



MONITORING HEALTH WORKFORCE MIGRATION THROUGH INTERNATIONAL DATA COLLECTION: PROGRESS WITH OECD/EUROSTAT/WHO-EUROPE JOINT QUESTIONNAIRE

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OECD/Eurostat/WHO-Europe Joint Questionnaire (non-expenditure statistics)

- Started in 2010 with data collection on health human resources and physical resources:
 - Extended in 2013 (health care activities)
 - Extended in 2015 (health workforce migration)
- Aim is to collect internationally comparable data to monitor key aspects and trends in health workforce development (and other resources and activities of health systems)
- Aim of joint data collection is to:
 - Reduce data collection burden on national authorities
 - Improve consistency of data in international databases



General approach to Joint Questionnaire

- 61 countries receive Joint questionnaire each year:
 - 28 EU + 7 EU candidate countries and EFTA countries
 - 18 other countries in WHO-Europe region
 - 8 OECD countries outside Europe (Canada, US, Japan, ...)
- Based on international standard classifications:
 - SHA: International Classification of Health Accounts (ICHA)
 - ISCO-08: International Standard Classification of occupations



Scope of data collection on health workforce

- Number of doctors (by categories), nurses, midwives, dentists, pharmacists, physiotherapists
- New graduates (doctors, nurses, midwives, dentists, pharmacists)
- Health workforce migration (focussing on doctors and nurses only)



Data collection based on three concepts of activity

Practising

- Providing services for patients

Professionally active

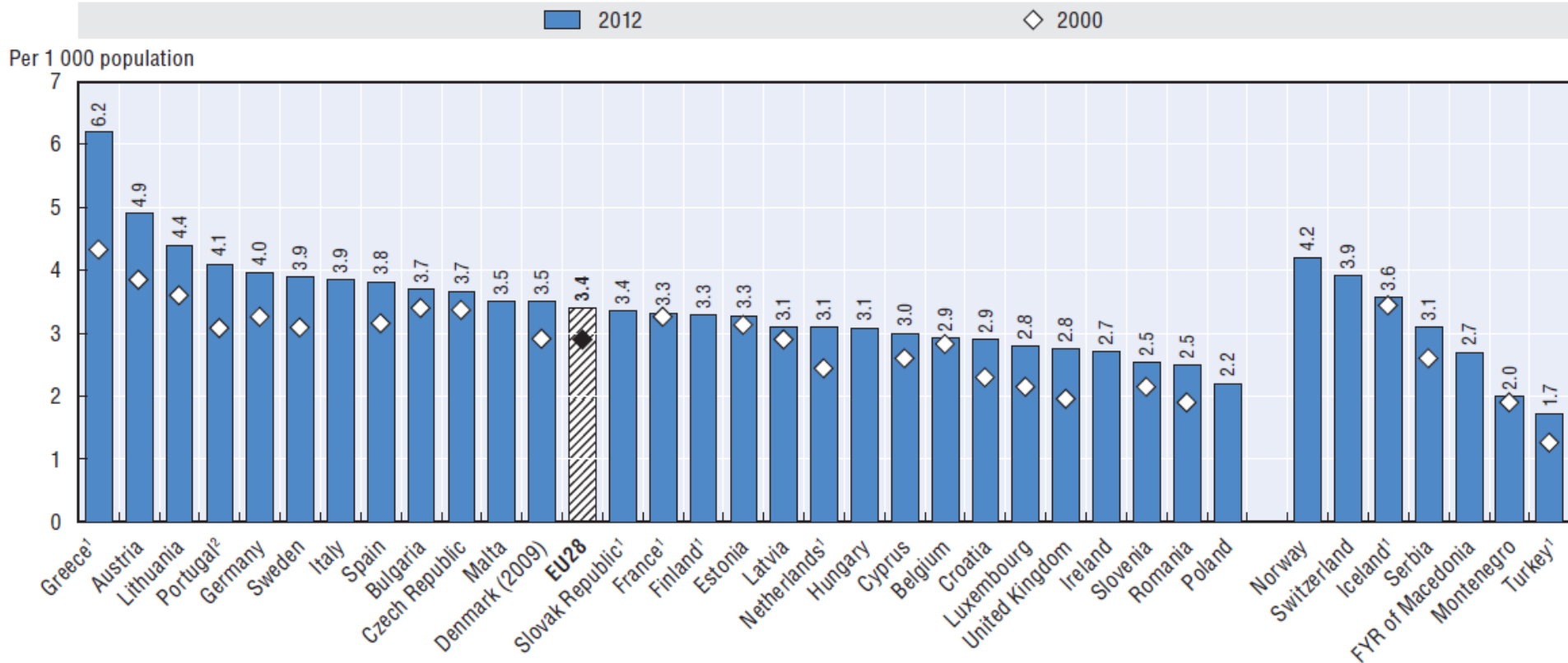
- Practising
- Working in health system as administrators, managers, researchers, teachers, etc. (excluding direct contact with patients)

