JRCPTB

Joint Royal Colleges of Physicians Training Board

ROYAL COLLEGE
of PHYSICIANS
of EDINBURGH

ROYAL COLLEGE OF
PHYSICIANS AND
SURGEONS OF GLASGOW

The state of physicianly training in the UK

Appendix A
Report 2 2019

Royal College
of Physicians

Appendix A: Data analysis

This section details the data analysis of the key datasets mapped against the General Medical Council (GMC) themes for standards of medical education and training.[1]

1.0   Global theme

The data sources used to inform this theme include the GMC national training survey (NTS) (generic and specialty-specific data), annual review of competence progression (ARCP), Membership of the Royal Colleges of Physicians of the United Kingdom (MRCP(UK) outcomes, higher specialty training (HST) workforce census data/new consultants (post-certification of completion of training (CCT)) survey, and penultimate year assessment (PYA) reports.

1.1   GMC NTS – generic data

The total number of medical trainees who completed the GMC NTS survey in 2018 was 7,740. The breakdown by specialty and 2015–18 trends are shown in Table 1.

Table 1 Numbers of trainees who completed the GMC survey by specialty

Specialty	2015	2016	2017	2018	Contribution to the acute take
Acute internal medicine (AIM)	339	315	329	330	Yes
Allergy	9	9	10	8	No
Audiovestibular medicine	14	15	15	11	No
Cardiology	572	561	549	584	Yes
Clinical genetics	47	53	51	57	No
Clinical neurophysiology	30	28	28	25	No
Clinical pharmacology and therapeutics	25	25	36	28	Yes
Core medical training	2,947	2,912	2,780	2,745	Yes
Dermatology	199	193	205	219	No
Endocrinology and diabetes	339	350	345	346	Yes
Gastroenterology	476	465	503	483	Yes
General internal medicine (GIM)	1,655	1,650	2,772	2,846	Yes
Genitourinary medicine	106	90	96	96	Yes
Geriatric medicine	619	660	649	618	Yes
Haematology	389	392	380	393	Some
Immunology	21	24	29	30	No
Infectious diseases	97	85	85	89	Yes
Medical oncology	154	148	149	157	Some
Medical ophthalmology	<3	<3	8	7	No
Neurology	237	232	254	254	Some
Nuclear medicine	8	9	9	12	No
Paediatric cardiology	27	39	30	32	No
Palliative medicine	185	183	173	173	Some
Pharmaceutical medicine	101	110	103	No data	No
Rehabilitation medicine	55	65	63	38	No
Renal medicine	259	242	249	238	Yes
Respiratory medicine	495	489	519	512	Yes
Rheumatology	223	226	219	222	Yes
Sports and exercise medicine	30	30	30	33	No
Total	**8,003**	**7,945**	**7,896**	**7,740**	

Table 2 Overall satisfaction (mean scores by deanery / local education training board (LETB) 2015–18)

No	Specialty	2015	2016	2017	2018	2015–18 Difference
1	Allergy*	81	99	98	99	17.95
2	Clinical genetics*	86	87	89	89	2.44
3	Palliative medicine	89	87	88	88	-1.79
4	Sports and exercise medicine*	81	84	81	85	4.32
5	Genitourinary medicine*	85	85	84	85	-0.48
6	Dermatology	86	86	84	84	-1.64
7	Rehabilitation medicine*	90	87	87	83	-7.35
8	Rheumatology	85	82	84	83	-2.36
9	Immunology*	84	85	82	82	-2.06
10	Paediatric cardiology*	83	87	84	82	-1.08
11	Haematology	84	84	78	82	-2.29
12	Neurology	83	84	84	82	-1.43
13	Medical oncology*	86	86	76	81	-4.20
14	Clinical neurophysiology*	86	88	85	81	-4.82
15	Clinical pharmacology and therapeutics*	79	77	71	80	1.65
16	Endocrinology and diabetes	83	83	81	80	-2.89
17	Infectious diseases*	85	83	81	80	-5.15
18	Nuclear medicine*	86	91	78	79	-6.5
19	Renal medicine	82	80	78	79	-3.22
20	Cardiology	83	83	79	78	-4.19
21	Respiratory medicine	82	82	78	78	-3.69
22	Gastroenterology	81	82	80	78	-3.64
23	Geriatric medicine	81	81	79	77	-3.89
24	Acute internal medicine	77	80	77	76	-0.83
25	Audio vestibular medicine*	91	93	85	76	-14.53
26	General Internal medicine*	80	80	85	64	-16.40
27	Medical ophthalmology*	No data	No data	No data	No data	No data
28	Pharmaceutical medicine	83	84	81	No data	No data

* Not all deaneries / LETBs that hosted the specialty programme had three or more trainees completing the NTS, so a complete set of mean scores was not possible from all regions. Calculations have been made based on the data available.

Table 3 Overall satisfaction by core training programme

Specialty	2015	2016	2017	2018	2015–18 difference
Core psychiatry training	83.43	85.00	82.67	83.35	-0.08
Core anaesthetics training	87.68	87.67	85.84	86.70	-0.98
Core surgical training	77.71	76.58	74.16	74.00	-3.71
Core medical training	76.85	75.34	72.11	70.24	-6.61

In total, 2,745 CMT trainees (1,377 CMT1s and 1,368 CMT2s) completed the GMC NTS survey in 2018. This was a decline of 1.5% (35 CMT trainees) on the number of trainees completing the 2017 survey.

Table 4 Top five indicators for core medical training showing the highest percentage of trusts with red or green flags compared with 2017

	Indicator (red flags)	No	Indicator (green flags)	No
1	Rota design	15 (new)	Teamwork	21 (+14)
2	Workload	14 (+8)	Adequate experience	18 (+6)
3	Clinical supervision	13 (+8)	Regional teaching	18 (+6)
4	Clinical supervision (out of hours)	13 (+5)	Educational governance	17 (+3)
5	Overall satisfaction	11 (+5)	Reporting systems	12 (-1)
6	Study leave	11 (+1)		

Rota design was a new indicator which had the highest number of red flags, after which workload, clinical supervision (in and out of hours) and overall satisfaction showed the biggest increase in 2018 in the percentage of trusts with red flags compared with 2015.

1.2   GMC NTS – specialty-specific data

The cumulative analysis of the specialty-specific questions (SSQs) for all specialties that had data available is shown in Table 5. There is a lot of variability both in the number of questions and the content and this makes comparisons between specialties difficult. Smaller specialties that have fewer than three trainees in one site are not represented by the GMC survey. There continues to be a lack of consistency in terms of which GMC themes have been covered by each specialty, but an attempt has been made to identify the issues raised and to map them to the GMC themes. This is not an exhaustive list of all the results, but it is a summary of some of the issues that are raised mapped to the GMC themes.

Comparisons have been made with the 2016 data though given some questions have been changed since this has not always been possible.

The JRCPTB quality team will continue to work with the SACs to encourage mapping their SSQs to the GMC themes to allow more meaningful comparisons in the future.

