



How long do new international route registrants stay registered for?

An analysis of first-time HCPC registrations: 2013 to 2018

HCPC Insight & Analytics Team 2024

Foreword

Health and care professionals who trained and qualified outside of the UK are a hugely valuable part of our workforce. As of December 2023, they make up 15% of the HCPC Register.

Recruiting and retaining international health and care professionals is therefore a critical part of the workforce planning required to deliver safe and effective health and care services.

In 2023, we published analysis on the <u>retention rates</u> for the professionals we regulate who trained in the UK. We have now conducted similar analysis of the extent to which HCPC's registrants who trained outside of the UK and joined our Register via the international registration route left the workforce within four years of joining. We examined how this was impacted by characteristics such as age, sex and World Bank country income group.

We have found that people joining the HCPC Register via the international registration route were substantially more likely to leave the HCPC Register within four years than those who trained in the UK. 34.2% of those who joined the HCPC Register via the international registration route had left the Register within four years, compared to just 5.7% of registrants who joined in the same period via the UK registration route.

As we found with UK registration route registrants, there was considerable variation between professions. For example, seven out of ten international registration route Orthoptists left the HCPC register within four years, compared to just one in ten Operating department practitioners. This report also identifies groups of international route registrants who seemed more likely to leave the Register. These included females, younger registrants and those from certain parts of the world.

We know that career transitions such as joining the workforce as a new registrant, working in the UK for the first time or returning after a lengthy period away from the workforce, can be challenging for individuals. To support people during these significant moments in their careers we have published <u>Preceptorship Principles</u>. High quality preceptorship improves retention and helps develop and maintain confident, safe and effective practice throughout the careers.

Workforce planning is complex, and we hope this report (alongside the UK training route retention rate analysts report) provides useful information for employers, professional bodies and others responsible for workforce planning.

Bernie O'Reilly

Chief Executive Officer

Executive Summary

This report examines the retention rate for HCPC registrants who joined our Register via the international registration route. The <u>international registration route</u> is for professionals who trained and qualified outside of the UK. It sits alongside the 2023 HCPC report on the retention rates for HCPC registrants who joined the HCPC Register via the <u>UK registration route</u> (those who completed HCPC approved education programmes in the UK) [1].

The analyses are based on data for all international route registrants (inclusive of European Mutual Recognition (EMR) registration route) joining the HCPC Register for the first time between 2013 and 2018. These individuals were followed up until the end of 2022 to allow for a four year retention rate to be estimated for all 15 profession that the HCPC regulates. This is the same time period used in the <u>UK registration route</u> report.

The time spent on the HCPC Register was analysed by profession, with subgroup analyses by country income group alone and a combination of age, sex and country income group. Country income groups were as per World Bank classification in 2015 and enabled a logical grouping of countries which exhibited broadly similar retention rates. This report contains some profession level details. The profession and modality specific factsheets should be consulted for more detailed insights for each profession.

The findings of this work have particularly important implications for workforce planners, in particular:

- 34.2% (equivalent to just over 1 in 3) of all new international registrants left the HCPC Register within four years of joining.
- Retention rates varied considerably between professions.
- Retention rates varied considerably within professions, depending on the age, sex and country income group of registrants.
- Registrants from low and middle income countries (LMIC) had the highest retention rates. Registrants from high income countries (HIC) outside of Europe had the lowest registration rates. Registrants from HIC within Europe had medium to high retention rates.
- Younger registrants had lower retention rates than older registrants.
- Female registrants had lower retention rates than male registrants.
- The biggest single group of international route registrants were younger females, and almost half of the total were aged under 30. Our analysis has shown that females and younger registrants had lower retention rates.

These findings may be of particular interest to workforce planners, seeking to fill shortfalls in the UK workforce with people who trained and qualified outside of the UK.

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Methods

Data

All HCPC registration records with a first registration date between 12 June 2012 and 18 October 2022 were extracted. From these data, profession specific cohorts were created consisting of solely international route (inclusive of EMR route) registrants whose first registration fell between the first day of their professions first renewal window on or after 1 March 2013 up until 31 August 2018.