Licensed to practice

- All health professionals who are licensed to practice, including non-practising (e.g. unemployed, retired, working abroad)



Number of doctors has increased in nearly all EU countries since 2000



1. Data include not only doctors providing direct care to patients, but also those working in the health sector as managers, educators, researchers, etc. (adding another 5-10% of doctors).

2. Data refer to all doctors licensed to practice.



NEW MODULE ON HEALTH WORKFORCE MIGRATION



Aim of this new module

- Monitor trends in inflows (immigration) and outflows (emigration) of doctors and nurses across countries
- Data can be used to analyse impact of recent policy and economic developments on migration patterns:
 - EU enlargement in 2004, 2007 and 2013
 - Economic crisis that started in 2008
 - Adoption of WHO Global Code in 2010
 - Other national policies designed to reduce emigration or manage migration (e.g., bilateral agreements)



Scope and approach to data collection

- Focus on migration of doctors and nurses
- Focus on place of training (foreign-trained, where first diploma was obtained)
- Collect *immigration* data from destination countries by all countries of origin (based on professional registries, physician/nurse surveys or other sources)
- Include both total “stocks” and annual “flows”
- Describe *emigration* patterns through *aggregation of immigration* data
- Collect time series where possible (from 2000 onwards)



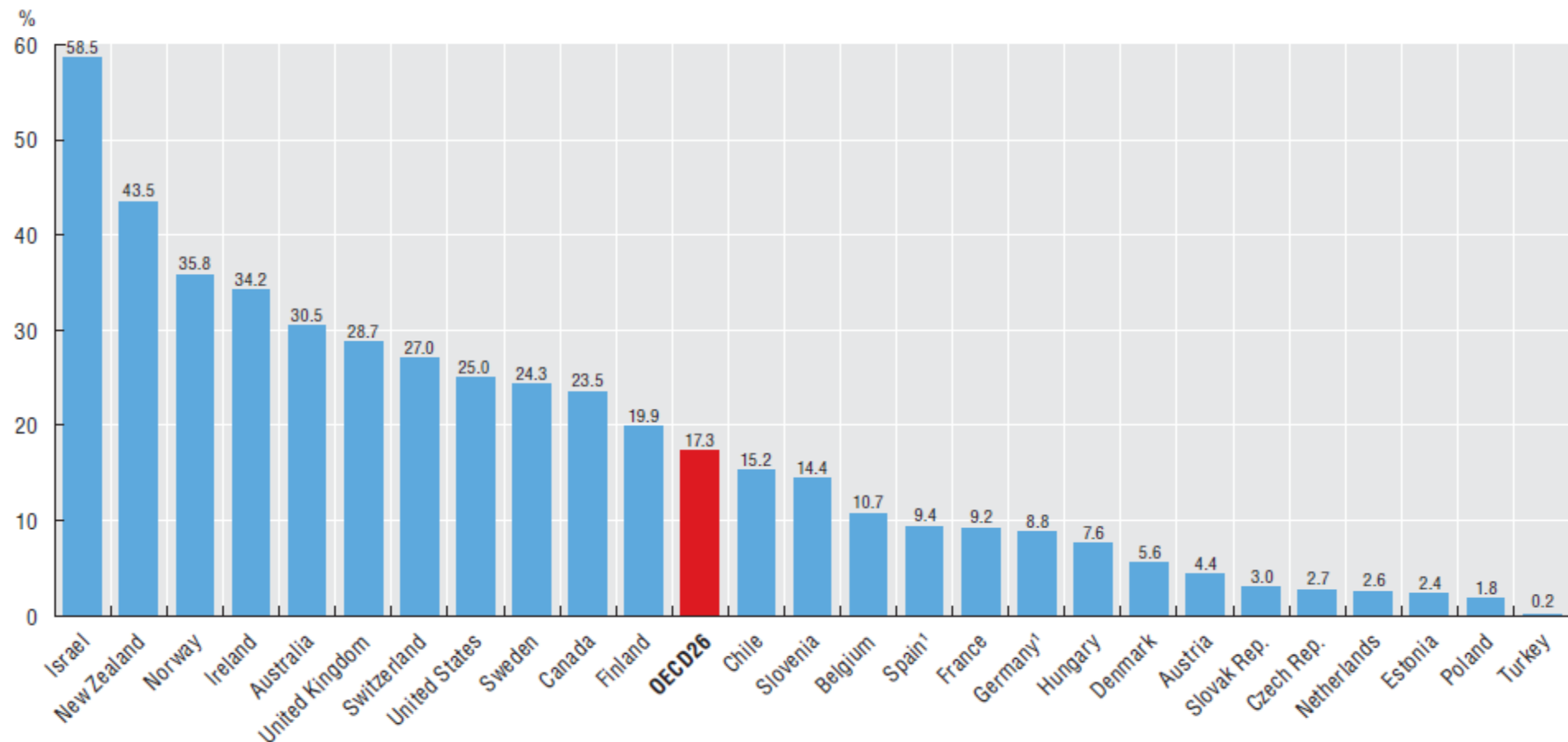
Results of 2015 data collection on health workforce migration (data availability)

