



## 6.7. Practising nurses on the health sector per 1 000 inhabitants (A-6)

### 6.7.1. Documentation sheet

<b>Description</b>	<b>Main indicator:</b> Number of practising nurses on the health sector per 1 000 inhabitants Secondary indicators: Number of nurses with a licensed to practice (LTP) and number of professionally active nurses on the Belgian market
<b>Calculation</b>	<b>Main indicator:</b> Number of practising nurses on the health sector per 1 000 inhabitants <ul style="list-style-type: none"><li>• Numerator : Number of practising nurses on the health sector x 1000</li><li>• Denominator: Total end of year Belgian population</li></ul>
<b>Technical definition</b>	<b>Main indicator:</b> Practising nurses are defined as those employed on the health sector. Secondary indicators: <ul style="list-style-type: none"><li>• A licensed to practice nurse (LTP) is defined as nurses who have obtained a recognised qualification in nursing, including people with a midwife diploma registered under nursing category in the cadastre database.<sup>1</sup></li><li>• A nurse is considered as professionally active when he/she is registered as self-employed person into INASTI database or registered into ONSS database with at least 0.1 full time equivalent (FTE) per year. The threshold of 0.1 FTE per year has been established by the nursing working group on nurses from workforce planning cell.<sup>1</sup></li><li>• A nurse is considered as practising nurses on the health sector when he/she is registered into INASTI database and had provided at least 893 acts (based on INAMI-RIZIV nomenclature) per year or registered into ONSS+ database with at least 0.1 full time equivalent (FTE) per year and working for an active employer on the health sector.<sup>1</sup></li></ul> The distinction between professionally active nurses and practising nurses is the activity sector. Practising nurses are nurses who are active only on the health sector instead of on the entire Belgian market for professionally active nurses.
<b>Rationale</b>	Nurses play a critical role in providing health care in hospitals and long-term care institutions, but also in primary care and in the home care setting. In addition, they are in most countries the largest group of healthcare professionals. Monitoring the number of practising nurses per 1000 inhabitants is therefore important in light of the accessibility and sustainability of the healthcare system. These are essential figures for workforce planning. <sup>2</sup>
<b>Data source</b>	Results from “PlanCAD” 2016 <sup>1</sup> , Federal database of health care professionals, Federal Public Service Health, Food Chain Safety and Environment <sup>1</sup> It should be noted that data from the PlanCAD slightly differ from the workforce statistics (HWF STATAN 2017), also published by the Federal Public Service Health, Food Chain Safety and Environment, because of another extraction period and a larger selection in the PlanCad (e.g. inclusion of people with a midwife diploma registered as nurse in the cadastre).
<b>International comparability</b>	The differences in inclusion and exclusion criteria between countries make international comparison of these data hazardous. Austria and Greece for example report only nurses working in hospital, resulting in an under-estimation.  In OECD health statistics <sup>2</sup> for Belgium, the 2010-2015 data on professionally active nurses have been estimated from the PlanCAD for nurses 2014 <sup>2</sup> by using the average share for the period 2004-2009 of professionally active nurses among all nurses licensed to practice. The 2004-2008 data and



2010-2015 data on practising nurses have been estimated from the PlanCAD for nurses 2014<sup>2</sup> by using the 2009 share of practising nurses among all professionally active nurses.

<b>Dimension</b>	Accessibility (health workforce)
<b>Related indicators</b>	Number of practising physicians per 1000 population Medical and nursing graduates

