



1.1. Foreign-trained physicians (% of those licensed to practice) (S-14)

1.1.1. Documentation sheet

Description	<p>Primary indicator Foreign-trained physicians (% of physicians licensed to practice, Stock)</p> <p>Secondary indicator Foreign-trained physicians (% of practising physicians, Stock) Medical graduates with a foreign diploma (% medical graduates receiving a visa/visum in Belgium, New inflow)</p>
Calculation	<p>Primary indicator Numerator: Number of foreign-trained physicians licensed to practice (Stock) Denominator: Total number of physicians licensed to practice (Belgian-trained physicians and foreign-trained physicians)</p> <p>Secondary indicator Numerator: Number of practising foreign-trained physicians (Stock) Denominator: Total number of practising physicians (Belgian-trained physicians and foreign-trained physicians) Number of medical graduates with a foreign diploma (New inflow) Numerator: Total number of medical graduates receiving a visa/visum in Belgium (Belgian diploma and foreign/unknown diploma, New inflow)</p>
Rationale	Maintaining a sufficient stock of physicians to guarantee the accessibility and quality of care requires investment in training new physicians, taking into account that it takes at least 8 years to train a general practitioner ^a and 10-13 years to train a medical specialist. Some European countries opt for strong recruitment strategy to recruit trained physicians from abroad. ¹ The World Health Organization adopted in May 2010 “The Global Code of Practice on the International Recruitment of Health Personnel” ² to promote a more ethical recruitment of health personnel and to encourage countries to achieve greater “self-sufficiency” in the training of health workers.
Data source	Federal database of health care professionals (“Cadastre/Kadaster”), Federal Public Service Health, Food Chain Safety and Environment (FPS Public health). For practising physicians (foreign-trained physicians in % of practising physicians): PlanCad 2017-2021 ³ OECD Health statistics 2023
Technical definitions	Foreign-trained physicians are physicians who have obtained abroad the diploma allowing them to have a medical practice in Belgium (i.e. equivalent to the master degree to become a medical doctor). These physicians have also obtained a visa and are registered with the Medical College (Ordre des Médecins / Orde der artsen) to be entitled to practice in Belgium.

^a General practitioners have the possibility to begin their 3 years post-graduate training the last year of their basic training.



People with an unknown diploma are included in foreign-trained physicians (for information, data are also presented without including them). Stock data do not include physicians with temporary visa.

Practising physicians are identified based on the definition of the PlanCad project, which differ from the RIZIV-INAMI definition (see also A-10). In the PlanCad project, practising physicians concern physicians registered as self-employed into the NISSE database and having provided a minimum level of services per year (at least 5% of the median amount reimbursed to self-employed physicians in the 45-54 age category, defined by medical (sub-)specialty, based on RIZIV-INAMI nomenclature, with some exceptions^b), or registered as salaried worker into the NSSO database with at least 0.1 full time equivalent (FTE) per year and working for an active employer in the health sector. Because of a stricter threshold, data in the PlanCad projects are lower than in RIZIV-INAMI data.

The number of medical graduates with a foreign diploma is based on the number of “visa/visum” delivered by the FPS Public Health, which are registered in the federal cadastre. Only the first “visa/visum” delivered is taken into account.

Limitations	The principal indicator refers to the share of foreign-trained physicians on all physicians with a license to practice and not on practising physicians or professionally active physicians (data not available). This indicator therefore includes physicians without active practice in Belgium.
International comparability	International comparability is partially limited due to methodological differences (some countries report licensed to practice physicians while others report practising or professionally active physicians). The data for Germany are based on nationality, not on the place of training.
Dimension	Sustainability of the health system
Related indicators	Number of medical graduates; Number of practising physicians; Number of practising physicians above 55+ years old
Reviewers	Pascale Steinberg and Timothée Mahieu

^b For medical specialists in clinical genetics, the threshold of at least 2 RIZIV-INAMI services per year was used and for physicians without recognition, a threshold of €7 500 was used.