Table 5 Cumulative analysis of the GMC SSQs (2018)

Specialty	Number of trainees	Qs	Main findings	Mapped to GMC themes
Acute medicine	330	14	Disproportionate amount of service provision to acute take (39% increasing trend +6%); educational supervisor (ES) is an acute medical physician 83% (+8%); study leave to attend specialist meeting 90% (+32%); adequate time to train in specialist skills 56% (+11%).	1, 2, 3, 5
Allergy	8	11	Sufficient experience of many aspects of the curricula (100% agree); asthma, chronic rhinitis (80% agree – upward trend); BASCI training days cover topics mapped to curriculum – 100% (+16%).	1, 5
Audiovestibular medicine	11	9	Overall satisfaction in training in: Adult – audiology 45% (+5%); vestibular medicine 45% (-15%) Paediatric – audiology – 63% (-17%); vestibular 63% (+16%) Practical procedures – 72% (+5%) satisfied to achieve Competencies.	1, 5
Cardiology	584	20	63% of trainees in GIM reported none of their time spent delivered curriculum-based teaching; 97% trainees undertaking first choice modules; 90% felt ES supportive; 89% reported highly effective training – well equipped to be consultant but regional variation (Wales 33% only); pericardiocentesis and ECHO training opportunities much improved	1, 2, 3, 5
Clinical genetics	57	12	Overall, good training opportunities currently, both clinically and laboratory experience; good support within departments.	1, 2, 5
Clinical neurophysiology	25	7	Evidence of good training in specific competencies; training best possible in 68%; specific curricula issues, advanced EMG and 56% (-19%).	1, 5
Clinical pharmacology and therapeutics	28	13	82% trainees dual accrediting with GIM; good coverage of curricula; opportunity to do specialist interest area; high proportion do research.	1, 2, 5
Dermatology	219	23	Good coverage of curricula for >90% agreement in most domains; prick testing, cosmetic procedure risk, phototherapy (52–59%).	1, 2, 5
Diabetes and endocrinology	346	5	58% (+4%) trainees report GIM commitments impact on specialty experience; attend specialty clinics due to on-call commitments 47% (0–24 clinic); experience of diabetes care in the community in only 32% (+3%).	1, 2, 3, 5
Gastroenterology	483	17	68% (+22%) trainees report specialty experience limited by GIM commitments (endoscopy and clinics); 32% trainees not feeling equipped for independent practice in colonoscopy and 40% for endoscopic management of GI bleeds; nutrition training 41% (-9%); quality of supervision 84%; overall satisfaction with training 79% (-7%).	1, 2, 3, 5
Genitourinary medicine (GUM)	96	11	92% (+10%) have to go outside of deanery to gain HIV inpatient competencies; 92% confident that 4 years training will provide opportunity to achieve all competencies; negative impact of local sexual health care tendering process on training – 37% (+12%).	1, 2, 3, 5
Geriatric medicine	618	9	83% satisfied with training; 28% (+3%) feel GIM adversely affects their specialty training; curriculum coverage / training opportunities variable regionally least in palliative care, rehabilitation, orthogeriatrics, falls, poor mobility.	1, 2, 3, 5
Haematology	393	11	97% don't do medical on calls; specialty-specific experience – low for transfusion medicine, only 32% thought training effective to be a consultant (-4%); lab time still an issue – <5% time 33% and 5–10% of total time 34%; haemoglobinopathy 46% (+4%); paediatric haematology training better.	1, 2, 5
Immunology	30	13	Meeting some curricular competencies for ST stage; 77% (+17%) trainees feel sufficient lab training to achieve competencies.	1,2, 5
Infectious diseases (ID)	89	12	Questions mainly around curriculum coverage most requirements >67%; pre-travel advice lowest at 42% (-11%); GIM impacting on specialty 28% (+10%).	1, 2, 3, 5

Table 5 (cont'd) Cumulative analysis of the GMC SSQs (2018)

Medical oncology	157	10	Appropriate level of supervision >90%; opportunity to complete audit projects 76% (-6%); opportunity to be involved in research 81% (-5%).	1, 2, 3, 5
Medical ophthalmology	7	9	Trainees rate their training for core ophthalmology 86%; laser procedures 57%; opportunities to do research 57%.	1, 2, 5
Neurology	254	12	Curriculum requirements achieved in >90%; acting up in last 3 months achieved in 67% (-5%); good clinic exposure; involved in national stroke strategy 61% with full 24-hour cover in 38%; OOPE declined due to service commitments 75% (+25%).	1, 2, 3, 5
Nuclear medicine	12	15	Excellent access to medical physics expert, radio-pharmacist (100%); curriculum prepares you to consultant post (50%).	1, 2. 3, 5
Paediatric cardiology	32	7	64% of trainees spend over half of their time in special interest training; 69% feel on-call duty affects training; 31% (-19%) trainees felt difficult to achieve curriculum competencies.	1, 2, 3, 5
Palliative care	173	10	Trainee felt prepared to manage patients independently 100%; adequate opportunities to develop leadership skills in voluntary sector 71%; 92% confident in managing unstable patients.	1, 2, 5
Rehabilitation medicine	38	8	Good exposure to attendance and leading MDT; discussion with supervisor for complex cases; poor opportunity to seeing patients at home (50% trainees had no exposure); poor feedback on discharge summaries (42% no feedback).	1, 2, 5
Renal medicine	238	9	Overall workload and GIM compromising specialty training: poor attendance at haemodialysis MDT (34% none); live donor assessment (50% none); adolescent care (40% none).	1, 2, 3, 5
Respiratory medicine	512	11	Issues in cardiopulmonary exercise training 36% rate as poor and 33% not available.	1, 5
Rheumatology	222	13	Most trainees received adequate training for stage of training (>90%) and supervision (93%); interact with primary care physicians (57%).	1, 2, 3, 5
Sports and exercise medicine	33	10	Able to gain training >75% most competencies but lower in exercise physiology (58%) and exercise and sport in specific groups (58%) and care of elite athletes (58%); systems used to assess skills & knowledge adequate in 58% (-19%).	1, 5

1.3   ARCP outcomes

Overall, 10,543 ARCP outcomes for 8,572 higher specialty trainees (HST) (1.2 outcomes per trainee) were reported to the GMC in 2017. A further 29 outcomes were unsatisfactory due to exam failure and these are not included.

Table 6 Proportion of ARCP outcomes in each category for HST

Outcome	1	2	3	4	5	6	7.1	7.2	7.3	7.4	8	Total
Overall	56%	5%	2%	0%	13%	13%	1%	0%*	0%*	0%	10%	100%

Satisfactory (1, 6 & 7.1)	Unsatisfactory (2,3,4,5,7.2,7.3 & 7.4)	Out of programme (8)
70%	20%	10%

3,615 ARCP outcomes for 3,006 core medical trainees (CMT) (1.2 outcomes per trainee) were reported to the GMC (excluding exam failure) in 2017.

Table 7 Proportion of ARCP outcomes in each category for CMT

Outcome	1	2	3.7	4	5	6	7.1	7.2	7.3	7.4	8	Total
Overall	27%	9%	4%	1%*	31%	26%	0%*	0%	0%	0%*	0%*	98%

Satisfactory (1, 6 & 7.1)	Unsatisfactory (2,3,4,5,7.2,7.3 & 7.4)	Out of programme (8)
53%	45%	0%

* = <0.5% of the total number of trainees so number rounded down to 0%.

The satisfactory outcomes were significantly lower in CMT compared with HST (53% versus 70%). The unsatisfactory outcomes were greater in CMT (45%) compared with HST (20%). There was a greater proportion of outcome 5s in CMT (31%) compared with HST (13%). There were 10% of trainees out of programme (OOP) in HST compared with none in CMT. There were greater number of outcomes (424) which were unsatisfactory due to exam failure in the CMT group.

The proportion of satisfactory and unsatisfactory outcomes by deanery/LETB for HSTs are shown in Figs 1 and 2. There was significant variability in the proportion of the ARCP outcomes across the deaneries/LETBs. This is explored further in theme 2.

The proportion of satisfactory and unsatisfactory outcomes by specialty are shown in Figs 3 and 4. There was some variability in satisfactory outcomes by specialty (100% in allergy, audiovestibular medicine hepatology, metabolic and nuclear medicine and 52% for CPT). Medical ophthalmology and nuclear medicine outcomes are better than the first report.

There was significant variability in the unsatisfactory outcomes by specialty with immunology at the top with high proportion of outcome 3s. Audiovestibular medicine had a high proportion of outcome 4s on the last report as well as medical ophthalmology. In this report, medical ophthalmology has a high proportion of outcome 5s. Overall, the proportion of outcome 5s are still very high and this is explored in themes 2 and 5.