### 6.7.2. Results

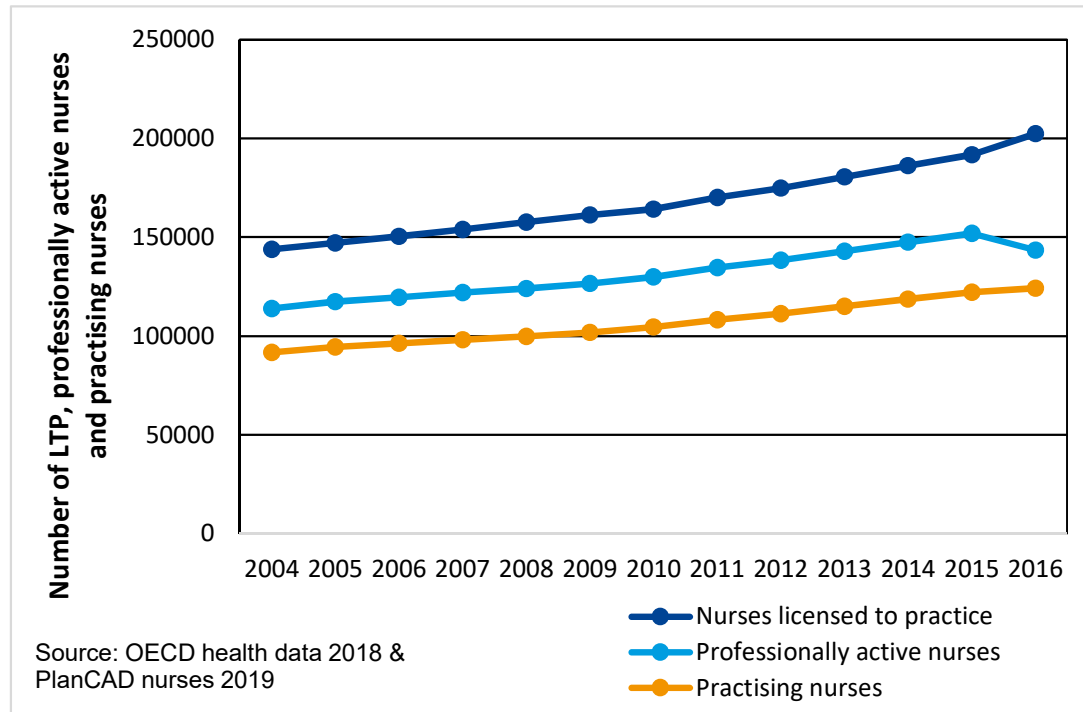
In 2016<sup>w</sup>, there were 202 402 nurses licensed to practise, 143 470 accredited nurses active on the Belgian labour market, and 124 196 practising nurses, i.e. working in the healthcare sector (see Table 49). Figure 79 shows that the number of nurses (all categories) increases over the time.

**Table 49 – Number of nurses (all categories) in Belgium (2004-2016)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Nurses licensed to practice</b>	143 893	147 068	150 414	153 889	157 591	161 299	164 141	170 023	174 849	180 547	186 277	191 805	202 402
<b>Professionally active nurses on the Belgian labour market</b>	113 919	117 346	119 623	121 991	124 064	126 473	129 916	134 572	138 392	142 901	147 437	151 812	143 470
<b>Practising nurses on the health sector</b>	91 644	94 401	96 232	98 137	99 805	101 743	104 513	108 258	111 331	114 959	118 608	122 127	124 196

2016 data are based on the PlanCAD for nurses 2019;<sup>1</sup> 2004-2015 data are based on OECD 2018 Health statistics. The 2010-2015 data on professionally active nurses have been estimated from the PlanCAD for nurses 2014<sup>2</sup> by using the average share for the period 2004-2009 of professionally active nurses among all nurses licensed to practice. The 2004-2008 data and 2010-2015 data on practising nurses have been estimated from the PlanCAD for nurses 2014<sup>2</sup> by using the 2009 share of practising nurses among all professionally active nurses.

<sup>w</sup> The last publication of PlanCAD nurses is in 2019.

**Figure 86 – Evolution of number of nurses licensed to practice, professionally active nurses and practising nurses (2004-2016)**

Source: 2004-2015 data based on OECD 2018 Health statistics. 2016 data based on PlanCAD nurses 2019<sup>1</sup>

In Table 50, results are detailed by community, region of activity, gender and nationality for each type of nurses (LTP, PA, PR) in 2016. For the 124 196 accredited nurses who were professionally active on the health sector: 14.7% were male (n=18 213), 6.3% were foreigners, 61.3% (n=63 327) of the nurses work in Flanders, 10.2% (n=12 697) in Brussels and 28.4% (n=35 277) in Wallonia (Table 50).

In Belgium, there were 109 practising nurses on the health sector per 10 000 inhabitants and differences were observed between regions (see Table 52).

This corresponds to 117 nurses per 10 000 inhabitants in Flanders, 107 nurses per 10 000 inhabitants in Brussels and 98 nurses per 10 000 inhabitants in Wallonia (Table 52). In term of full time equivalent, there were 105 718 practising nurses on the health sector in Belgium in 2016 with an average of 0.85 FTE (see Table 52). There are small variation in term of FTE between regions and communities (see Table 52). From Table 50, it is clear that most nurses active in the health sector (salaried only or with a mixed status) work as employees in hospitals (65.5%) followed by nursing homes (13.7%) and home care (7.9%).