Profession specific cohorts were necessary for both UK and international route analyses as most people coming off the HCPC Register were observed to do so on the day after the closure of a renewal window and registration renewal windows occur at different points in time over a two-year cycle for each of the 15 professions the HCPC regulates. [1] Therefore, to ensure equal exposure to those key time points, the profession specific cohorts were aligned to their respective registration renewal windows (Table 1). It should therefore be kept in mind when all professions are considered together, or when different professions are being compared, that there will be some degree of variation in their cohort times. In the most extreme case, for the professions at opposite ends of the renewal cycle, this means their two-year cohorts overlapped by only six months.

The focus of this analysis, international route registrants (inclusive of EMR) registrants had all qualified outside of the UK. The registrant's nationality has been used as a proxy for where they have come from, and therefore where they were likely to have trained. Whilst this may have led to a small number of misclassifications, it is the best approximation that could be made from the current HCPC dataset.

Some international route registrants stated UK nationality. This meant they were UK citizens who trained outside of the UK and are therefore regarded as an international route registrant. The majority of these registrants had trained in English speaking countries with close ties to the UK, including Australia, South Africa, Canada, the USA and New Zealand.

Profession	First registration			
	Cohort 1	Cohort 2		
Practitioner psychologists	Mar-2013 to Feb-2015	Mar-2015 to Feb-2017		
Paramedics	Jun-2013 to May-2015	Jun-2015 to May-2017		
Orthoptists	Jun-2013 to May-2015	Jun-2015 to May-2017		
Clinical scientists	Jul-2013 to Jun-2015	Jul-2015 to Jun-2017		
Prosthetists / orthotists	Jul-2013 to Jun-2015	Jul-2015 to Jun-2017		
Speech & language therapists	Jul-2013 to Jun-2015	Jul-2015 to Jun-2017		
Occupational therapists	Aug-2013 to Jul-2015	Aug-2015 to Jul-2017		
Biomedical scientists	Sep-2013 to Aug-2015	Sep-2015 to Aug-2017		
Radiographers	Dec-2013 to Nov-2015	Dec-2015 to Nov-2017		
Physiotherapists	Feb-2014 to Jan-2016	Feb-2016 to Jan-2018		
Arts therapists	Mar-2014 to Feb-2016	Mar-2016 to Feb-2018		
Dietitians	Apr-2014 to Mar-2016	Apr-2016 to Mar-2018		
Chiropodists / podiatrists	May-2014 to Apr-2016	May-2016 to Apr-2018		
Hearing aid dispensers	May-2014 to Apr-2016	May-2016 to Apr-2018		
Operating department practitioners	Sep-2014 to Aug-2016	Sep-2016 to Aug-2018		

Table 1: Profession specific cohort periods

Whilst conducting the exploratory data analysis, a number of important issues emerged that directed the groupings used in this report and in the factsheets.

The numbers of registrants from most countries were relatively small, but the retention rates seemed to follow a pattern that related to a combination of geographical location and economic categorisation. As such, the following country income groups were developed and are used throughout:

- High Income Countries in Europe (HIC Euro)
- High Income Countries elsewhere (HIC other)
- Low & Middle Income Countries (LMIC)

The classification into HIC or LMIC was based on the World Bank Country income groups at around the mid-point of the cohort period, 2015. [2] The profession specific factsheets do also detail up to fifteen actual countries as well as these groups.

Retention rates were also observed to vary by age and sex, though the impact of sex was often greater in the younger ages and less so in the older ages. These effects were observed to also vary by country income group. As such the following 12 demographic groups were developed and are also used throughout:

- HIC Euro/HIC other/LMIC: Female 20-29
- HIC Euro/HIC other/LMIC: Female 30+
- HIC Euro/HIC other/LMIC: Male 20-29
- HIC Euro/HIC other/LMIC: Male 30+

Outcome variable

The outcome variable was the time in days from the date of first registration to the date of deregistration. For registrants who had not come off the HCPC Register, this was the time from first registration to the censoring date: 31 Dec 2022. All records included therefore had a minimum of four years follow up from the point of registration.