Fig 1 Proportion of satisfactory ARCP outcomes by deanery / LETB for HST
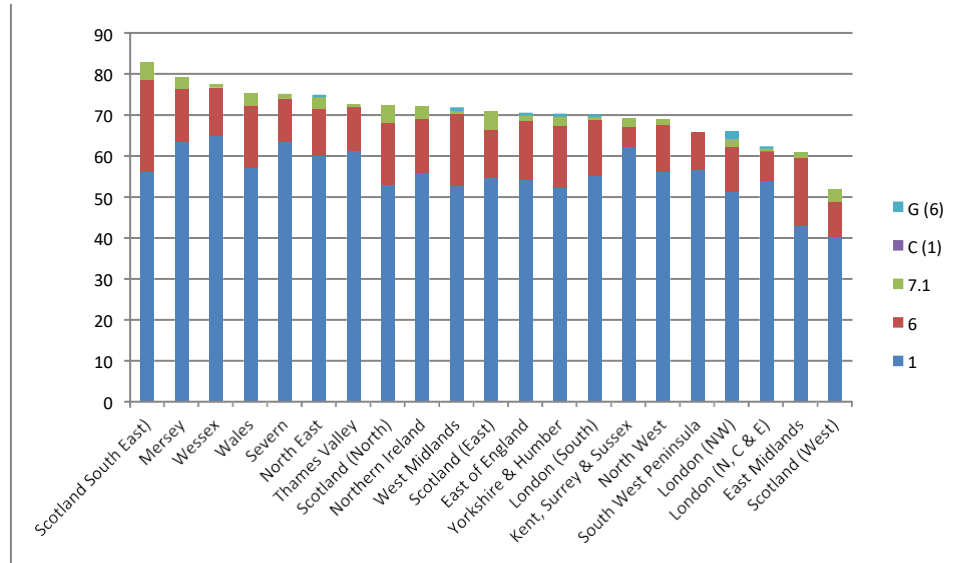
Fig 2 Proportion of unsatisfactory ARCPs outcomes by deanery / LETB for HST

Fig 3 Satisfactory ARCP outcomes by specialty

Fig 4 Unsatisfactory ARCP outcomes by specialty
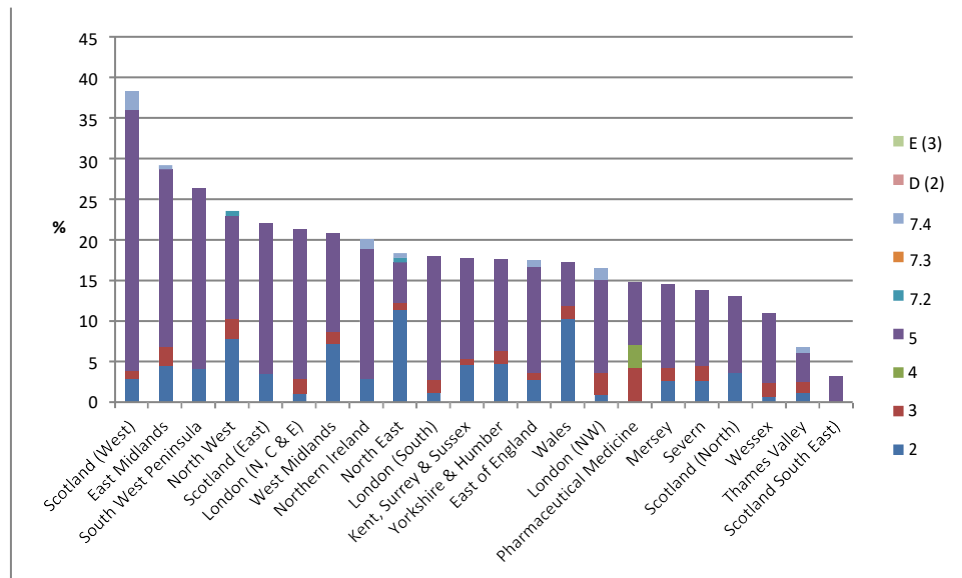
1.4   MRCP outcomes

The MRCP(UK) dashboard data shows that overall pass rates for the MRCP(UK) exams have been consistent for the last 5 years (2014–18) (Fig 5). The overall reliability and standard error of the mean (SEM) is consistent with good values across all examinations. Examiner concordance remains at a similar rate to previous years.

Fig 5 MRCP (UK) pass rates and reliability across all MRCP(UK) exams (2015–18)
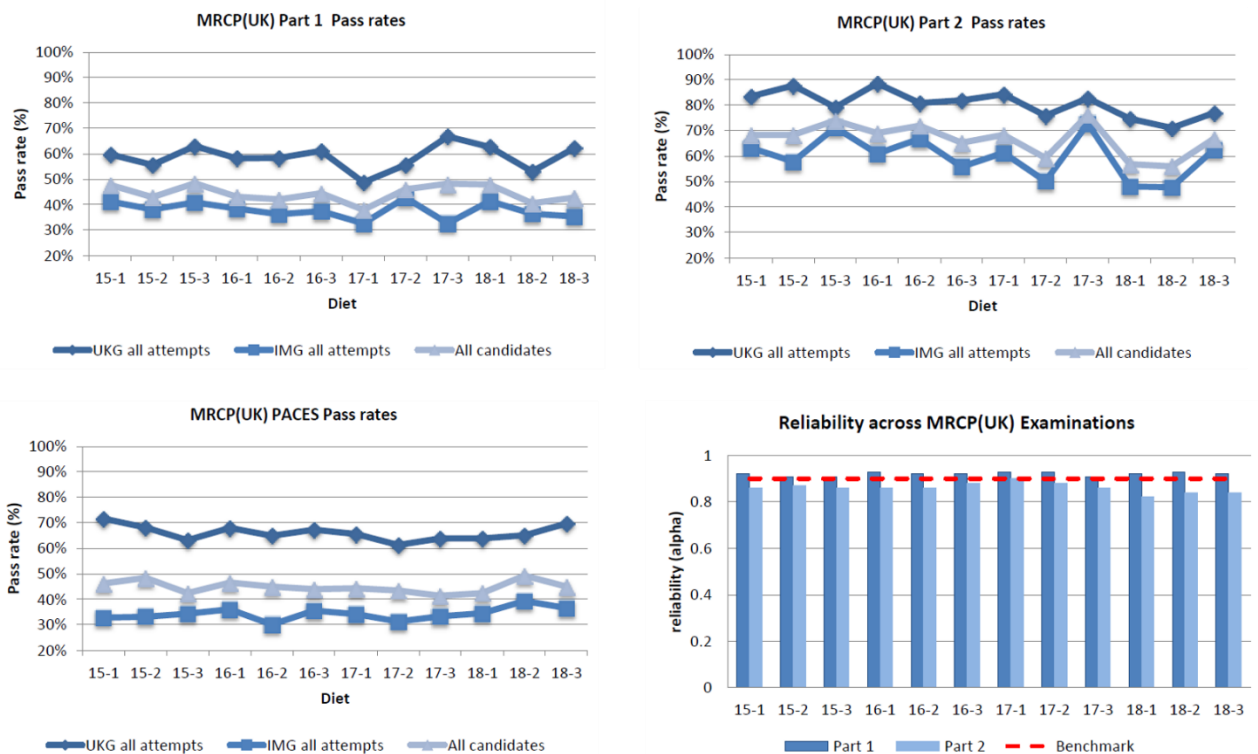
Data from 11 specialty certificate examinations (SCE) were available and the trend analysis of pass rates (2016–18) and pass marks (2014–18) are shown in Figs 6 and 7. Variable changes in pass rates for each specialty were noted. Pass rates remained stable for three SCEs, decreased for three SCEs and increased for five SCEs. These ranged from 48.3% to 76.2%. Reliability remained high at 0.85–0.95 and the SEM remains stable and within the expected range at 2.84–3.12 (Fig 8).

Data was also analysed by deanery / LETB and by ethnicity and primary medical qualification and these are discussed in themes 2 and 5.

