NHS
Health Education England

National Pre-registration Pharmacist Recruitment: Outcome Report Year 2 (2018)

March 2019

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Executive Summary

Health Education England coordinated a national scheme for recruitment to pre-registration pharmacist training programmes for the second time in September 2018.

There were 2,881 training places available across all programmes, with a significant increase in the number of programmes offered by medium, small, and independent community pharmacy employers, compared with the first year.

A total of 2,592 applied for training programmes collectively, 2,048 of whom attended for interview. At the end of the process, 93 % (n=1,810) of appointable applicants had received a programme offer and 1,685 of these final programme offers were accepted by applicants.

The scheme yielded a fill rate of 99.6% for NHS and 31.2% for community pharmacy programmes. The maximum fill rate achievable had all appointable candidates been allocated places would have been 67% due to the number of places available in the scheme in 2018. The scheme achieved an overall fill rate of 58.1% to all programmes

Introduction

Overview

1.1. This was the second year that Health Education England conducted an entirely centralised process for recruitment to pre-registration pharmacist training programmes for the NHS and community pharmacy (optional for this sector).

1.2. This report provides information on applicants, applications and outcomes of the 2018 pre-registration recruitment scheme (year 2). Applications by demographic (age, gender, ethnic group and right to work in the UK) are reported, highlighting any identified trends.

1.3. Independent analysis undertaken by the Work Psychology Group examines fairness issues surrounding use of the SJT, MMI and Numeracy test and reports on any group differences in performance.

1.4. If you would like further information on the process of pre-registration pharmacy recruitment, please refer to the pharmacy recruitment web pages: https://www.lasepharmacy.hee.nhs.uk/national-recruitment/

Programme availability

2. Employing organisations, programmes and training places

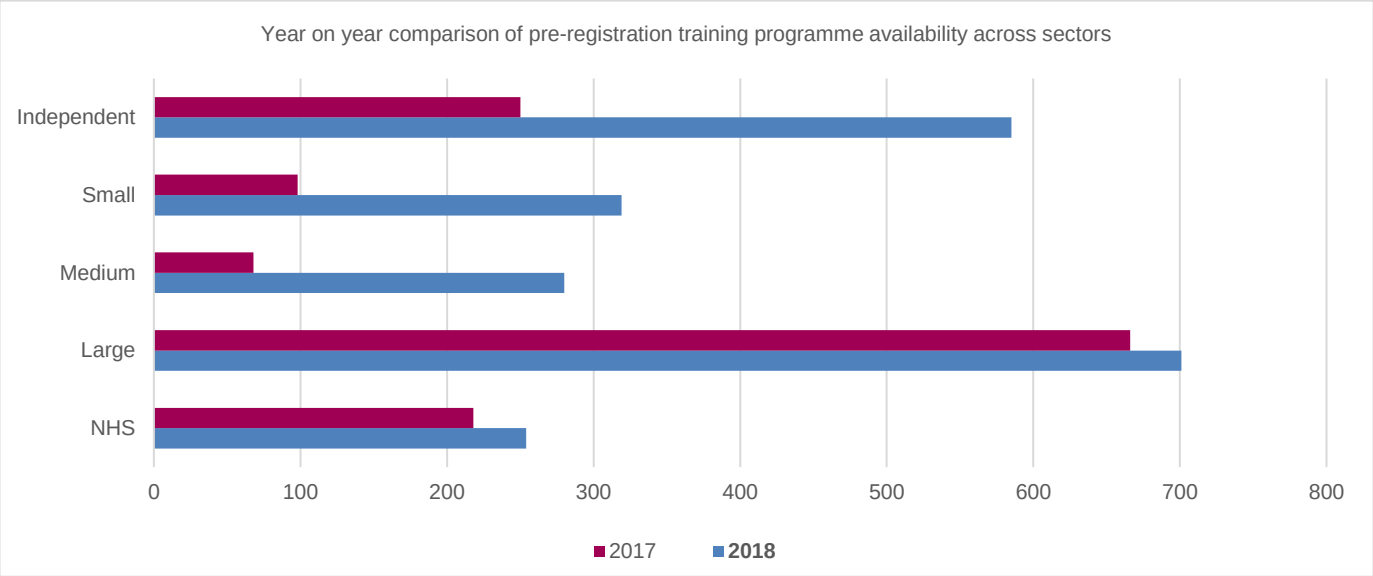
2.1. The 2018 pre-registration pharmacist recruitment scheme listed 2138 programmes for applicants to choose from, a 64% increase from the first year. In total, 2881

training places were available across all programmes; more than the anticipated number of scheme applicants.

