



8.8. Nursing students following the bachelor route (S-9)

8.8.1. Documentation sheet

Description	<p>Main indicator: Nursing students following the bachelor route (% of new graduates)</p> <p>Secondary indicator: Percentage of professionally active nurses on the Belgian labour market with a bachelor's degree</p>
Calculation	<p>Main indicator: Nursing students following the bachelor route (% of new graduates)</p> <ul style="list-style-type: none"> • Numerator : Number of nurses following the bachelor route • Denominator: Total number of nurses graduates <p>Secondary indicator: Percentage of professionally active nurses on the Belgian labour market with a bachelor's degree</p> <ul style="list-style-type: none"> • Numerator : Number of professionally active nurses on the Belgian labour market with a bachelor's degree • Denominator: Total number of professionally active nurses on the Belgian labour market
Rationale	<p>In many countries, including Canada, Australia, New Zealand, Norway, Spain, Philippines, and many countries in South America, the standardized entry into professional nursing is obtaining a diploma with a bachelor degree. In other countries such as the United States, Belgium,¹ The Netherlands, the United Kingdom, Sweden other (lower educational) entry levels exist besides the Bachelor degree entry-level. Nevertheless, a solid evidence base shows that better patient outcomes are associated with higher educated nurses. A landmark US-study showed that each 10% increase in the proportion of Bachelor-degree trained nursing staff was associated with 5% lower odds on patient mortality after taking into account how sick the patients were and other characteristics of hospitals that had been shown to be associated with mortality rates, including physician qualifications.² Replications in other countries with differently organized and financed health care (among which a multi-country European study) yielded remarkably similar findings.³ These research findings plead for policy recommendations and adoption of measures aiming for a sufficiently educated nursing workforce. In the US, for instance, the Institute of Medicine (IOM) recommended in its report on 'The Future of Nursing'⁴ to move to a nurse workforce comprising 80% of nurses with a Bachelor's degree by 2020 (compared to slightly more than 50% in 2010).</p> <p>In Belgium, policy makers did not (yet) formulated such targets but the above evidence suggests the importance of at least monitoring the educational level of nurses over time and encouraging the training and the employment of nurses with a bachelor degree.</p>
Data source	<p>Main indicator: Federal database of health care professionals ("Cadastre/Kadaster"), Federal Public Service Health, Food Chain Safety and Environment</p> <p>Secondary indicator: PlanCAD nurses 2019⁵</p>
Technical definitions	<p>A nurse is a person who has been trained to carry out nursing tasks. Nurses have successfully completed a three-year advanced vocational training course (A2 or HBO-5 leading to obtain a diploma degree) or a Bachelors' programme Nursing (A1 or bachelor leading to obtain a bachelor degree).</p> <p>The number of nursing graduates is based on the number of "visa/visum" delivered by the Federal Public Service Public Health, which are registered in the federal cadastre. Only the first "visa/visum" delivered to practise nursing is taking into account.</p>
International comparability	<p>No recurrent systematic data collection exists. In 2010, the RN4CAST study holds data about the educational level of nursing staff from 488 general acute care hospitals in 12 European countries, including Belgium.</p>
Dimension	Sustainability
Related indicators	<p>Number of practising nurses per 10 000 population</p> <p>Number of nursing graduates</p>



8.8.2. Results

Nursing students following the bachelor route (% of new graduates)^{ss}

Table 82 shows a huge increase of the percentage of nursing students following the bachelor route between 2007 and 2011 (from 20.1% in 2007 to 59.6% in 2011) and then, tended to stabilise around 55%. In Belgium, the percentage of nursing graduates holding a bachelor's degree was 55.7% in 2017 (see Table 82).

Since 2010, the share of nursing students following the bachelor route is higher in the French community than in the Flemish community (see Table 82). In 2017, respectively 48.8% and 64.8% of the nursing graduates in the Flemish community and in the French community had a bachelor degree (see Table 82).

Table 82 – New nursing graduates with Belgian diploma (2004-2017), per community and per diploma level