Coming off the HCPC Register for involuntary reasons (e.g., fitness to practise, continuing professional development audit failures, non-renewal, and non-payment of fees) and no longer being on the HCPC Register for voluntary reasons (e.g., where the registrant had notified the HCPC themselves) were all included. Records where the deregistration was due to the death of the registrant or where the registration being deregistered had been made in error, were excluded.

Registrants who had come off the HCPC Register but had subsequently re-join the HCPC Register before the censoring date (31 Dec 2022) were not counted as having left. This ensured that those who unintentionally let their registration lapse by not renewing their registration on time and then re-joined the Register did not affect the analysis.

Statistics

The time-to-event analyses were produced using the Kaplan-Meier method. All analysis was conducted in Stata 18.0 BE. [2]

Results

The record selection process yielded 10,735 first-time international registrants' records for these analyses.

International route retention rates by profession

Overall, 87.1% of new international registrants were still registered after two years and 66.8% after four years (Figure 1 & Annex A). There were considerable differences between professions in terms of the proportions remaining registered at these points.



Figure 1: Proportion remaining registered, by profession

The lowest levels remaining registered at both two and four years were observed in Orthoptists (57.1%, 28.6%). The highest retention rate at two years was observed in Practitioner psychologists (93.4%) and the highest retention rate at four years was observed in Operating department practitioners (90.3%). Annex C contains more detailed outputs by profession and the profession specific factsheets contain the full details.

Retention rates by registration route and country income group

For all professions combined, all international route country income groups had lower retention rates than for the UK route (Figure 2). This was also true for each of the professions individually and, for most of them, registrants from LMIC had the best international route retention rate and HIC other had the worst.

Annex A contains the retention rates for the international country income groups for all professions combined and the profession specific factsheets contain the full details for each profession.





International route retention rates by demographic group

Splitting the international routes down into demographic groups revealed age and sex patterns for all professions combined that were apparent for many of the individual professions as well (Figure 3).

LMIC demographic groups had the highest retention rates, often not that much lower than the UK registration route rate, and like the UK rates, tended to vary little between ages and sex.

HIC Europe demographic groups were a little lower than LMIC rates, but usually within 10 to 20 % of them. They generally exhibited age and sex effects whereby:

- younger (20-29) registrants retention rates were generally lower than for the older registrants (30+), including within the same sex.
- Within the age groups, retention rates were generally lower for females than for males.

HIC other demographic groups had considerably lower retention rates than the other routes, often being around or below 50%. They exhibited the same age and sex effects as HIC Europe, but with greater gaps between the ages and between the sexes.

Annex B contains some more detailed output by profession and the profession specific factsheets contain the full details.





Effect of profession size on retention rate

In the <u>UK registration route retention rate analysis</u>, an association between profession size and retention rate was observed, with smaller professions having lower retention rates. This analysis for international route registrants indicates the opposite association, with the smaller professions generally having better international registration route retention, relative to the other professions, albeit with no profession having better international registration route retention route retention route retention route retention.

Figure 4 shows the relative positions for the UK registration route (darker blue names) and international route (lighter blue names), with arrows indicating the direction of travel in relative terms.

Reasons previously suggested to us by stakeholders for the worse UK registration route retention of smaller professions included them potentially being more isolated in their work and having less of a support network. If those were indeed drivers of the

lower UK registration route rates, the question then is why do they then not influence international route registrants in a similar manner? Two possible explanations may lie in the facts that international route registrants in the six professions that do better relatively speaking (PO, HAD, AS, CS, ODP, BS) are:

- more likely to be aged over 30 (57%) than in those professions that do worse relatively (31%), with the older registrants generally having higher retention rates than the younger registrants.
- More likely to come from LMIC (27%) than in those professions that do worse relatively (17%), with registrants from LMIC usually having the highest retention rates.

These differences in important predictors of retention may both explain the difference in profession size effect and hint at specific recruitment issues in some of those professions.