Fig 6 Overall pass rate by specialty certificate examinations (2016–18)
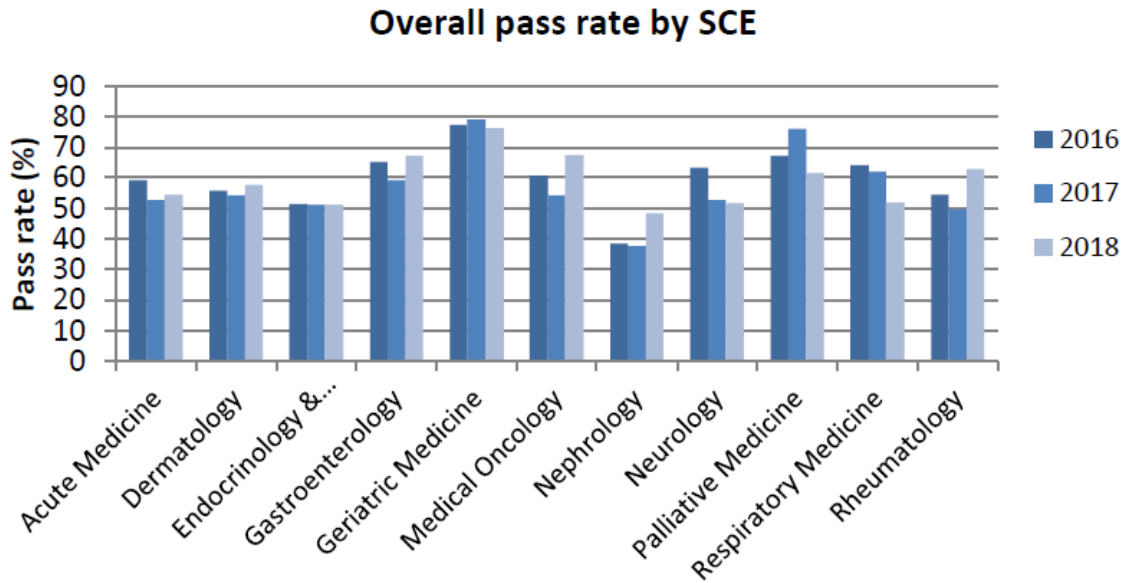
Fig 7 Pass marks by specialty certificate examinations
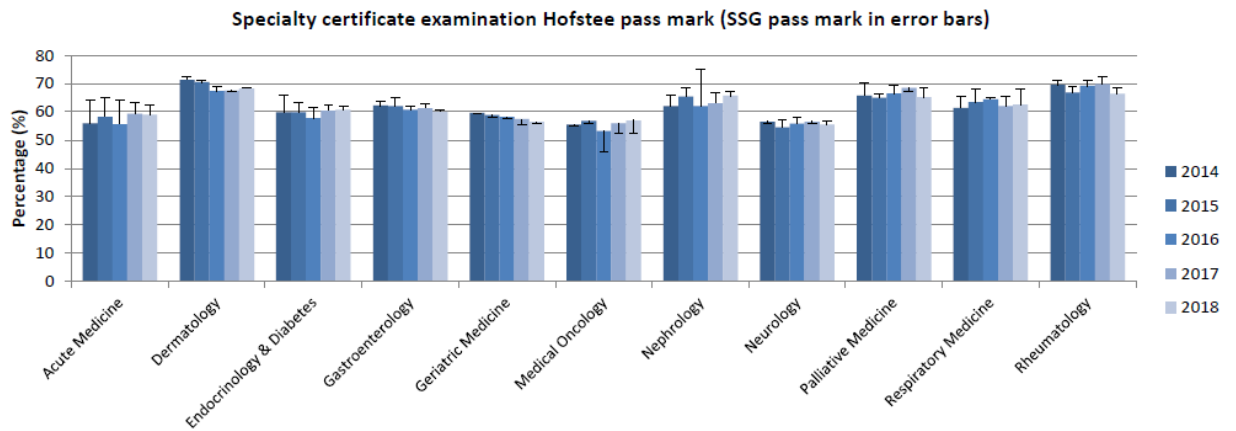
Fig 8 Reliability across specialty certificate examinations
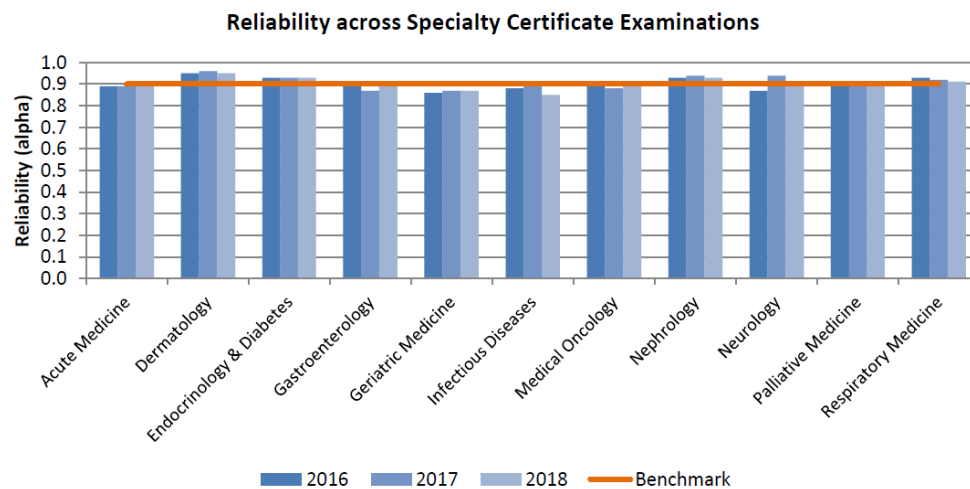
The MRCP(UK) core trainee (CT) progression is shown in Fig 9. Trainee progression is consistent in Part 1 and 2 over the last 4 years but slightly down in PACES. 72% of CT2 acquire full MRCP (Part 1, 2 and PACES) before the end of training. This is down 6% from 2015–18.

Fig 9 Core trainee progression data (2015–18)

CMT trainee progression
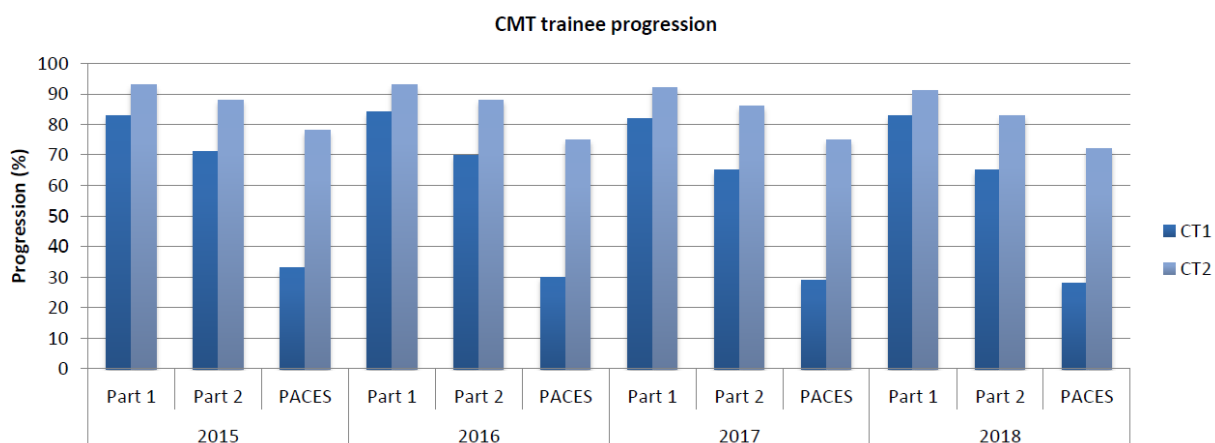
CT1 trainee progression	2015	2016	2017	2017	2018	Difference	
Part 1	83.0	84.0	82.0	82.0	83.0	⇨	1.00
Part 2	71.0	70.0	65.0	65.0	65.0	⇨	0.00
PACES	33.0	30.0	29.0	29.0	28.0	⇨	-1.00
CT2 trainee progression	2015	2016	2017	2017	2018	Difference	
Part 1	93.0	93.0	92.0	92.0	91.0	⇨	-1.00
Part 2	88.0	88.0	86.0	86.0	83.0	⬇	-3.00
PACES	78.0	75.0	75.0	75.0	72.0	⬇	-3.00

There are regional variations for core trainee progression and these are shown in Figs 10 and 11. CT1 pass rates are better in Health Education England (HEE) north east (NE), London and Scotland south east (SE). CT2 pass rates are better Scotland SE, HEE NE and Thames Valley.