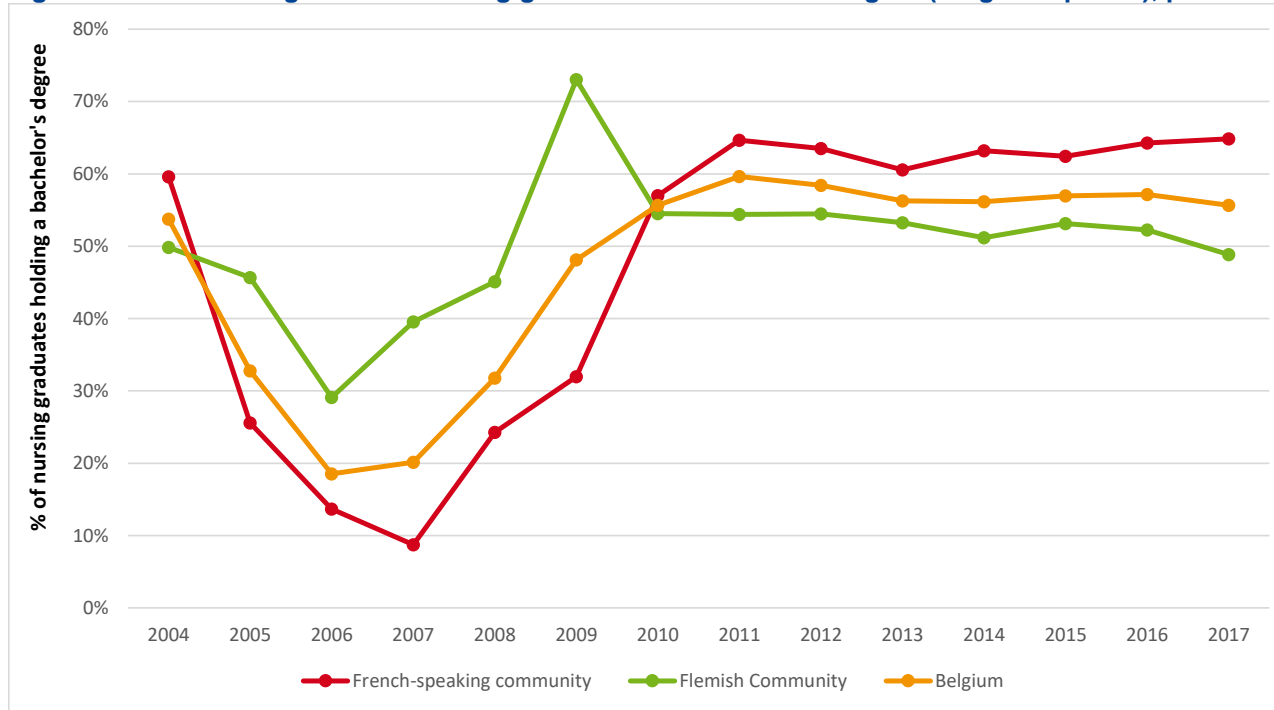
SPF 2018		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
French-speaking community	Bachelor (A1)	890	566	335	200 (8.7%)	595	758	1 064	1 551	1 308	1 286	1 430	1 468	1 629	1 756 (64.8%)
	Diploma (A2)	603	1 646	2 113	2 095	1 856	1 614	803	848	752	837	833	884	905	952 (35.2%)
	Total	1 493	2 212	2 448	2 295	2 451	2 372	1 867	2 399	2 060	2 123	2 263	2 352	2 534	2 708
Flemish Community	Bachelor (A1)	1 115	562	327	534 (39.5%)	623	1 125	1 217	1 253	1 452	1 601	1 638	1 772	1 938	1 782 (48.8%)
	Diploma (A2)	1 123	669	797	817	759	415	1 015	1 050	1 214	1 406	1 562	1 563	1 771	1 867 (51.2%)
	Total	2 238	1 231	1 124	1 351	1 382	1 540	2 232	2 303	2 666	3 007	3 200	3 335	3 709	3 649
Total Belgium	Bachelor (A1)	2 005	1 128	662	734 (20.1%)	1 218	1 883	2 281	2 804 (59.6%)	2 760	2 887	3 068	3 240	3 567	3 538 (55.7%)
	Diploma (A2)	1 726	2 315	2 910	2 912	2 615	2 029	1 818	1 898	1 966	2 243	2 395	2 447	2 676	2 819 (44.3%)
	Total	3 731	3 443	3 572	3 646	3 833	3 912	4 099	4 702	4 726	5 130	5 463	5 687	6 243	6 357

Source: SPF-FOD Cadastre

^{ss} The term diploma is a generic term to refer to a certificate awarded by an educational establishment to show that someone has successfully completed a course of study. When related to a diploma level (in comparison with Bachelor degree), the symbol A2 will systematically be added.