1.1.1. Results

1.1.1.1. Foreign-trained physicians (% physicians licensed to practice) (Stock)

Belgium

In 2021, 72 660 physicians licensed to practice were counted in Belgium (see Table 2). About 13% of them held a foreign or an unknown diploma (9 526 foreign-trained physicians). Table 2 shows that the share of foreign-trained physicians is increasing over time in Belgium from 6.2% in 2010 to 13.1% in 2021 (+5.3 percentage points when including unknown diploma; +5.8 percentage points when excluding unknown diploma).

Analysis by demographic characteristics

The proportion of male foreign-trained physicians is slightly higher than female foreign-trained physicians (respectively 51.5% and 48.5%, Table 1). This is quite interesting to highlight since a reverse gender distribution is observed among new medical graduates with a Belgian diploma (38.5% were men and 61.5% were women in 2017). More than 70% of them are younger than 55 years old. Unsurprisingly, 84.4% of foreign-trained physicians do not have the Belgian nationality (or the nationality is unknown, at the time of data extraction) and almost 50% of them resided abroad at the end of the year they received their visa. Figure 1 shows that almost half of foreign-trained physicians come from France, The Netherlands or Romania.

Table 1 – Foreign-trained physicians by personal characteristics (2021)

		2021
Foreign-trained physicians in Belgium (including unknown diploma)		9526
<i>Foreign-trained physicians in Belgium (excluding unknown diploma)</i>		8756 (92%)
Gender	Female	4620 (48.5%)
	Male	4906 (51.5%)

Age group	<35	1304 (13.7%)
	35-44	3345 (35.1%)
	45-54	2143 (22.5%)
	55-64	1691 (17.8%)
	65-74	758 (8%)
	>74	285 (3%)
Belgian nationality*	Yes	1488 (15.6%)
	No	7924 (83.2%)
	Unknown	114 (1.2%)
Place of residence**	Residence in Belgium	3729 (39.1%)
	Residence abroad	4730 (49.7%)
	Unknown	1067 (11.2%)

Source: FPS Public health, Cadastre; **Belgian nationality at the time of the data extraction (December 2022); ***Residence at the end of the visa year (31/12)

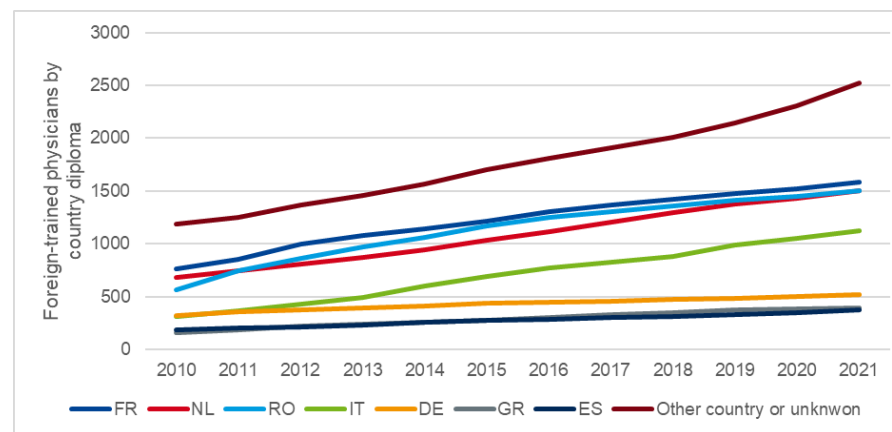
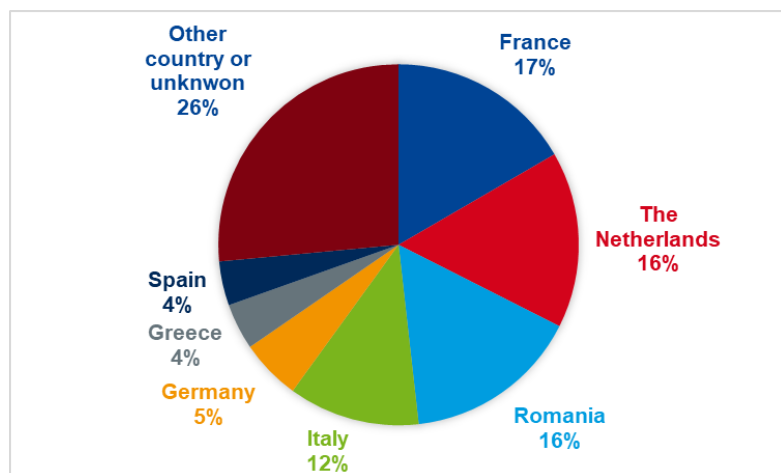