Fig 10 CT1 MRCP pass rates by deanery – 2018

CT1 MRCP(UK) pass rates by deanery
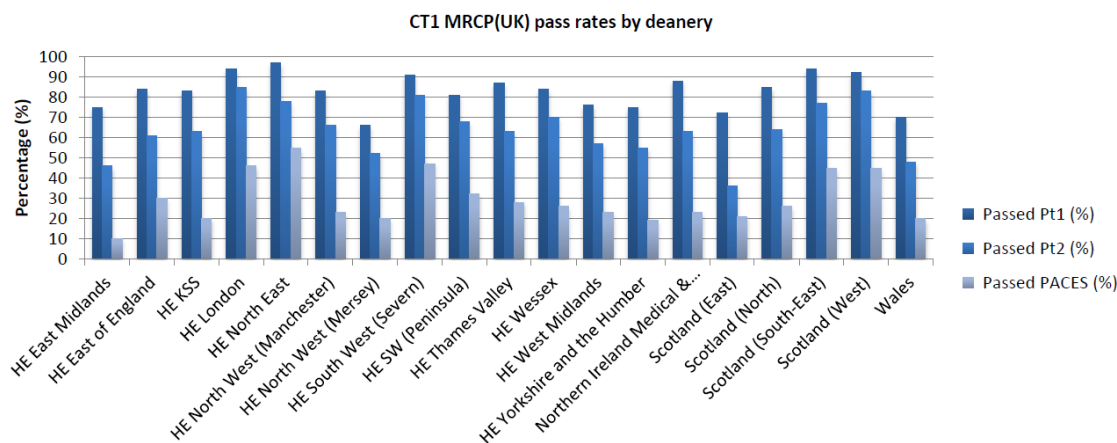
Fig 11 CT2 MRCP pass rates by deanery – 2018

CT2 MRCP(UK) pass rates by deanery
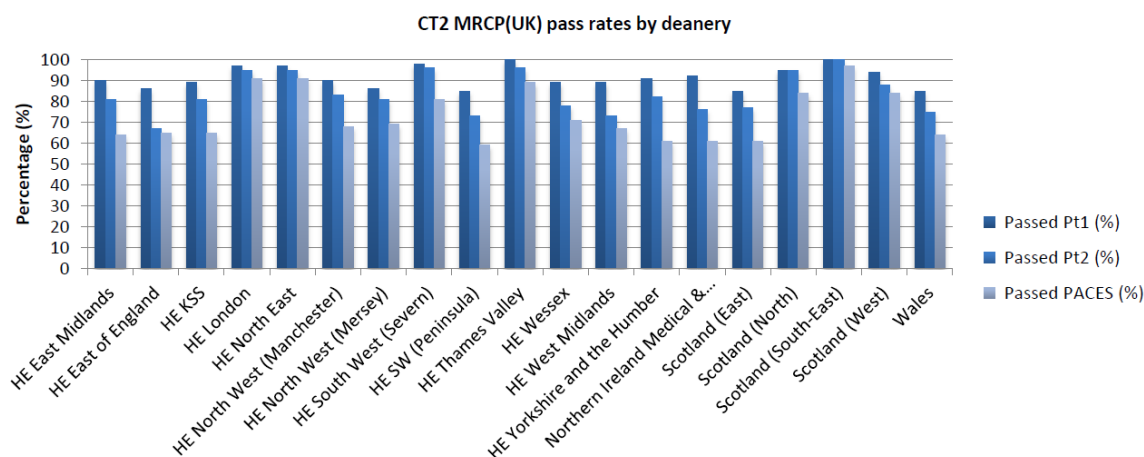
1.5. HST census and new consultants (post-CCT) survey

Data from the annual HST workforce census from 2017–18 were analysed.[2] There were 7,254 higher medical trainees of which 53% were female and 47% were male. The majority (51%) of HST were aged between 31–35. The proportion of HSTs dual accrediting with general internal medicine (GIM) was 60%. The proportion of trainees working less than full time (LTFT) was 13% and those in academia was 19%.

The HST census data by gender and specialty is shown in Fig 12. The specialties with the highest proportion of women were metabolic medicine, palliative care medicine, clinical genetics, dermatology and medical oncology whereas stroke medicine, cardiology, CPT and gastroenterology have a higher proportion of men.

Fig 12 HST census data by gender and specialty
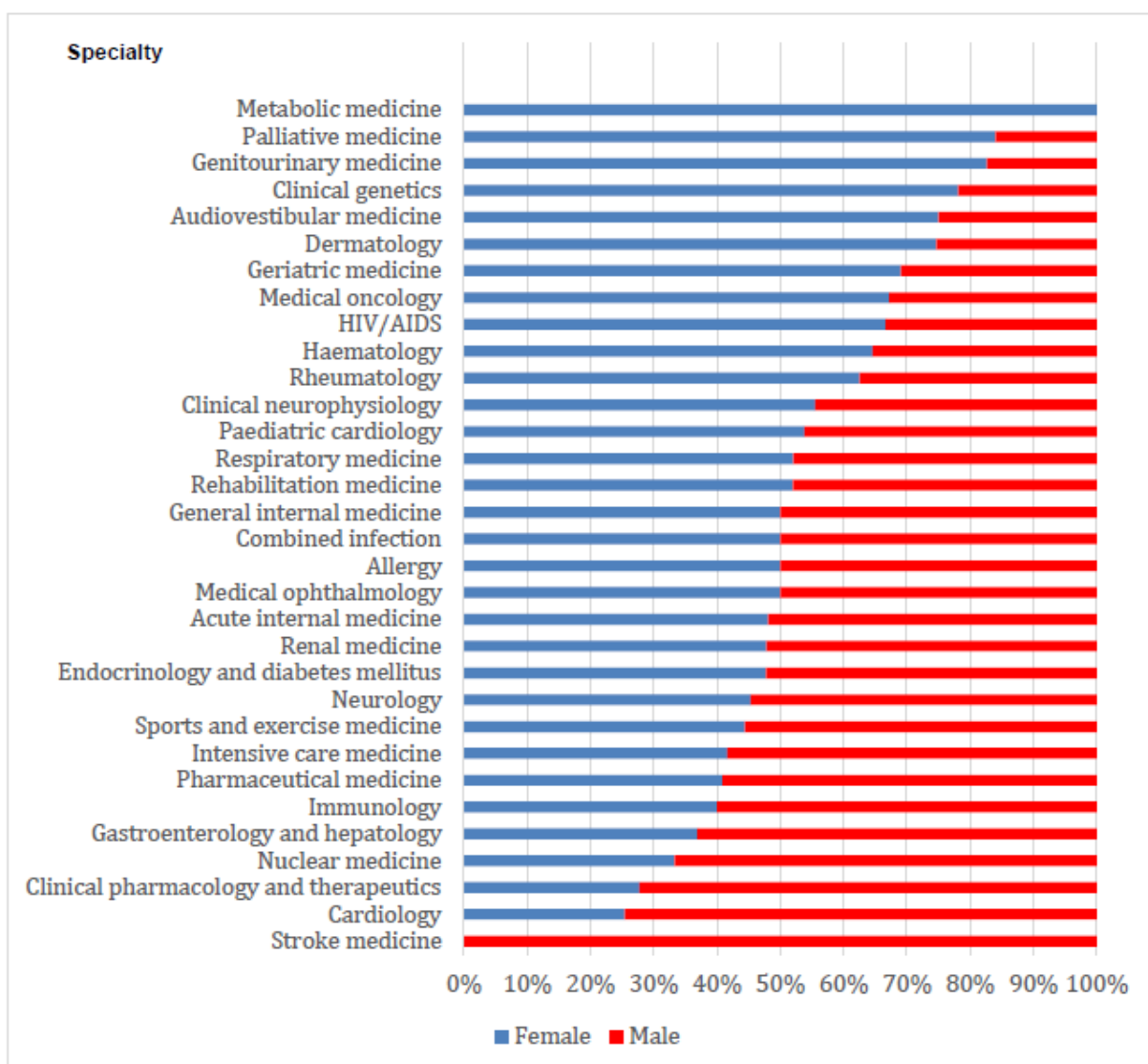
Trainees in specialties participating in the acute take or looking after non-specialty GIM patients are shown in Table 8. Acute internal medicine, geriatrics, diabetes and endocrinology, respiratory medicine and gastroenterology have the highest number of trainees participating in the acute take.