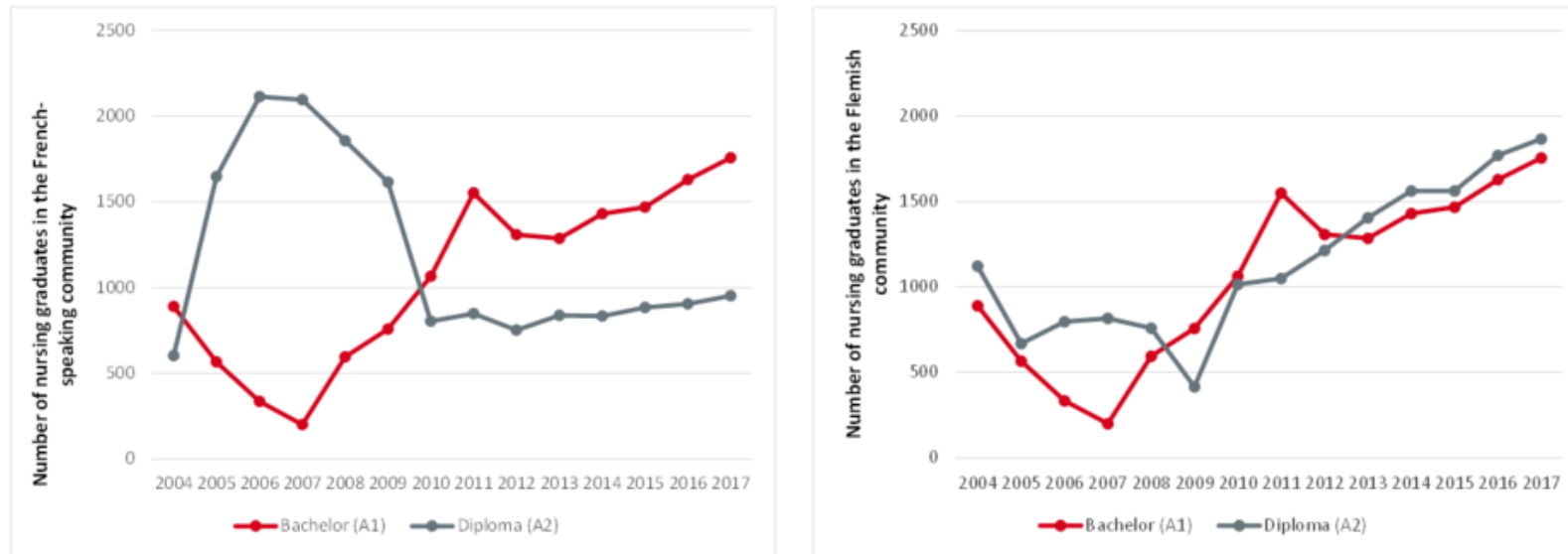
Figure 115 – Percentage of new nursing graduates with bachelor degree (Belgian diploma), per community (2004-2017)



Source: SPF-FOD Cadastre



Figure 116 – Number of new nursing graduates with a Belgian diploma, per type of diploma and per community (2004-2017)



Source: SPF-FOD Cadastre

Percentage of professionally active nurses on the Belgian labour market with a bachelor degree

In 2016, there were 143 470 professionally active nurses on the Belgian labour market in Belgium (see Table 83). 55.3% of the professionally active nurses had a bachelor degree A1 (i.e. 79 357 nurses) and 35.1% had a diploma (A2). These proportions remain quite stable since 2009.



Table 83 – Professionally active nurses on the Belgian labour market, per type of diploma (2009, 2016)

		Professionally active nurses on the Belgian labour market (PA) in 2009*		Professionally active nurses on the Belgian labour market (PA) in 2016**	
		N	%	N	%
Total in Belgium		126 473	100%	143 470	100%
Type of diploma	Bachelor (A1)	72 684	57.5%	79 357	55.3%
	Diploma (A2)	47 620	37.6%	50 290	35.1%
	Assistant in hospital care***	5 949	4.7%	3 624	2.5%
	Foreign diploma or unknown diploma	220	0.2%	10 199	7.1%

Source: *PlanCAD nurses 2014⁶; **PlanCAD nurses 2019.⁵ ***This diploma was interrupted in 1996.

Key points

- **In Belgium, the percentage of nursing graduates holding a bachelor degree was 55.7% in 2017.**
- **The percentage of nursing graduates holding a bachelor degree increased between 2007-2011 (from 20.1% in 2007 to 59.6% in 2011) and then, tends to stabilise around 55%.**
- **Based on the new nursing graduates, more nurses followed a bachelor degree in the French community (64.8%) than in the Flemish community (48.8%) in 2017.**

References

[1] Cellule Planification de l'offre des professions des soins de santé. Schéma du parcours des professionnels des soins de santé pour exercer en Belgique. SPF Santé publique, sécurité chaîne alimentaire et environnement, DG soins de santé; Juillet 2014.

[2] Aiken LH, Clarke SP, Cheung RB, Sloane DM, Silber JH. Educational levels of hospital nurses and surgical patient mortality. *JAMA*. 2003;290(12):1617-23. doi: 10.001/jama.290.12..

[3] Aiken LH, Sloane DM, Bruyneel L, Van den Heede K, Griffiths P, Busse R, *et al*. Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. *Lancet*. 2014;383(9931):1824-30. doi: 10.016/S0140-6736(13)62631-8. Epub 2014 Feb 26.

[4] Institute of Medicine (US). *The Future of Nursing: Leading Change, Advancing Health*. Washington (DC): National Academies Press (US). 2011.

[5] 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.

[6] 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.