Table 2 – Number of physicians licensed to practice distributed according to the place of training (2012-2017)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Total physicians licensed to practice	53 335	54 650	56 039	57 270	58 646	60 151	61 849	63 537	66 778	68 866	70 692	72 660	
Country diploma	Belgian diploma	49 166	49 943	50 759	51 537	52 395	53 347	54 564	55 832	58 670	60 284	61 695	63 134
	Foreign diploma	3 309	3 860	4 440	4 895	5 422	5 983	6 474	6 904	7 312	7 793	8 219	8 756
	EU-27	3177	3690	4202	4617	5083	5564	5989	6352	6686	7074	7379	7733
	Non EU-27	132	170	238	278	339	419	485	552	626	719	840	1023
	Unknown	860	847	840	838	829	821	811	801	796	789	778	770
% Foreign-trained physicians (including unknown diploma)	7.8%	8.6%	9.4%	10.0%	10.7%	11.3%	11.8%	12.1%	12.1%	12.5%	12.7%	13.1%	
<i>% Foreign-trained physicians (excluding unknown diploma)</i>	6.2%	7.1%	7.9%	8.5%	9.2%	9.9%	10.5%	10.9%	10.9%	11.3%	11.6%	12.1%	

Source : FPS Public Health , Cadastre

Figure 1 – Foreign-trained physicians by country diploma; stock (2010-2021)



Source: FPS Public health, Cadastre



International comparison

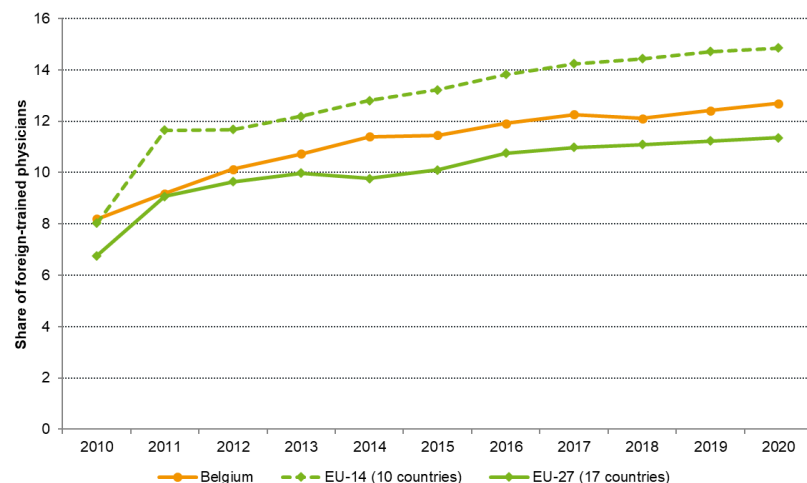
The share of foreign-trained physicians in Belgium is higher than the average observed across the EU-27 countries (based on 17 countries, excluding Luxembourg^c) and below the average observed across the EU-14 countries (based on 10 countries, excluding Luxembourg). The increase observed between 2010 and 2020 was slightly more important for the EU-

14 countries on average than for the EU-27 countries or in Belgium (+6.8 percentage points vs 4.6 and 4.5 percentage points respectively).