The overall trend of trainees dual accrediting with GIM is down from previous years. Trainees dual accrediting with GIM by specialty in 2018 are shown in Table 9.

Table 8 Trainees in specialties participating in the acute take or looking after non-specialty GIM patients

Specialties participating in the acute take	%
Acute internal medicine	99%
Geriatrics	98%
Diabetes and endocrinology	92%
Respiratory medicine	90%
Gastroenterology/hepatology	86%
Rheumatology	73%
Renal medicine	63%
Cardiology	49%
Infectious diseases	47%
Other specialties	<5%

Table 9 Trainees in specialties accrediting in GIM

Specialty	Specialty 1	Dual CCT with GIM	% on dual CCT
Acute internal medicine	330	293	89%
Allergy	8	0	0%
Cardiology	594	238	41%
CPT	28	24	86%
Diabetes and endocrinology	346	343	99%
Gastroenterology	482	435	90%
Geriatric medicine	618	597	97%
Infectious disease	89	54	61%
Renal medicine	238	175	74%
Respiratory medicine	512	475	93%
Rheumatology	224	138	62%
Total	3,459	2,772	80%

The mean hours worked per week is highest mainly for the acute medical specialties and notable for some of the smaller specialties (Fig 13). GIM, GUM and cardiology had the highest number of mean hours worked whereas audiovestibular medicine, clinical genetics and clinical neurophysiology had the lowest number of mean hours worked.

Sessional split between inpatient work, clinics and procedural lists is variable depending on specialty. There is very little dedicated administration time in most specialties.

Fig 13 Mean hours worked by specialty

Specialty

General internal medicine	
HIV/AIDS	
Cardiology	
Stroke medicine	
Paediatric cardiology	
Intensive care medicine	
Medical ophthalmology	
Neurology	
Gastroenterology and hepatology	
Respiratory medicine	
Pharmaceutical medicine	
Renal medicine	
Endocrinology and diabetes mellitus	
Nuclear medicine	
Haematology	
Acute internal medicine	
Combined infection	
Clinical pharmacology and therapeutics	
Medical oncology	
Rheumatology	
Geriatric medicine	
Dermatology	
Allergy	
Immunology	
Palliative medicine	
Rehabilitation medicine	
Metabolic medicine	
Genitourinary medicine	
Sports and exercise medicine	
Clinical neurophysiology	
Clinical genetics	
Audiovestibular medicine	

0.0   10.0   20.0   30.0   40.0   50.0   60.0   70.0   80.0   90.0   100.0

■ Mean Hrs rostered per week   ■ Mean Hrs worked per week   ■ Mean excess Hrs per week

The new consultants (post-CCT) survey included data from medical consultants who had obtained their CCT in the last 12 months.[3] In 2017, 935 CCT holders were contacted and 487 responses were received (52%) which is better than the response rate in 2016 (45.1%). 50% of respondents were male and 19% of respondents trained less than full time. There was a good ethnic mix; 50% of respondents described their ethnicity as white British, 19% Indian, 8% white other than British, 5% Pakistani, 5% Chinese and all other ethnic groups were each less than 5% of respondents.

The trend analysis of the employment status over the last 5 years is shown in Fig 14. Encouragingly, the percentage of CCT holders obtaining substantive posts has increased steadily (67% in 2017 compared 63%, 57% in preceding years) and those doing locum posts has decreased (15%). This may reflect the vacancies in the consultant posts particularly in the acute medical specialties.

The mean number of consultant posts applied for was 1.49 and those shortlisted was 1.44. Geographical location was the most important factor in 65% of CCT holders for choice of consultant post.

Of the respondents who had secured substantive consultants posts, 42% were doing acute medical take and 44% were involved in looking after general medical patients.

When asked if they could turn back time, 93% of CCT holders responded they would train again in their parent specialty. However, only 53% respondents said they would choose to do GIM (Fig 15).

Fig 14 Current employment status of CCT holders (2013–17)
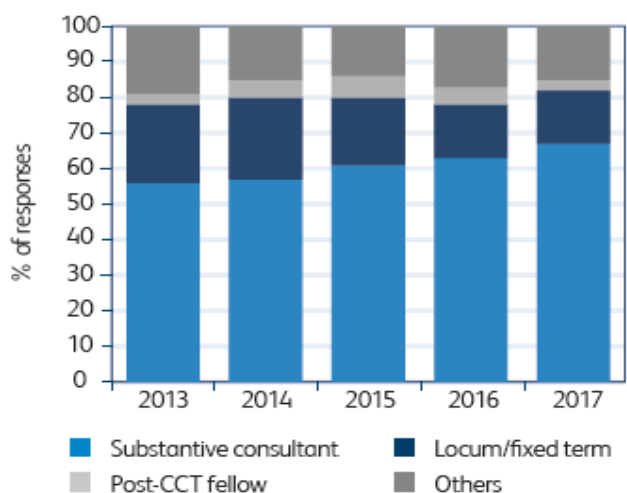
Fig 15 If you turn back time, would you train in?
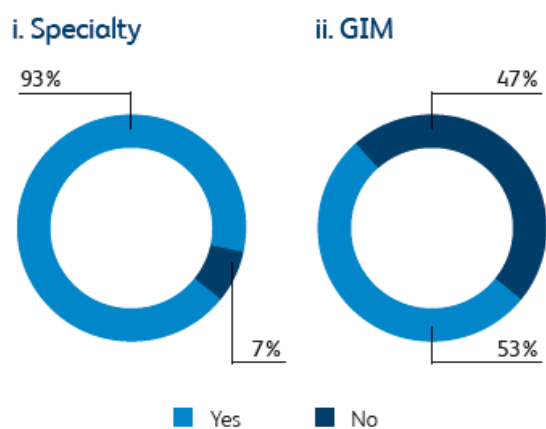
The overall perceived quality of training in GIM remains generally poorer than specialty training and this has been the trend for many years. 66% of CCT holders felt well trained in their specialty compared to 52% in GIM (Figs 16 and 17).