Table 50a – Number of nurses (all categories) in Belgium (2016)

PlanCAD 31/12/2016		Licensed to practise (LTP)	Professionally active nurses on the Belgian labour market (PA)	Practising nurses on the health sector (PR)		
		N	N	FTE	N	FTE
<b>Belgium</b>		202 402	143 470	113 414	124 196	105 718
<b>Community</b>	Flemish community	120 555 (59.6%)	88 110 (61.4%)	68 026	76 172 (61.3%)	63 431
	French community	81 847 (40.4%)	55 360 (38.6%)	45 388	48 024 (38.7%)	42 287
<b>Region of activity</b>	Flanders	-	87 415 (60.9%)	67 274	76 155 (61.3%)	63 327
	Wallonia	-	40 707 (28.4%)	33 409	35 277 (28.4%)	31 130
	Brussels Capital	-	15 224 (10.6%)	12 670	12 697 (10.2%)	11 200
	Foreign or unknown	-	124 (0.1%)	62	67 (0.1%)	61
<b>Gender</b>	Male	27.200 (13.4%)	21.317 (14.9%)	19 629	18 213 (14.7%)	17 819
	Female	175.202 (86.6%)	122.153 (85.1%)	93 785	105 983 (85.3%)	87 899
<b>Nationality</b>	Belgian	185.055 (91.4%)	135.033 (94.1%)	106 558	116 397 (93.7%)	98 603
	Not Belgian	17.347 (8.6%)	8.437 (5.9%)	6 857	7 799 (6.3%)	7 114

Source: PlanCAD nurses 2019<sup>1</sup>; \*This diploma was interrupted in 1996.

Table 51b – Number of nurses active in the health sector (from the National Social Security Office database, i.e. salaried only or with a mixed status, n = 113 878), per activity sector (2016)

	Hospitals	Nursing homes	Home care	Public centres for social action (OCMW-CPAS)	Social welfare	Other health sectors	Total
<b>N (%)*</b>	74 619 (65.5%)	15 567 (13.7%)	8 451 (7.4%)	8 987 (7.9%)	3 550 (3.1%)	3 725 (3.3%)	113 878

Source: PlanCAD nurses 2019<sup>1</sup>; \* Some nurses worked in multiple sectors meaning that the total does not equal to the some of the sectors..


**Table 52 – Practising nurses active on the health sector in Belgium (density per 1 000 population)**

31/12/2016		Practising nurses on the health sector				
		N	Density	N (in FTE)	Density (in FTE)	Average FTE
<b>Belgium</b>		124 196	11.0	105 718	9.3	0.85
<b>Region</b>	Flanders	76 155	11.7	63 327	9.7	0.83
	Wallonia	35 277	9.8	31 130	8.6	0.88
	Brussels Capital	12 697	10.7	11 200	9.4	0.88
	Foreign or unknown	67	-	61	-	0.92
<b>Community</b>	Flemish community	76 172	11.3	63 431	9.4	0.83
	French community	48 024	10.5	42 287	9.3	0.88

Source: PlanCAD nurses 2019.<sup>1</sup>, density (own calculation)

### International comparison

Based on OECD Health Statistics, the number of practising nurses on the health sector in Belgium increased between 2004 and 2015 (see Table 53).

This is in line with what is observed in other European countries (see Figure 87). In 2015, Belgium had 10.8 nurses per 1 000 inhabitants which is one nurse more than the EU-11 average. In 2016, Belgium had 10.9 nurses per 1 000 inhabitants (see Table 53).