2.2. 11 % (n=254) of programmes were within the NHS hospital sector, representing 27 % (n=790) of all available training places. 32 % (n=701) of programmes were offered by large community pharmacy employers, 13 % (n=280) by medium pharmacy employers, 16 % (n=343) by small pharmacy employers and 27% (n=585) by independent pharmacy contractors.

2.3. There was a significant increase in the number of programmes offered through Oriel by medium, small, and independent community pharmacy employers, compared with the first year (Figure 1).

Figure 1: Year on year comparison of pre-registration training programme availability across sectors



2.4. Table 1: Programme Availability in the 2018 Pre-registration Pharmacist Recruitment Scheme and Table 2 below provide an overview of the numbers of employing organisations, programmes and training places available in the 2018 scheme, broken down by sector and geography

Table 1: Programme Availability in the 2018 Pre-registration Pharmacist Recruitment Scheme

Sector	Number of Employing Organisations	Number of Programmes	Number of Training Places	Number of Tier 2 Sponsor Licences
NHS Hospital	168	254	790	786
Large Community Pharmacy (*Employs 200+)*	5	701	724	0
Medium Community Pharmacy (*Employs 25-200*)	23	280	323	0
Small Community Pharmacy (*Employs 6-25*)	57	319	343	25
Independent Community Pharmacy (*Employs 1-6*)	468	585	701	72
TOTALS	**721**	**2138**	**2881**	**883**

Table 2: Geographical Spread of Programmes (and Training Places), by Sector

HEE Pharmacy Region	HEE Local Area	NHS Hospital	Large Community Pharmacy	Medium Community Pharmacy	Small Community Pharmacy	Independent Community Pharmacy
Midlands and East	East Midlands	10 (44)	52 (52)	24 (40)	21 (22)	35 (41)
Midlands and East	East of England	22 (71)	75 (76)	3 (6)	23 (29)	66 (84)
Midlands and East	West Midlands	17 (55)	58 (59)	77 (69)	33 (36)	69 (89)
London and South East	Kent, Surrey and Sussex	17 (51)	53 (53)	12 (16)	13 (14)	47 (48)
London and South East	London	44 (212)	22 (22)	6 (11)	89 (100)	213 (241)
North	North East	16 (49)	43 (43)	16 (16)	0 (0)	9 (10)
North	North West	27 (54)	81 (95)	75 (96)	68 (67)	54 (67)
North	Yorkshire and the Humber	29 (47)	78 (81)	20 (22)	30 (30)	37 (54)
South	South West	23 (50)	115 (117)	6 (10)	17 (18)	16 (19)
South	Thames Valley	8 (29)	31 (31)	18 (27)	15 (17)	14 (17)
South	Wessex	17 (39)	49 (49)	7 (8)	3 (4)	6 (9)
Wales	Wales	24 (54)	44 (46)	16 (2)	6 (6)	21 (22)
	TOTALS	**254 (790)**	**701 (724)**	**280 (323)**	**318 (343)**	**585 (701)**

3. Tier 2 sponsorship

3.1. Tier 2 sponsored training place availability in the community pharmacy sector increased to 97 places in 2018; 16% (n=883) more sponsored places in total than were available to applicants requiring visas in 2017 (n=759).

4. Multi-sector placements

4.1. Fifty-one collaborative organisations registered split-placement training programmes on Oriel in 2018. These included HEE funded multi-sector programmes such as the GP pre-registration pilot. These programmes were split between at least two sectors, including Hospital, Community Pharmacy, GP Practice and Clinical Commissioning Groups.

4.2. Sixty-five multi-sector programmes were available in total, representing a total of 95 training places. Split training programme availability was generally evenly spread across the regions, with the fewest programmes found in Thames Valley (n=3) and West Midlands (n=3) and the most available in Yorkshire and Humber (n=21) and London (n=24).

Applicant outcomes

5. Applications

5.1. The number of applications received via the Oriel system was 2592 (not including incomplete applications). This compares with 2585 received in the first year.

5.2. 1.7 % (n=46) of applicants were either currently enrolled on an accredited overseas pharmacists' assessment programme (OSPAP) or were OSPAP graduates.

6. Longlisting

6.1. 3 % of total applicants (n=74) did not progress through the formal longlisting process due to not meeting basic eligibility criteria.

6.2. Nine applicants subsequently withdrew their application, leaving 2509 applicants invited to interview; a 3 % decrease from the previous year.