Fig 16 Overall perceived quality of training in the primary specialty (2010–17)
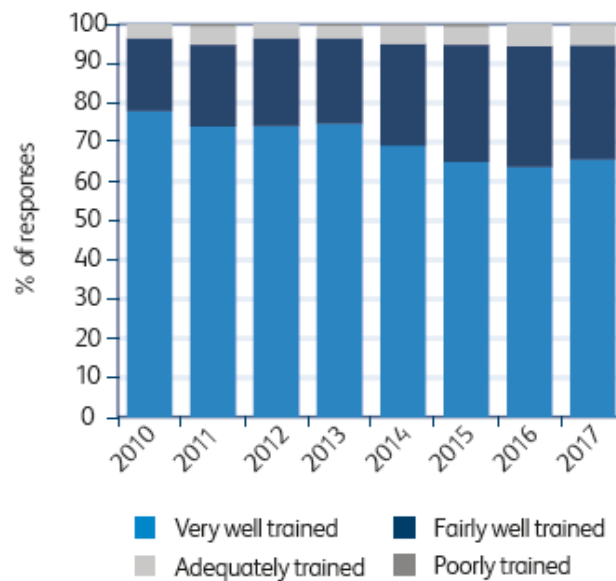
Fig 17 Perceived quality of training in GIM
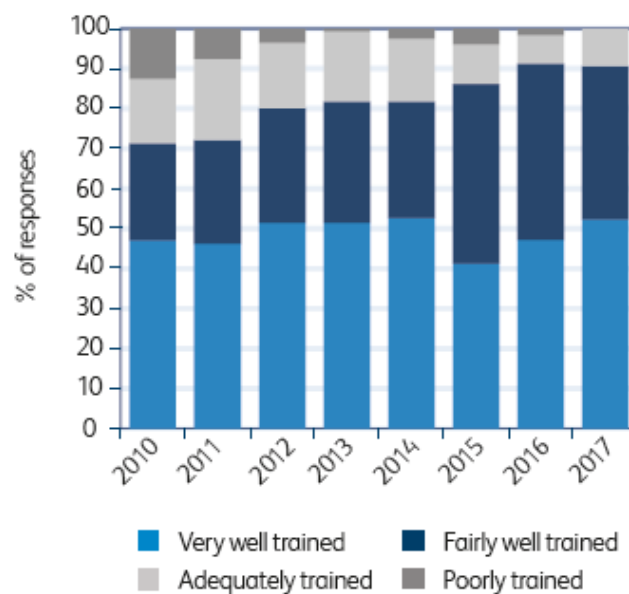
1.6   Penultimate year assessments

1,467 trainees from 29 medical specialties undertook penultimate year assessments (PYAs) between the 5 August 2017 and 3 August 2018. These are shown in Fig 18.

Fig 18 Number of trainees who had PYAs by specialty in 2017–18
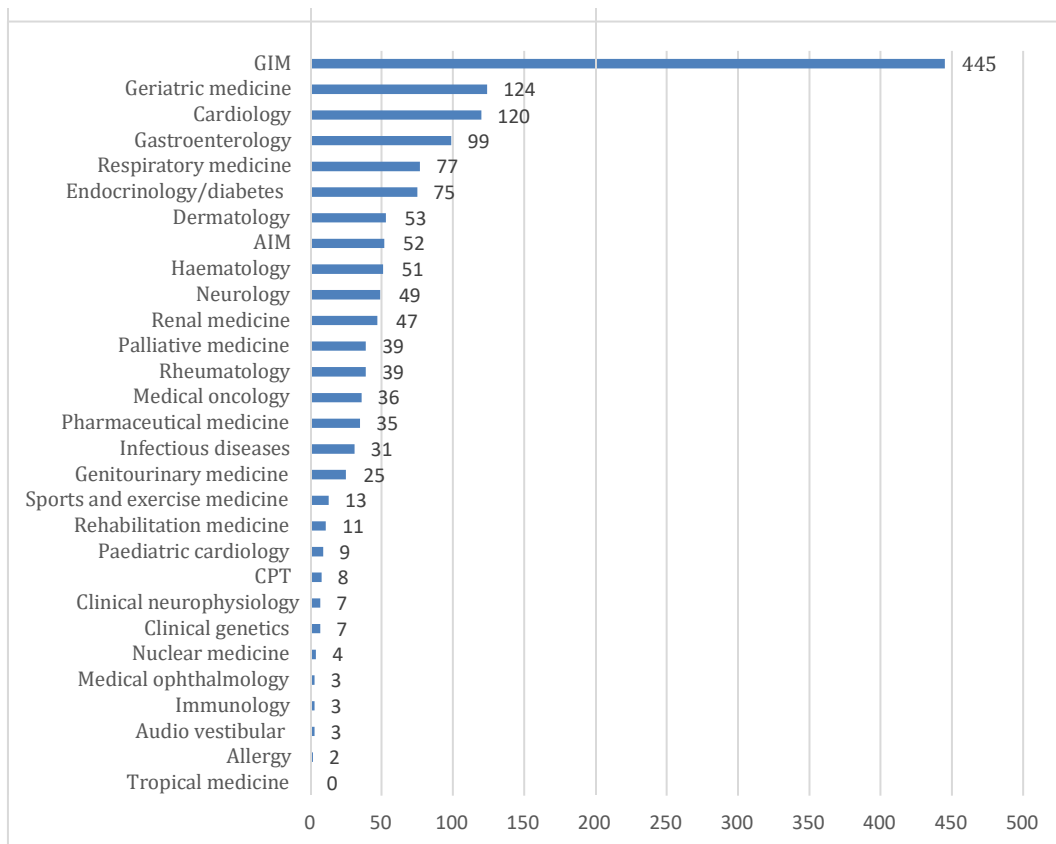
Four trainees were specialist trainee (ST) year 4, 178 were ST5, 788 were ST6, 407 were at ST7 and 12 were ST8 level. 75 trainees were out of programme (OOP).

Table 10 shows the percentage of trainees in the above specialties rated as satisfactory against the ARCP decision aid requirements at the time of their PYAs.

Table 11 shows the average mandatory and recommended PYA targets set per trainee for all specialties.

There was considerable variability between different specialties and some of the more specific issues are discussed in the relevant GMC-themed sections.

Table 10 Percentage of trainees rated as satisfactory against ARCP decision aid requirement at the time of PYA

ARCP decision aid requirements	Percentage of trainees rated satisfactory
Quality of educational supervisor's reports	91.0%
Quality of training portfolios	79.6%
Workplace-based assessments	84.0%
Specialty-specific examination pass	76.7%
Valid advanced life support (ALS) certification	79.4%
Research and audit	
- Adequate research skills	91.1%
- Active in audit / quality improvement project (QIP)	87.4%
Course completion	
- Formal teaching	53.2%
- Management training	52.7%
Teaching	
- Undergraduates	89.8%
- Postgraduates	96.8%
- Other clinical staff	82.2%
Communication	
- With patients	78.9%
- With staff	88.3%
- With colleagues	90.8%
Legal/ethical knowledge	89.2%
Continuing professional development (CPD) diary registration	35.9%
Timekeeping	
- Leave/absence (sickness/maternity)	24.4%
- Effective timekeeping	90.0%

Table 11 Average PYA targets per trainee

PYA targets set in 2018	Average per trainee
Mandatory	4.3
Recommended	1.5

2.0 Theme 1: Learning environment and culture

The data sources used to inform this theme include the GMC NTS (generic and SSQ), ARCP outcomes, HST census data, PYA reports and monitoring visit reports.

2.1 GMC National trainee survey – generic data

The deanery / LETB red and green flags by specialty between 2015–18 are shown in Tables 12 and 13.

Table 12 Deanery / LETB red flags by specialty 2015-2018

No	Specialty	2015	2016	2017	2018	2015/2018 difference
1	Gastroenterology	28	33	40	62	+34
2	Geriatric medicine	29	50	31	55	+26
3	Acute internal medicine	34	40	28	40	+ 6
4	Renal medicine	19	15	18	38	+19
5	Cardiology	14	21	28	32	+18
6=	Endocrinology and diabetes	21	25	18	31	+10
6=	Respiratory medicine	19	25	41	31	+12
8	Core medical training	12	15	26	29	+17
9	Haematology	12	8	21	27	+15
10	Rheumatology	6	9	6	15	+ 9
11	Infectious diseases	9	8	11	13	+ 4
12	Paediatric cardiology	10	7	12	8	- 2
13	Medical oncology	6	5	29	7	+ 1
14	Neurology	6	8	4	6	+ 0
15	Clinical pharmacology and therapeutics	9	11	12	4	- 5
16=	Rehabilitation medicine	3	3	4	2	- 1
16=	Sports and exercise medicine	2	2	2	2	+ 0
18=	Clinical neurophysiology	1	0	3	1	+ 0
18=	Dermatology	15	0	3	1	-14
18=	Genitourinary medicine	4	0	4	1	- 3
21=	Allergy	0	0	0	0	+ 0
21=	Audio vestibular medicine	0	0	0	0	+ 0
21=	Clinical genetics	2	0	0	0	- 2
21=	Immunology	0	4	1	0	+ 0
21=	Medical ophthalmology	0	0	0	0	+ 0
21=	Nuclear medicine	0	0	0	0	+ 0
21=	Palliative medicine	5	2	2	0	- 5
28	Pharmaceutical medicine	0	0	1	No data	N/A

The top 10 specialties with the highest number of deanery / LETB red flags were all acute medical specialties. These recorded a significant increase in the number of red flags indicators compared with 2015.