	Data availability (out of 34 OECD countries)	Including breakdown by countries of origin
Physicians - Stocks	26	23
Physicians - Inflows	20	16
Nurses - Stocks	24	21
Nurses - Inflows	18	16



Share of foreign-trained doctors varies widely across OECD countries

Share of foreign-trained doctors in OECD countries, 2013 (or nearest year)

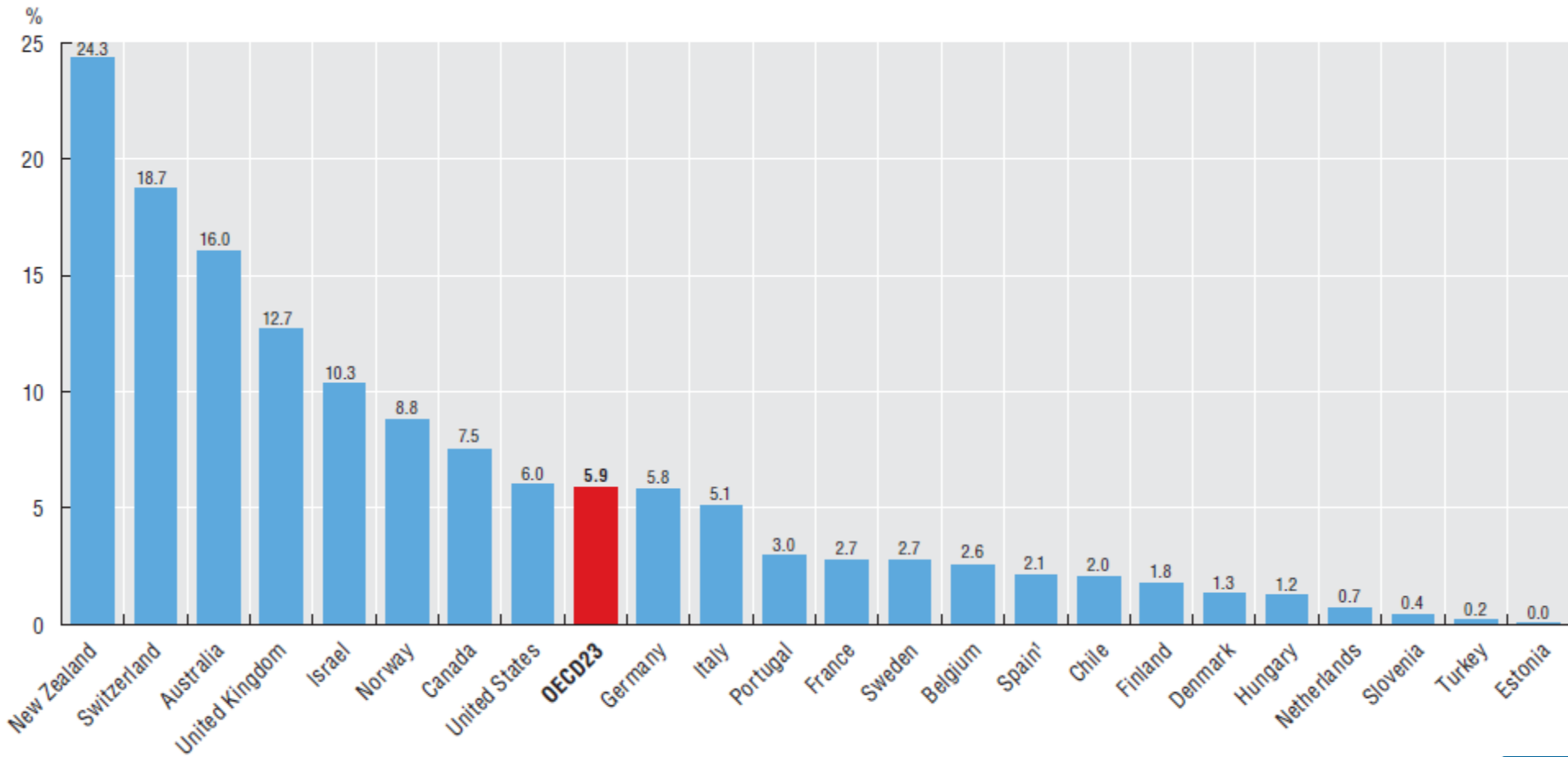


1. In Germany and Spain, the data is based on nationality (or place of birth in Spain), not on the place of training.



Share of foreign-trained nurses lower than foreign-trained doctors (but absolute number is higher)

Share of foreign-trained nurses in OECD countries, 2013 (or nearest year)



1. Data for some regions in Spain relate to foreign nationality or place of birth, not the place of training.



Main countries of origin of foreign-trained doctors working in the United Kingdom (top 20)

	2008	2009	2010	2011	2012	2013	2014
Total number of doctors	146 834	153 497	155 448	158 577	160 748	169 601	172 561
Domestically-trained doctors	99 817	104 913	104 657	108 152	110 341	116 359	119 171