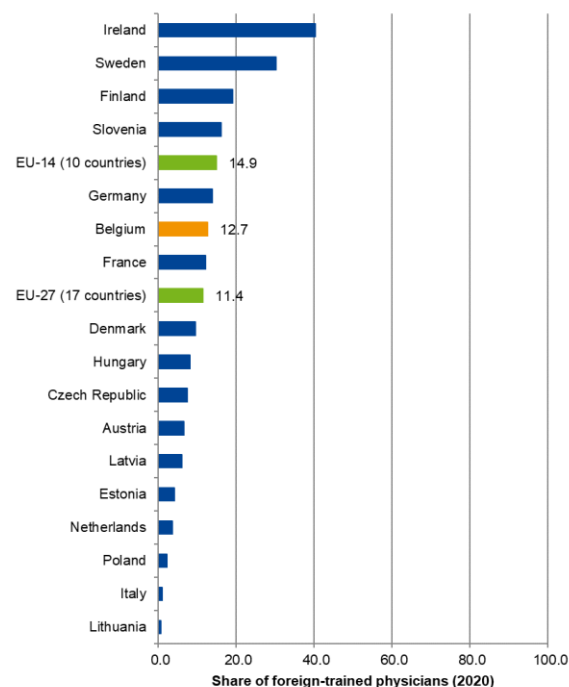
Impact of COVID-19 pandemic

The share of foreign-trained physicians follows a similar trends before and after the COVID-19 pandemic, both for Belgium and EU-averages.

Figure 2 – Share of foreign-trained physicians: international comparison (2000-2015)^d



Source: OECD Health Statistics 2023



^c Luxembourg was excluded from the international (outliers: 100% of foreign-trained physicians).

^d Because of the lack of data from other European countries in 2021, 2020 is taken as the reference in the calculation.



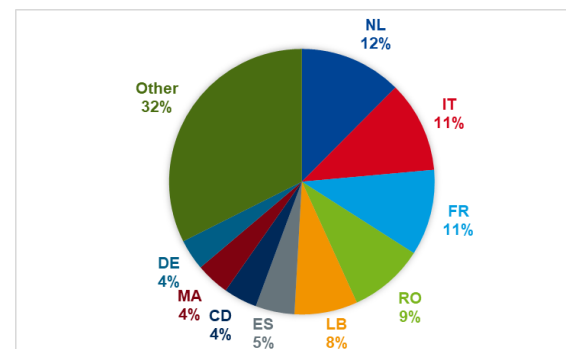
1.1.1.2. *Foreign-trained physicians (% of practising physicians, Stock)*

Based on data from the PlanCad³, only 2239 physicians with a foreign diploma were nevertheless active in the healthcare sector in 2021 (2239 on 35 061, i.e. 6.4%).

1.1.1.3. *Medical graduates with a foreign diploma^e (% medical graduates receiving a visa/visum in Belgium, new inflow)*

Regarding the new inflow, the share of new physicians with a foreign diploma receiving a visa/visum (new inflow) decreased between 2010 and 2020 (-14.0 percentage points) but increase in 2021 (+4.2 percentage points compared to 2020) to reach a percentage similar to 2017. In 2021, half of them came from the Netherlands (12.4%), Italy (11.1%), France (10.5%), Romania (9.2%) or Lebanon (7.7%). A higher proportion of medical graduates with a foreign diploma registered in the French community.