7. Interviews

7.1. 2048 interviews were attended by applicants. Of these, 1940 (95 %) were considered appointable and subsequently received an overall ranking based on their test scores.

8. Applications and programme offers by demographic

8.1. For the purposes of this section, we refer to the following:

- *Application* – the number of applications progressed *after* longlisting (n=2509)
- *Offer* - applicants who received a pre-registration programme offer (n=1810), irrespective of whether this offer was accepted by the applicant.

8.2. Table 3 below provides a breakdown of applicant gender, along with data pertaining to appointability and programme offers received by these two groups.

Table 3: Applications and programme offers by gender

Group	Percentage of applications	Percentage of appointable applicants	Percentage of offers made	Percentage of offers accepted
Male	32.3 % (812)	31.2 % (606)	31.1 % (564)	28.5 % (517)
Female	65.8 % (1651)	67.1 % (1303)	67.1 % (1216)	62.9 % (1140)
Not disclosed	1.8 % (46)	1.5 % (31)	1.6 % (30)	1.5 % (28)
Totals	**100 % (2509)**	**100 % (1940)**	**100 % (1810)**	**100 % (1685)**

8.3. Table 4 below provides a breakdown of applications received, along with data pertaining to the percentage of appointable applicants and programme offers received, for each of the age categories.

*Table 4: Applications and programme offers by age group**

Group	Percentage of applications	Percentage of appointable applicants	Percentage of offers made	Percentage of offers accepted
19-24 years	88.4 % (2218)	90.1 % (1748)	90.1 % (1632)	90.2 % (1521)
25-29 years	5.6 %(141)	5.1 % (99)	5.1 % (93)	5.1 % (86)
30–34 years	1.2 % (32)	1.13 % (22)	1.1 % (21)	1.1 % (20)
35-39 years	1.9 % (49)	1.5 % (31)	1.4 % (27)	1.5 % (26)
40-44 years	0.5 % (14)	0.2 % (4)	0.1 % (3)	0.1 % (3)
45-49 years	0.3 % (8)	0.2 % (5)	0.2 % (5)	0.1 % (3)
50-54 years	0.1 % (3)	0.1 % (2)	0.1 % (2)	0 % (0)
55-59 years	0 % (0)	0 % (0)	0 % (0)	0.05 % (1)
Not disclosed	1.7 % (44)	1.4 % (29)	1.4 % (27)	1.4 % (25)
Totals	**100 % (2509)**	**100 % (1940)**	**100 % (1810)**	**100 % (1685)**

**Age at 01 September 2018*

8.4. Table 5 provides a breakdown of applications and offers by individual ethnic groups.

8.5. 72% (n=1807) of applications were received from applicants of Black, Asian and minority ethnic (BAME) origin and 23% (n=583) were received from applicants of 'White' origin. 4.7% of applicants (n=101) chose not to declare their ethnic origin.

8.6. In line with findings observed in 2017[1], applicants in the 'Chinese' group have a lower proportion of offers to applications than those in any other ethnic group.

8.7. Significant differences in MMI performance by the Chinese group, compared with other ethnic groups are a contributing factor (see 9.4.3). This would have resulted in lower overall rankings amongst the Chinese group, reducing the likelihood of receiving an offer for training place offer for any of their preferenced programmes, particularly where small numbers of programmes were preferenced or where more popular programmes were preferenced.

[1] HEE National Pre-Registration Pharmacist Recruitment Evaluation Report; Phase 1 https://www.hee.nhs.uk/sites/default/files/documents/National%20pre-registration%20pharmacist%20recruitment%20evaluation%20report%20phase%201.pdf