Foreign-trained doctors	43 885	45 775	45 771	45 983	46 192	48 734	48 766
- of which native-born but foreign-trained	2 175	1 977	1 905	1 816	1 758	1 700	1 632
Unknown place of training	3 135	2 811	5 019	4 439	4 222	4 512	4 625
Share of foreign-trained doctors	29.9%	29.8%	29.4%	29.0%	28.7%	28.7%	28.3%
India	17 503	17 738	17 517	17 285	16 941	17 378	16 833
Pakistan	3 956	4 311	4 544	4 731	4 868	5 200	5 275
Nigeria	1 790	1 950	1 989	2 041	2 137	2 205	2 189
Ireland	2 046	2 007	1 926	1 883	1 860	1 916	1 859
Egypt	1 396	1 470	1 538	1 561	1 569	1 674	1 718
South Africa	1 595	1 620	1 551	1 500	1 455	1 470	1 424
Sri Lanka	1 356	1 222	1 481	1 421	1 333	1 353	1 354
Germany	1 381	1 421	1 400	1 360	1 335	1 374	1 347
Iraq	1 329	1 403	1 395	1 380	1 340	1 408	1 343
Greece	537	609	632	667	839	1 070	1 162
Italy	495	600	587	622	691	836	930
Romania	273	344	423	563	618	763	848
Poland	666	723	733	735	730	775	831
Spain	543	551	549	557	605	714	767
Sudan	429	470	517	536	572	679	729
Czech Republic	319	416	424	456	504	574	616
Bangladesh	396	430	454	474	498	530	536
Australia	593	601	590	546	527	501	497
Hungary	227	277	286	345	399	463	496

