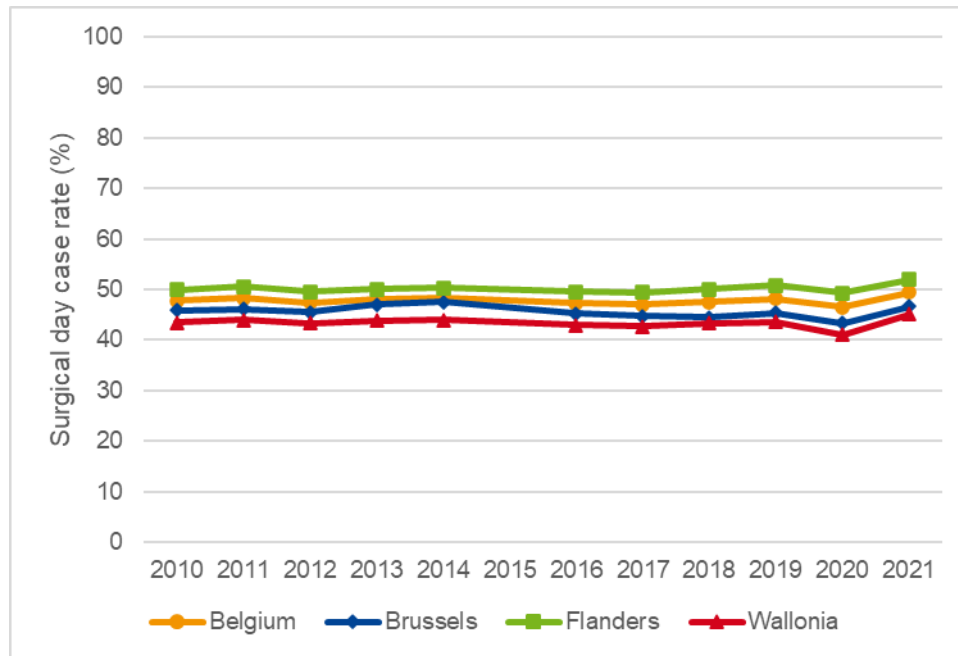
<sup>d</sup> List from 01/01/2023 available at [https://www.health.belgium.be/sites/default/files/uploads/fields/fpshealth\\_theme\\_file/lijst\\_a\\_vanaf\\_1\\_januari\\_2023\\_-\\_liste\\_a\\_a\\_partir\\_du\\_1er\\_janvier\\_2023.xlsx](https://www.health.belgium.be/sites/default/files/uploads/fields/fpshealth_theme_file/lijst_a_vanaf_1_januari_2023_-_liste_a_a_partir_du_1er_janvier_2023.xlsx)

**Table 1 - Surgical day cases amongst all surgical hospitalisations by year and region (2021)**

Variable	Category	Numerator: all surgical day cases	Denominator: all surgical cases	Percentage
<b>Year</b>	2010	613 926	1 286 543	47.7%
	2011	631 249	1 308 576	48.2%
	2012	601 797	1 269 177	47.4%
	2013	611 626	1 272 910	48.0%
	2014	618 126	1 278 633	48.3%
	2015			
	2016	622 599	1 318 561	47.2%
	2017	620 496	1 318 449	47.1%
	2018	633 544	1 331 691	47.6%
	2019	654 250	1 357 213	48.2%
	2020	484 453	1 042 480	46.5%
	2021	619 496	1 251 993	49.5%
<b>Data 2021 by region</b>				
<b>Region</b>	Brussels	74 919	160 488	46.7%
	Flanders	396 173	762 311	52.0%
	Wallonia	14 404	329 194	45.1%

Source: RHM – MZG (FPS Public Health)

Figure 1 - Percentage of surgical day cases amongst all surgical hospitalisations by region (2010-2021)



Source: RHM – MZG (FPS Public Health)

**Table 2 - Proportion of day care cases for selected surgeries (2010-2021, %)**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cataract surgery	94.2	94.4	94.6	95.0	95.4		95.7	89.8	90.0	89.4	96.3	86.9
Tonsillectomy	70.8	70.8	70.6	70.4	70.8		69.7	70.9	69.4	70.5	71.1	75.4
Transluminal coronary angioplasty	8.7	9.0	9.0	9.0	8.1		8.0	7.7	8.6	9.6	11.1	15.0
Coronary artery bypass graft	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.1
Stem cell transplantation	2.1	2.9	1.6	2.9	1.6		1.4	1.2	0.5	1.6	0.9	1.2
Appendectomy	99.3	99.3	99.3	99.2	99.2		99.1	98.8	98.8	98.4	98.3	98.0
- Laparoscopic appendectomy	0.8	0.8	0.8	1.0	0.9		1.0	1.3	1.3	1.6	1.8	2.1
Cholecystectomy	3.0	3.0	3.5	4.3	4.6		5.7	6.7	7.6	8.5	9.7	11.2
- Laparoscopic cholecystectomy	3.3	3.3	3.8	4.7	4.9		5.3	6.4	7.5	9.0	10.3	11.8
Repair of inguinal hernia	29.6	30.4	33.7	36.0	38.1		41.1	43.5	45.4	47.1	49.8	52.2
- Laparoscopic repair of inguinal hernia	28.6	29.2	34.0	36.8	39.9		44.5	46.4	48.5	51.3	54.0	56.5
Open prostatectomy	0.5	0.4	0.6	0.8	0.6		0.1	0.1	0.2	0.1	0.0	0.1
Transurethral prostatectomy	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.1	0.2	0.2
Hysterectomy	0.2	0.2	0.4	0.5	0.4		1.6	2.1	2	2.1	3.0	3.5 <sup>(1)</sup>
- Laparoscopic hysterectomy	0.1	0.3	0.7	0.8	0.7		1.2	0.8	0.4	0.5	0.7	0.9 <sup>(1)</sup>
Caesarean section	0.2	0.2	0.2	0.2	0.2		0.4	0.4	0.4	0.4	0.4	0.5
Hip replacement	0.1	0.0	0.0	0.0	0.0		0.1	0.1	0.1	0.1	0.2	0.2
Total knee replacement	0.1	0.0	0.0	0.0	0.0		0.1	0.1	0.1	0.1	0.2	0.1
Partial excision of mammary gland	29.2	28.3	27.2	28.2	27.8		23.3	24.4	25.3	24.9	25.7	27.2
Total mastectomy	2.8	3.8	3.1	3.3	3.9		9.9	10.3	10.0	10.0	10.3	12.4 <sup>(1)</sup>

Source: OECD Health statistics 2023

<sup>(1)</sup> There is a break in the series from 2016 on following the transition from ICD-9 to ICD-10; some mappings still need to be improved.

## Key points

- The percentage of surgical hospitalisations that were performed in one day hospital grew from 47.7% in 2010 to 49.5% in 2021.
- Depending on the type of surgery, the rate can be high (i.e. 98% for appendectomy) or low (e.g. 0.1% for total knee replacement); this depends in part on how they are financed in day surgery.

## References

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4. OECD. OECD Health Statistics 2023 [Web page]. [updated 30 July 2023; cited 3 October 2023]. Available from: <https://www.oecd.org/health/health-data.htm>