Table 5: Applications and programme offers by ethnic group

Group	Percentage of applications		Percentage of appointable applicants		Percentage of offers made		Percentage of offers accepted	
White – British	18.8 % (474)	23.2 % (583)	20 % (388)	24.2 % (470)	21.2 % (385)	25.5 % (463)	21.8 % (369)	26.2 % (442)
White - Irish	0.7 % (18)		0.6 % (13)		0.6 % (12)		0.5 % (9)	
Any other white background	3.6 % (91)		3.5 % (69)		3.6 % (66)		3.7 % (64)	
Mixed White and Black Caribbean	0.1 % (5)	2.1 % (53)	0.2 % (5)	2.1 % (42)	0.2 % (5)	2.2 % (41)	0.2 % (5)	2.3 % (40)
Mixed White and Black African	0.3 % (8)		0.2 % (5)		0.2 % (5)		0.2 % (5)	
Mixed White and Asian	0.7 % (18)		0.8 % (16)		0.8 % (16)		0.9 % (16)	
Any other mixed background	0.8 % (22)		0.8 % (16)		0.8 % (15)		0.8 % (14)	
Asian or Asian British – Indian	15.6 % (392)	42.6 % (1071)	15.9 % (309)	42.2 % (819)	16.2 % (295)	42.1 % (763)	15.8 % (267)	41.3 % (697)
Asian or Asian British – Pakistani	13.7 % (346)		12.4 % (241)		12.8 % (232)		12.5 % (212)	
Asian or Asian British – Bangladeshi	4.3 % (108)		4.6 % (91)		4.5 % (83)		4.6 % (78)	
Any other Asian background	8.9 % (225)		9.1 % (178)		8.4 % (153)		8.3 % (140)	
Black or Black British - Caribbean	0.4 % (11)	12.4 % (313)	0.3 % (6)	12.5 % (244)	0.3 % (6)	12.5 % (227)	0.3 % (6)	12.7 % (215)
Black or Black British - African	11.1 % (280)		11.4 % (223)		11.5 % (209)		11.6 % (197)	
Any other black background	0.8 % (22)		0.7 % (15)		0.6 % (12)		0.7 % (12)	
Chinese	9 % (228)		9.1 % (177)		7.5 % (137)		7.4 % (125)	
Any other ethnic group	5.6 % (142)		5.5 % (108)		5.7 % (104)		5.6 % (95)	
Not disclosed	4.7 % (119)		1.9 % (37)		4.1 % (75)		4.2 % (71)	
Totals	**100 % (2509)**		**100 % (1940)**		**100 % (1810)**		**100 (1685)**	

9. Group Differences at a Test Level for SJT, MMI & Numeracy

9.1. Independent analysis undertaken by the Work Psychology Group examined fairness issues surrounding use of the SJT, MMI and Numeracy test. Group differences in performance between applicants were analysed on the basis of age, gender and ethnicity. Analyses were conducted after outliers (applicants with very low/high scores and / or missing data) had been removed.

9.2. Age

9.2.1. Pearson's correlations were conducted to examine the relationships between age and scores on the SJT, MMI and Numeracy test.

9.2.2. SJT: A small significant negative correlation (Pearson's r) between age and SJT score was found ($r = -.23$, $p<0.01$). This suggests that, younger applicants typically performed slightly better than older applicants on the SJT.

9.2.3. MMI: A small significant negative correlation (Pearson's r) between age and MMI score was found ($r = -.18$, $p<0.01$). These findings suggest that, on average, younger applicants performed slightly better than older applicants on the MMI.

9.2.4. Numeracy: A small significant negative correlation (Pearson's r) between age and Numeracy score was found ($r = -.18$, $p<0.01$). This suggests that, younger applicants typically performed slightly better than older applicants on the Numeracy test.

9.3. Gender

9.3.1. Independent t-tests were conducted to examine whether there were significant differences in SJT, MMI and Numeracy test scores based on gender.

9.3.2. SJT: A significant difference in performance on the SJT based on gender was found, indicating that females scored significantly higher than males, though the effect size was small ($t(2018) = 9.351$, $p < 0.01$, $d = .44$).

9.3.3. MMI: A significant difference in performance on the MMI based on gender was found, indicating that females scored significantly higher than males on the MMI, although the difference was small ($t(2103) = 8.091$, $p < 0.01$, $d = .37$).

9.3.4. Numeracy: No significant differences in performance were found on the Numeracy test based on gender ($t(2018) = 1.238$, p =ns).

9.4. Ethnicity

9.4.1. Ethnic backgrounds included: 'White', 'Asian', 'Black', 'Chinese', 'Mixed' and 'Other'. Applicants were also given the response option 'Prefer not to say', though these individuals were not included in the analysis. Analyses of variance (ANOVAs) were conducted to investigate whether there were significant differences on the SJT, MMI and Numeracy test scores dependent on ethnicity.

9.4.2. SJT: Significant differences in performance between applicants of different ethnic groups were found on the SJT ($F(5,1961)=25.42$, $p<0.01$, $\eta^2 = 0.06$), with applicants who indicated that they were 'White' or 'Mixed' performing better than applicants in other ethnic groups, although the effect size was small.

9.4.3. MMI: Significant differences in performance between applicants of different ethnic groups were found on the MMI ($F(5,2043)=21.28$, $p<0.01$, $\eta^2 = 0.05$), although the effect size was small. Applicants in the 'White' group achieved significantly higher scores than those in all other ethnic groups with the exception of the 'Mixed' group. All ethnic groups scored significantly higher than those indicating they were 'Chinese'.