Figure 4: Effect of profession size on retention rate, profession Z scores

AS: Arts therapists, BS: Biomedical scientists, CH: Chiropodists / podiatrists, CS: Clinical scientists, DT: Dietitians, HAD: Hearing aid dispensers, ODP: Operating department practitioners, OR: Orthoptists, OT: Occupational therapists, PA: Paramedics, PH: Physiotherapists, PO: Prosthetists / orthotists, PYL: Practitioner psychologists, RA: Radiographers, SLT: Speech & language therapists.

Discussion

This analysis has revealed some interesting patterns in how long new registrants joining the HCPC register via the international route remain on the HCPC Register and therefore able to practice in the UK.

About two thirds of new international route registrants remained registered after fouryears, meaning one third had left. This is much lower than the UK route registrants' retention rate of well over 90%.

However, there is considerable variation between professions with seven out of ten international route Orthoptists leaving the HCPC Register within four-years, compared to just one in ten Operating department practitioners.

There was also considerable variation depending on the country of origin, age and sex. This suggests there may be socio-economic drivers influencing intent to stay in the UK workforce. It is possible that a high percentage of younger registrants come to the UK on short term visas and/or do so for career reasons rather than with an intent to remain the in the UK workforce for a longer period of time. This seems particularly prevalent for those from high income countries outside of Europe, in particular Australia, where there may be a economic reason to return to their home country. Registrants from LMIC may have better employment and lifestyle opportunities in the UK than in their home country, which may explain their generally very high retention rates.

The change in the pattern of association of profession size and retention rate raises interesting questions. Are some professions finding it harder to recruit from HIC, an unintended benefit of which may be that they are attracting LMIC registrants who are more likely to stay? Is there over supply of some professions in some countries meaning a continual supply of new, younger registrants to the UK, the flip side being they are less likely to stay longer term?

Most registrants who leave the register do not supply the HCPC with information as to why they've left the HCPC Register. Employers may have better information in this regard if they hold exit interviews. An exercise to aggregate employers' information in this regard may prove useful in explaining some of the effects observed here.

One potential weakness of this analysis is that we cannot be sure that all international route registrants were practicing in the UK during this period. There is no barrier to a suitably qualified international route registrant joining the HCPC Register from overseas without being in, or ever coming to the UK. Future work will attempt to take some account of the potential for this, but there is currently no definite way to separate out those living and working in the UK from those not in the UK.

References

- HCPC, \"When to renew,\" 05 07 2018. [Online]. Available: https://www.hcpc-uk.org/registration/registration-renewals/when-to-renew/. [Accessed 17 01 2023].
- [2] StataCorp, \"Stata Statistical Software: Release 17,\" StataCorp LLC, College Station, TX, 2021.

Annexes

Annex A: Time-to-deregistration analysis – all, routes and nationalities

Population	Years since first	Remaining registered		At risk at start of period	Deregistering in period
	registration	%	95% CI (%)	(n)	(n)
All	0			10,735	269
International	1	97.5	97.1 to 97.7	10,466	1,101
route	2	87.1	86.4 to 87.7	9,365	1,228
	3	75.9	75.1 to 76.7	8,137	994
	4	66.8	65.9 to 67.6	7,143	
International	0			4,854	103
route: HIC	1	97.9	97.4 to 98.2	4,751	375
Europe	2	90.1	89.2 to 90.9	4,376	288
	3	84.3	83.2 to 85.3	4,088	315
	4	77.9	76.7 to 79.0	3,773	
International	0			3,905	137
route: HIC	1	96.4	95.8 to 96.9	3,768	642
other	2	79.6	78.3 to 80.8	3,126	869
	3	57.8	56.2 to 59.3	2,257	609
	4	42.3	40.7 to 43.8	1,648	
International	0			1,972	25
route: LMIC	1	98.6	98.0 to 99.0	1,947	84
	2	94.4	93.3 to 95.4	1,863	71
	3	91.1	89.8 to 92.3	1,792	70
	4	87.8	86.2 to 89.1	1,722	