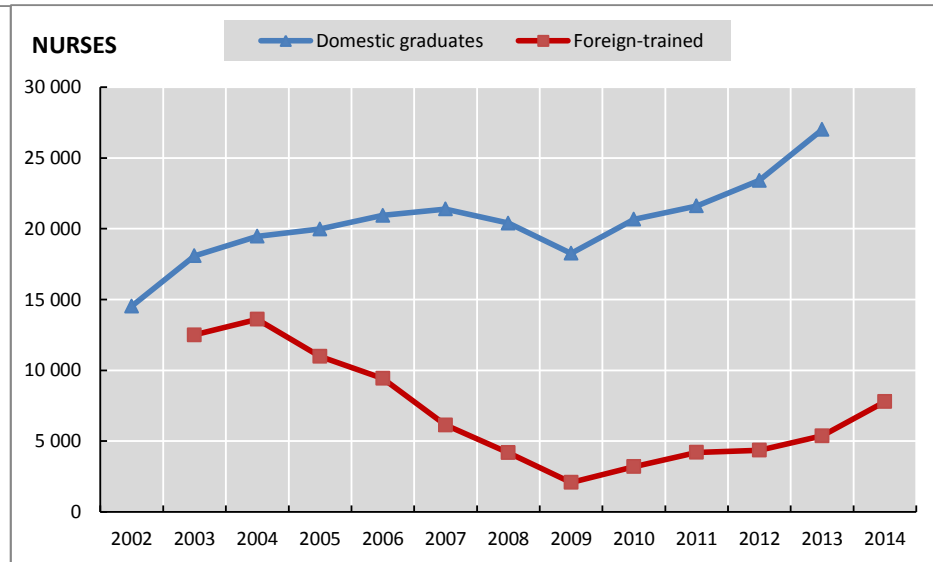
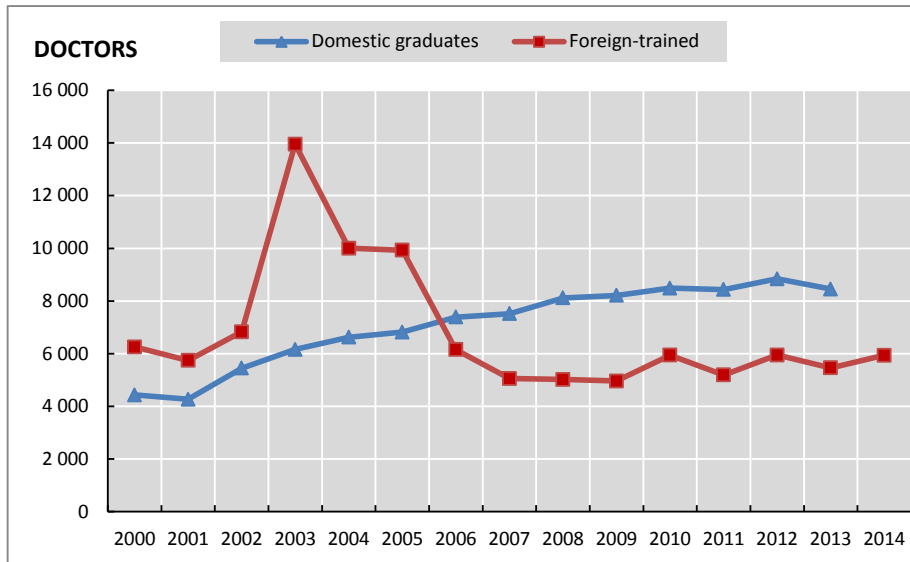


Comparing annual inflows of foreign-trained doctors and nurses with domestic graduates

United Kingdom

Doctors

Nurses



Source: OECD/Eurostat/WHO-Europe Joint Questionnaire 2015



Using immigration data to monitor emigration: Example of Bulgaria

Physicians trained in Bulgaria working in other OECD countries

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Austria									3	3	3	5	6	8
Belgium						1	1	8	19	28	38	50	61	73
Canada	31	32	40	39	41	44	48	54	57	64	68	70	70	70
Chile														
Czech Republic	1	1	2	2	2	2	2	2	3	5	6	10	12	5
Finland										24	28	29	29	
France							57	106	194	236	267	302	336	356
Germany	144	150	167	227	259	281	308	366	442	545	651	803	948	1090
Hungary					13	13	13	13	13	12	10	10	10	10
Ireland												41	45	50
Israel	52	53	55	54	55	55	53	55	54	57	55	59	60	58
Netherlands										7	10	8		
New Zealand	8	9	7	9	9	9	8	8	8	7	11	11	11	11
Norway									38	36	38	46	46	48
Slovenia											11	22	31	37
Spain												108		
Sweden	56	59	62	62	66	64	67	82	93	101	107	119	115	
Switzerland									45	43	45	46	50	
Turkey	10	16	19	23	25	27	28	29	29	29	29	30	30	30
United Kingdom									120	158	181	227	249	286
United States							373	396	422		449	486	504	504
Number of countries reporting data (incl. those which reported zero throughout the period)	7	7	7	7	8	9	11	11	15	16	18	20	18	15
TOTAL	302	320	352	416	470	496	958	1119	1540	1355	2007	2482	2613	2636