9.4.4. Numeracy: Significant differences in performance between applicants of different ethnic groups were found on the Numeracy test ($F(5,1961)=24.00$, $p<0.01$, $\eta^2 = 0.06$), although the effect size was small. Applicants indicating they were 'White' or 'Chinese' scored significantly higher than those in the 'Asian', 'Black' and 'Other' groups. Applicants in both the 'Asian' and 'Other' groups scored significantly higher than those indicating they were 'Black'.

9.5. Summary

9.5.1. Some group differences on the SJT, MMI and Numerical assessment were found based on age, gender and ethnicity. Small significant differences for age, gender and ethnicity were observed, but all effect sizes were small.

10. Applicants with Tier 4 Student Visas

10.1. International students must switch from a tier 4 study visa to a general tier 2 work visa before beginning the preregistration year. 12% (n=297) of longlisted applications were received from those requiring training places which offer tier 2 sponsorship.

10.2. Following the selection process, 74% (n=221) were deemed appointable, amounting to 11% of all appointable applicants.

10.3. Training place offers were made to 48 % (n=142) of the applicants requiring tier 2 sponsorship, a 60 % increase in offers for this group from the previous year. A key contributing factor for this increase is the higher number of tier 2 sponsored training places available within the community pharmacy sector.

11. Final programme offers

11.1. At the end of the process, 93 % of appointable applicants (n=1810) had received a programme offer. Of these, 40 offers were declined and 56 offers expired. Overall, 93 % (n=1685) of final programme offers were accepted by applicants.

11.2. 6.7 % (n=130) of appointable applicants were left without a pre-registration programme offer at the end of the process; a 48 % decrease from the previous year. These applicants fall into one or both of the following categories:

- 62 % (n=81) required a general Tier 2 work visa before beginning the pre-registration training year and either:
  - did not achieve a ranking high enough to gain an offer for programme/s offering Tier 2 sponsorship
  - preferenced programme/s not able to offer Tier 2 sponsorship

- Did not achieve a ranking high enough to gain an offer for any of their preferenced programme/s. This was common in instances where applicants preferenced very few programmes.

Employer outcomes

12. Fill-rates

12.1. At the end of the recruitment process, 99.6% of available NHS Hospital training places were filled and 31.2 % of community pharmacy training places.

12.2. The fill-rate overall was 58 %.

12.3. Table 6 below provides a breakdown of the fill-rate, by number of training places available within each sector

12.4. The HEE funded GP pre-registration pilot has achieved a 90% fill-rate via national recruitment.

Table 6: Summary of fill-rate by sector.

	NHS Hospital	Large Pharmacy	Medium Pharmacy	Small Pharmacy	Independent Pharmacy	All Programmes
Total Training Places Available	790	724	323	343	701	2881
Training Places Not Filled	0.3 % (3)	54.9 % (398)	62.2 % (201)	54.2 % (187)	57.9 % (407)	41.8 % (1196)
Overall Fill-Rate (Training Places Filled)	**99.6 % (787)**	**45.0 % (326)**	**37.7 % (122)**	**45.7 % (156)**	**42.0 % (294)**	**58.1 % (1685)**

12.9. Table 7 below provides a breakdown of programme fill rate by Health Education England region.

12.10. The ratio of hospital to community pharmacy training places available, particularly in areas that are traditionally hard to recruit to, will have affected Regional fill-rates. The South region experienced the lowest fill-rate.

Table 7: Summary of regional fill-rates

HEE Pharmacy Region	HEE Local Area	Places	Accepted	Fill Rate (Local)	Fill Rate (Regional)
Midlands and East	East Midlands	199	98	49.2 %	55.6 %
Midlands and East	East of England	266	161	60.5 %	
Midlands and East	West Midlands	308	171	55.5 %	
London and South East	Kent, Surrey and Sussex	182	107	58.7 %	72.2 %
London and South East	London	586	448	76.4 %	
North	North East	118	75	63.5 %	51.3 %
North	North West	401	203	50.6 %	
North	Yorkshire and the Humber	247	115	46.5 %	
South	South West	214	84	39.2 %	50.9 %
South	Thames Valley	121	80	66.1 %	
South	Wessex	109	62	56.8 %	
Wales	Wales	130	81	62.3 %	62.3 %
	TOTALS	**2881**	**1685**		

END OF REPORT