Population	Years since first registration	Remaii %	ning registered 95% CI (%)	At risk at start of period (n)	Deregistering in period (n)
HIC Europe: Female 20- 29	0 1 2 3 4	97.5 87.7 81.5 74.3	96.7 to 98.1 86.1 to 89.0 79.7 to 83.2 72.3 to 76.2	1,944 1,896 1,706 1,585 1,440	48 190 121 145
HIC Europe: Female 30+	0 1 2 3 4	98.1 91.2 85.8 81.0	97.1 to 98.7 89.5 to 92.7 83.7 to 87.6 78.7 to 83.1	1,232 1,209 1,123 1,057 997	23 86 66 60
HIC Europe: Male 20-29	0 1 2 3 4	97.9 90.6 84.1 77.6	96.8 to 98.7 88.5 to 92.3 81.5 to 86.3 74.7 to 80.2	910 891 825 765 706	19 66 60 59
HIC Europe: Male 30+	0 1 2 3 4	98.3 93.8 88.9 82.4	97.1 to 99.0 91.8 to 95.3 86.5 to 91.0 79.5 to 84.9	768 755 722 681 630	13 33 41 51
HIC other: Female 20- 29	0 1 2 3 4	96.2 78.1 53.6 37.3	95.4 to 96.9 76.4 to 79.7 51.6 to 55.6 35.4 to 39.2	2,443 2,354 1,923 1,313 910	89 431 610 403
HIC other: Female 30+	0 1 2 3 4	96.8 82.5 68.3 58.8	94.7 to 98.0 78.8 to 85.7 63.9 to 72.3 54.2 to 63.2	464 450 383 317 273	14 67 66 44
HIC other: Male 20-29	0 1 2 3 4	97.1 82.2 61.2 43.4	95.7 to 98.1 79.4 to 84.7 57.7 to 64.5 39.9 to 46.8	793 770 653 485 342	23 117 168 143
HIC other: Male 30+	0 1 2 3 4	94.6 81.5 69.7 60.4	90.5 to 97.0 75.4 to 86.2 62.9 to 75.5 53.3 to 66.7	205 194 167 142 123	11 27 25 19
LMIC: Female 20- 29	0 1 2 3 4	98.7 93.7 89.3 85.1	97.5 to 99.3 91.6 to 95.3 86.8 to 91.4 82.2 to 87.6	685 677 643 612 581	8 34 31 31
LMIC: Female 30+	0 1 2 3 4	99.1 94.8 92.2 89.5	97.9 to 99.6 92.7 to 96.4 89.6 to 94.1 86.6 to 91.8	562 557 534 515 499	5 23 19 16
LMIC: Male 20-29	0 1 2 3 4	97.8 94.7 91.2 88.4	95.5 to 99.0 91.6 to 96.7 87.5 to 93.9 84.3 to 91.4	320 314 302 290 280	6 12 12 10

Annex B: Time-to-deregistration analysis – all, demographic groups

LMIC: Male 30+	0 1 2 3 4	98.3 94.8 92.6 89.4	96.4 to 99.2 92.2 to 96.6 89.6 to 94.8 86.0 to 92.0	405 399 384 375 362	6 15 9 13
	4	69.4	86.0 10 92.0	302	