Source: OECD/Eurostat/WHO-Europe joint questionnaire 2015



Using immigration data to monitor emigration: Example of Romania

Physicians trained in Romania working in other OECD countries

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Austria									4	6	13	16	22	23
Belgium	1	1	1	1	2	7	9	135	267	420	566	744	866	975
Canada	164	166	177	194	224	248	261	279	311	332	330	335	338	339
Czech Republic												1	2	1
Finland										34	38	44	46	
France												2726	3118	3422
Germany	342	366	404	443	469	500	534	619	721	895	1269	1840	2559	3042
Hungary					1903	1898	1895	1883	1875	1858	1701	1652	1624	1623
Ireland												226	286	341
Israel	1159	1157	1140	1115	1110	1102	1108	1112	1125	1164	1168	1195	1194	1215
Netherlands		6	9	12	11	13	13	18	28	35	43	47		
New Zealand	4	8	13	13	14	20	20	19	18	18	18	18	20	23
Slovenia											2	2	4	4
Spain												343		
Sweden	187	212	216	229	239	249	262	313	363	386	421	476	496	
Switzerland									135	137	148	156	178	
Turkey	0	1	1	2	2	3	4	4	4	4	4	4	4	4
United Kingdom									273	344	423	563	618	763
United States							1844	1895	2013		2141	2324	2430	2457
Number of countries reporting data (excl. those which reported zero throughout the period)	7	8	8	8	9	9	10	10	13	13	15	19	17	14
TOTAL	1857	1917	1961	2009	3974	4040	5950	6277	7137	5633	8285	12712	13805	14232

Source: OECD/Eurostat/WHO-Europe joint questionnaire 2015



Using immigration data to monitor emigration: Example of Poland

Physicians trained in Poland working in other OECD countries														
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Austria							9	10	11	13	13	17	22	23
Belgium					2	12	17	26	34	39	41	47	53	60
Canada	417	428	438	436	432	436	438	456	467	476	489	508	523	540
Czech Republic	1	1	2	2	2	8	7	9	9	13	14	16	15	6
Estonia						1	1	1	1	1	1	1	1	1
Finland										57	60	80	96	
France							265	291	299	302	303	243	248	252
Germany	482	517	574	757	912	983	1069	1138	1218	1275	1298	1362	1451	1527
Hungary					11	10	9	9	9	9	8	8	8	8
Ireland												224	184	229
Israel	300	295	283	276	272	265	256	249	246	242	233	220	209	198
Netherlands		55	60	56	57	59	63	66	64	64	65	61		
New Zealand	11	12	17	15	15	18	19	19	15	17	18	23	28	30
Norway									533	610	733	899	1081	1254
Slovenia											3	4	5	5
Spain												210		
Sweden	439	491	562	613	716	786	850	899	956	995	1024	1081	1159	
Switzerland									120	126	129	135	139	
United Kingdom									666	723	733	735	730	775
United States							2144	2160	2206		2318	2504	2645	2724
Number of countries reporting data (incl. those which reported zero throughout the period)	6	7	7	7	9	10	13	13	16	16	18	20	18	15
TOTAL	1650	1799	1936	2155	2419	2578	5147	5333	6854	4962	7483	8378	8597	7632

Source: OECD/Eurostat/WHO-Europe joint questionnaire 2015



All countries are both source and destination countries: Example of emigration from UK

Doctors trained in the United Kingdom working in other OECD countries

	2007	2008	2009	2010	2011	2012	2013
Australia							4230
Austria	6	5	4	5	6	8	10
Belgium	38	42	45	47	49	52	55
Canada	2146	2137	2138	2091	2193	2170	2161
Chile							
Estonia	2	2	2	2	2	2	2
Finland			27	32	36	41	
France					82	84	80
Germany	133	136	139	147	155	159	166
Ireland					691	617	655
Israel	155	158	159	162	167	173	173
Netherlands	39	40	43	44	44		
New Zealand	1983	2156	2268	2492	2574	2614	2639
Norway		109	116	107	113	113	115
Spain					67		
Sweden	34	42	50	54	55	60	
Switzerland		21	23	27	29	34	
United States	3913	3855		3987	4169	4544	4707
# countries reporting data *	10	12	12	13	16	14	12
TOTAL	8449	8703	5014	9197	10432	10671	14993



Lessons and next steps to improve data collection on health workforce migration

- Data availability: Majority of OECD countries have been able to report data on the stock and flow of foreign-trained doctors and nurses working in their country for at least one recent year
 - But need to increase further the number of countries providing data for more comprehensive monitoring of immigration/emigration patterns
- Focus on place of training is the most relevant to measure “brain drain”, but need to take into account growing internationalisation of medical and nursing education
 - Need to achieve further progress in collecting data to distinguish “foreign-born and foreign-trained” students from “domestic-born but foreign-trained” returning to their home country after their studies
- Limitation of data collection approach: Does not capture doctors and nurses who may be emigrating to other countries, but do not work as doctors and nurses



For more information

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