Figure 3 – Medical graduates with a foreign diploma, per diploma origin, 2021



Source: FPS Public Health, Cadastre

Table 3 – Medical graduates receiving a visa in Belgium, per origin of diploma (Belgian vs foreign diploma) and community, new inflow 2010-2021

	2010	2011	2012	2013	2014	2015	2016	2017	(2018)**	2019	2020	2021
Belgian diploma	985 (65.9%)	1135 (63.1%)	1181 (63.2%)	1180 (71%)	1292 (69.6%)	1358 (67.8%)	1621 (71.3%)	1684 (75.4%)	3283** (87.6%)	2014 (78.5%)	1920 (79.9%)	1904 (75.7%)
French Community	408 (27.3%)	473 (26.3%)	462 (24.7%)	430 (25.9%)	573 (30.9%)	605 (30.2%)	736 (32.4%)	840 (37.6%)	1781 (47.5%)	985 (38.4%)	926 (38.5%)	1003 (39.9%)
Flemish Community	577 (38.6%)	662 (36.8%)	719 (38.4%)	750 (45.1%)	719 (38.8%)	753 (37.6%)	885 (38.9%)	844 (37.8%)	1502 (40.1%)	1029 (40.1%)	994 (41.4%)	901 (35.8%)
Foreign diploma	504* (34.1%)	664 (36.9%)	689 (36.8%)	482 (29%)	563 (30.4%)	646 (32.2%)	654 (28.7%)	550 (24.6%)	464 (12.4%)	552 (21.5%)	483 (20.1%)	611 (24.3%)
French Community	422 (28.2%)	564 (31.4%)	573 (30.6%)	363 (21.8%)	420 (22.6%)	466 (23.3%)	483 (21.2%)	369 (16.5%)	265 (7.1%)	359 (14%)	298 (12.4%)	375 (14.9%)
Flemish Community	82 (5.5%)	100 (5.6%)	116 (6.2%)	118 (7.1%)	143 (7.7%)	180 (9%)	164 (7.2%)	167 (7.5%)	184 (4.9%)	183 (7.1%)	172 (7.2%)	214 (8.5%)
German community	(0%)	(0%)	(0%)	1 (0.1%)	(0%)	(0%)	7 (0.3%)	14 (0.6%)	15 (0.4%)	10 (0.4%)	13 (0.5%)	22 (0.9%)

Source: FPS Public Health, Cadastre; *including unknown diploma (n=5); **Double cohort due to the shortening of the training; KCE calculation

^e Including unknown diploma in 2010 (n=5).



Key points

- **In 2021, about 13% of all licensed to practice physicians in Belgium held a foreign diploma (9 526 foreign-trained physicians^f among 72 660 physicians); half of them came from France, The Netherlands and Romania. This proportion relates to physicians who are entitled to practice and not to practising physicians.**
- **Results are nevertheless better if we only look at practising physicians. Indeed, based on data from the PlanCad, only 6.4% of practising physicians had a foreign diploma in 2021.**
- **An increasing proportion of foreign-trained physicians licensed to practise can be observed in Belgium (+5.3 percentage points between 2010 and 2021, no data available for practising physicians).**
- **During 2011 and 2020^g, the proportion of foreign-trained physicians licensed to practice in Belgium remained slightly below the EU-14 average (12.7 vs 14.9 in 2020) but was above the EU-27 average (12.7 vs 11.4 in 2020).**

References

1. OECD. Health at a Glance 2017: OECD Indicators. Paris: 2017. Available from: http://dx.doi.org/10.1787/health_glance-2017-en
2. WHO. Global Code of Practice on the International Recruitment of Health Personnel Copenhagen: World Health Organization; 2010. Available from: http://www.who.int/hrh/resources/code_implementation/en/
3. Vivet V, Durand C, Jouck P, Berwouts J, Nkenné D, Steinberg P, et al. PlanCad Médecins 2017-2021. Rapport final sur le couplage des données PlanCAD pour la profession des médecins. 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; 2023. Available from: https://organesdeconcertation.sante.belgique.be/sites/default/files/documents/plancad_medecins_2017-2021_fr.pdf

^f Including unknown diploma

^g 2021 was not presented because of the lack of data from other European countries