Population	Years since first registration		emaining egistered 95% CI (%)	At risk at start of period (n)	Deregistering in period (n)
Physiotherapists	0 1 2 3 4	97.3 85.3 74.1 64.5	96.7 to 97.8 84.0 to 86.4 72.6 to 75.5 62.9 to 66.1	3,456 3,363 2,949 2,558 2,220	93 414 391 338
Radiographers	0 1 2 3 4	97.9 90.0 79.7 71.5	97.1 to 98.4 88.6 to 91.2 77.9 to 81.4 69.5 to 73.4	2,055 2,014 1,854 1,637 1,465	41 160 217 172
Paramedics	0 1 2 3 4	97.6 92,6 82.5 70.5	96.4 to 98.4 90.8 to 94.1 80.0 to 84.7 67.6 to 73.2	998 974 925 823 702	24 49 102 121
Occupational therapists	0 1 2 3 4	96.4 80.9 63.1 50.5	95.1 to 97.4 78.4 to 83.1 60.2 to 65.8 47.5 to 53.4	1,113 1,074 909 702 561	39 165 207 141
Practitioner psychologists	0 1 2 3 4	98.1 93.4 86.2 82.5	96.6 to 98.9 91.0 to 95.1 83.1 to 88.8 79.2 to 85.4	574 564 534 493 470	10 30 41 23
Biomedical scientists	0 1 2 3 4	98.2 91.9 86.7 82.1	97.0 to 98.9 89.9 to 93.5 84.2 to 88.8 79.4 to 84.5	863 849 794 749 711	14 55 45 38
Speech & language therapists	0 1 2 3 4	98.1 79.7 60.9 48.7	96.6 to 98.9 76.4 to 82.7 57.0 to 64.6 44.7 to 52.6	622 610 497 379 303	12 113 118 76
Operating department practitioners	0 1 2 3 4	96.8 90.3 90.3 90.3	79.2 to 99.5 72.9 to 96.8 72.9 to 96.8 72.9 to 96.8	31 30 28 28 28	1 2 0 0
Dietitians	0 1 2 3 4	97.1 84.1 72.8 63.9	95.3 to 98.2 80.8 to 86.9 68.9 to 76.3 59.7 to 67.7	548 532 464 399 349	16 68 65 50
Clinical scientists	0 1 2 3 4	98.8 93.2 88.8 86.3	95.1 to 99.7 88.0 to 96.2 82.8 to 92.8 80.0 to 90.8	161 159 151 143 139	2 8 8 4

Annex C: Time-to-deregistration analysis – Professions

Country income classification	Country of nationality	n	4 year retention rate % 95% CI	
HIC other	Australia	1,180	41.0	39.2 to 42.7
HIC Europe	Portugal	811	85.8	83.4 to 87.9
HIC Europe	Italy	538	82.0	78.9 to 84.8
HIC Europe	Poland	480	86.7	83.5 to 89.2
LMIC	India	474	90.7	87.8 to 92.9
HIC Europe	United Kingdom	412	86.7	83.4 to 89.5
HIC Europe	Ireland	389	58.1	54.2 to 61.7
HIC Europe	Greece	381	82.5	78.7 to 85.7
HIC Europe	Spain	279	71.4	66.7 to 75.6
LMIC	South Africa	248	79.1	74.2 to 83.2
LMIC	Nigeria	199	91.3	86.6 to 94.3
HIC other	New Zealand	197	37.0	32.9 to 41.1
LMIC	Philippines	182	93.4	88.9 to 96.1
LMIC	Romania	160	82.9	76.8 to 87.5
HIC other	United States	152	62.0	55.7 to 67.8
HIC other	Canada	78	43.8	36.5 to 50.9
LMIC	Bulgaria	72	90.0	81.0 to 94.9
HIC Europe	Germany	68	78.2	67.9 to 85.5
HIC Europe	Hungary	62	79.5	68.7 to 86.9
LMIC	Pakistan	59	96.8	87.7 to 99.2
HIC Europe	France	53	68.0	56.4 to 77.1
HIC Europe	Netherlands	44	62.0	49.7 to 72.1
HIC Europe	Cyprus	42	72.0	58.8 to 81.5
HIC Europe	Lithuania	37	82.2	67.6 to 90.7
LMIC	China	36	87.8	73.2 to 94.7
LMIC	Brazil	28	90.3	72.9 to 96.8
HIC Europe	Croatia	25	75.8	57.3 to 87.1
HIC Europe	Czech Republic	23	76.7	57.2 to 88.1
LMIC	Zimbabwe	23	82.1	62.3 to 92.2
LMIC	Jamaica	22	81.5	61.1 to 91.8
HIC Europe	Sweden	22	66.7	47.9 to 80.0
LMIC	Uganda	21	100.0	-
HIC Europe	Slovakia	20	74.1	53.2 to 86.7

Annex D: Time-to-deregistration analysis – all, largest nationalities

Note: Only countries with n>=20 are included in this table.