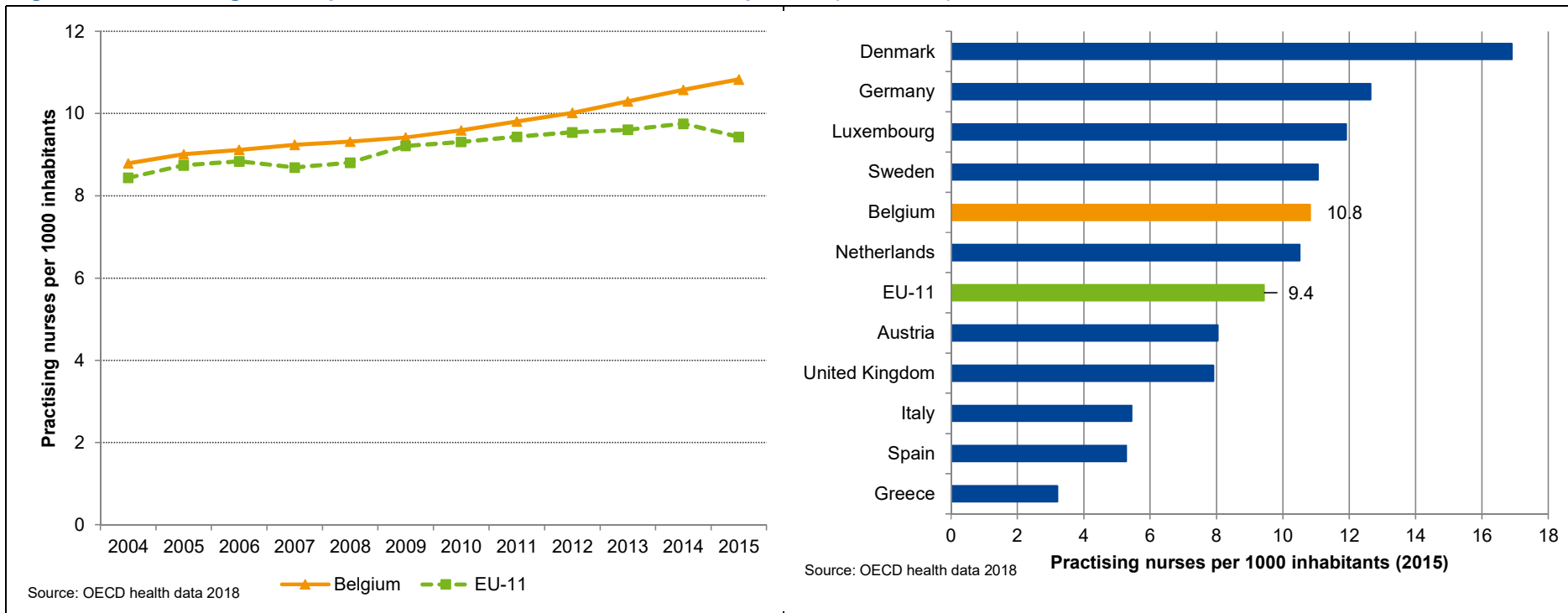
**Table 53 – Number of practising nurses on the health sector in Belgium and density per 1 000 inhabitants (2004-2015)**

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>Number of practising nurses on the health sector (head counts)</b>	91 644	94 401	96 232	98 137	99 805	101 743	104 513	108 258	111 331	114 959	118 608	122 127
<b>Density per 1 000 population (head counts)</b>	8.8	9.0	9.1	9.2	9.3	9.4	9.6	9.8	10.0	10.3	10.6	10.8

Source: OECD 2018 Health Statistics. Data refers to the number of nurses active on the health sector. The 2004-2008 data and 2010-2015 data have been estimated by using the 2009 share of practising nurses among all professionally active nurses (PlanCad).<sup>3</sup>



Figure 87 – Practising nurses per 1000 inhabitants: international comparison (2004-2015)



Source: OECD 2018 Health statistics



### Key points

- **The recent PlanCAD project<sup>1</sup>, resulting of a linkage of several administrative databases, allows precise estimation of the number of nurses active on the Belgian labour market (professionally active) and on the health sector (practising nurses).**
- **In 2016<sup>x</sup>, there were 202 402 nurses licensed to practise, 143 470 accredited nurses active on the Belgian labour market, and 124 196 practising nurses, i.e. working in the healthcare sector.**
- **Most of professionally active nurses work as employees in hospitals (65.5%) followed by nursing homes (13.7%) and home nursing (7.9%).**
- **The number of practising nurses per 1 000 inhabitants increased between 2004 and 2015 in Belgium (from 8.8 in 2004 to 10.8 per 1000 inhabitants in 2015). This increasing trend is also observed in other European countries. The number of practising nurses per 1 000 inhabitants is slightly above the European average.**

### References

1. Vivet V, Durand C, De Geest A, Delvaux A, Jouck P, Miermans P-J, et al. PlanCad Infirmiers 2016. Rapport final sur le couplage des données PlanCad pour la profession infirmière. Bruxelles: Cellule Planification des professions de soins de santé, Service Professions des soins de santé et pratique professionnelle, DG Soins de santé, SPF Santé publique, Sécurité de la chaîne alimentaire et Environnement; 2018. Available from: [https://organesdeconcertation.sante.belgique.be/sites/default/files/documents/plancad\\_infirmiers\\_2016.pdf](https://organesdeconcertation.sante.belgique.be/sites/default/files/documents/plancad_infirmiers_2016.pdf)
2. OECD. Health at a Glance 2017: OECD Indicators. Paris: 2017. Available from: [http://dx.doi.org/10.1787/health\\_glance-2017-en](http://dx.doi.org/10.1787/health_glance-2017-en)
3. Somer A, Vivet V, Delvaux A, Dumont G, Miermans P-J, Steinberg P. Eindrapport van de PlanCAD Gegevenskoppeling voor de beroepsgroep van de verpleegkunde. Brussels: Federale Overheidsdienst Volksgezondheid Veiligheid van de Voedselketen en Leefmilieu; 2014 April 2014.

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<sup>x</sup> The last publication of PlanCAD nurses is in 2019.<sup>1</sup>