Table 13 Deanery / LETB green flags by specialty in 2015–18

No	Specialty	2015	2016	2017	2018	2015/2018 difference
1	Palliative medicine	20	30	51	58	+38
2	Clinical genetics	11	17	21	35	+24
3	Genitourinary medicine	11	19	27	31	+20
4	Dermatology	17	21	27	36	+19
5	Neurology	0	4	15	13	+13
6	Allergy	1	1	9	11	+10
7=	Paediatric cardiology	0	9	12	7	+ 7
7=	Sports and exercise medicine	8	10	17	15	+ 7
9=	Clinical pharmacology and therapeutics	0	1	1	6	+ 6
9=	Medical oncology	8	8	6	14	+ 6
9=	Rheumatology	2	8	10	8	+ 6
12=	Immunology	2	2	3	7	+ 5
12=	Rehabilitation medicine	9	20	28	14	+ 5
14	Acute internal medicine	1	1	4	4	+ 3
15=	Endocrinology and diabetes	1	1	1	3	+ 2
15=	Haematology	6	7	10	8	+ 2
15=	Renal medicine	3	5	6	5	+ 2
18	Cardiology	1	0	0	2	+ 1
19=	Gastroenterology	1	2	2	1	+ 0
19=	Geriatric medicine	0	0	0	0	+ 0
19=	Medical ophthalmology	0	0	0	0	+ 0
22=	Core medical training	1	0	0	0	- 1
22=	Infectious diseases	2	1	2	1	- 1
22=	Respiratory medicine	3	1	3	2	- 1
25	Nuclear medicine	3	5	2	1	- 2
26=	Audio vestibular medicine	6	1	5	1	- 5
26=	Clinical neurophysiology	12	11	5	7	- 5
28	Pharmaceutical medicine	0	0	0	No data	N/A

N/A = 2018 data not available so unable to make a comparison.

18 of 28 specialties recorded an increase in the number of indicator green flags compared with 2015.

Palliative medicine recorded the highest increase in deanery / LETB green flags (up 38) compared with 2015.

The repeated red and green flags by indicator are shown in Tables 14 and 15.

Table 14 Repeated red flags by indicator 2015–18

Indicator (red flags)	2015/16 % (No.)	2016/17 % (No.)	2017/18 % (No.)
Clinical supervision (out of hours)	59 (32/54)	73 (30/41)	70 (31/44)
Teamwork (new in 2017)			57 (4/7)
Curriculum coverage (new in 2017)			51 (21/41)
Adequate experience	29 (9/31)	37 (13/35)	41 (17/41)
Overall satisfaction	25 (2/8)	3 (1/30)	39 (11/28)
Regional teaching	28 (7/25)	41 (9/22)	36 (4/11)
Workload	80 (8/10)	18 (5/28)	36 (9/25)
Clinical supervision	37(10/27)	46 (6/13)	31 (4/13)
Supportive environment	21 (3/14)	8 (1/13)	27(3/11)
Reporting systems (new in 2016)		32 (7/22)	25 (7/28)
Feedback	16 (3/19)	14 (2/14)	19 (3/16)
Educational governance (new in 2017)			17 (2/12)
Handover	0 (0/11)	22 (2/9)	16 (3/19)
Study leave	54 (7/13)	33 (3/9)	14 (2/14)
Local teaching	37 (11/30)	21 (4/19)	12 (3/24)
Induction	21 (4/19)	26 (5/19)	22 (7/32)
Educational supervision	0 (0/0)	0 (0/10)	0 (0/8)
Rota design (new in 2018)			

Table 15 Repeated green flags by indicator (2015–18)

Indicator (green flags)	2015/16 % (No.)	2016/17 % (No.)	2017/18 % (No.)
Clinical supervision out of hours	35 (8/23)	45 (19/42)	64 (27/42)
Regional teaching	52(13/25)	47 (17/36)	58 (14/26)
Educational governance (new in 2017)			57 (12/21)
Workload	38 (20/53)	74 (25/34)	54 (19/35)
Supportive environment	25 (1/4)	0 (0/17)	38 (8/21)
Teamwork (new in 2017)			38 (11/25)
Reporting systems (new in 2016)		15 (2/13)	35 (6/17)
Overall satisfaction	0 (0/3)	10(1/10)	33 (1/3)
Handover	0 (0/15)	20 (2/10)	31 (4/13)
Induction	34 (10/29)	23 (3/13)	27 (4/15)
Curriculum coverage (new in 2017)			14 (1/7)
Local teaching	22 (2/9)	30 (3/10)	9 (2/22)
Feedback	33 (1/3)	25 (1/4)	0 (0/4)
Study leave	37 (3/8)	0 (0/4)	0 (0/7)
Adequate experience	0 (0/0)	0 (0/0)	0 (0/0)
Clinical supervision	0 (0/0)	0 (0/0)	0 (0/0)
Educational supervision	0 (0/0)	0 (0/0)	0 (0/0)
Rota design (new in 2018)			

2.2   GMC NTS – specialty-specific data

The GIM and AIM quality criteria were launched by JRCPTB in March 2018.[4] These were developed with the purpose of supporting the educational experience of doctors undertaking the demanding role of either GIM or AIM Registrar. They are specific and measurable. Their effectiveness can be monitored through the GMC NTS.

These criteria have been grouped in the following three domains:

1. Ensuring safe and effective care
2. Creating a supportive environment
3. Improving educational experience

Data from the 2018 survey were analysed. 2,772 trainees completed the survey of which 99% were dual accrediting with diabetes and endocrinology, 97% with geriatrics, 93% respiratory medicine, 90% gastroenterology and 89% AIM.

Fig 19 Summary of GIM and AIM quality criteria, 2018

High level of agreement (>75%)	• Consultants on call are easily accessible for advice both 'in' and 'out of hours' (87% in overall agreement) with AIM, CPT and endocrinology and diabetes mellitus recording >89%. • Management of the acute take and out-of-hours care is effectively supported by multidisciplinary team working (eg by critical care outreach or Hospital at Night staff (80% overall agreement) with CPT, AIM, endocrinology and diabetes and respiratory medicine, rheumatology (>82%). • Consultants on call generally provide appropriate on-site supervision. (77% in overall agreement) with CPT, endocrinology and diabetes and respiratory medicine (>79%). • Educational supervisor's knowledge of the GIM curriculum and decision aid is very good or good. (77% in overall agreement) with CPT, endocrinology and diabetes, AIM, rheumatology and geriatric medicine (>80%).
Low level of agreement (<45%)	• Allocated and are able to spend, at least half a day per week of protected / bleep-free time to pursue learning opportunities specific to your GIM training (15% in overall agreement). • Trainee representatives involved in (at least monthly) meetings to review service and/or rota difficulties (19% in overall agreement). • Consultants and trainee representatives involved in the design of GIM rotas (22% in overall agreement). • Only appropriate calls and referrals are directed to the GIM registrar (31% in overall agreement). • Shifts are organised to ensure sufficient time is available for consultant-supervised patient reviews and workplace-based assessments at handover (35% overall agreement). • A named lead takes responsibility for final decisions on covering rota gaps (38% in overall agreement). • Training and assessment is provided for all essential procedures in the GIM curriculum (for example, in a simulated environment (38% in overall agreement).

2.3   ARCP outcomes

Satisfactory ARCP outcomes in acute and non-acute medical specialties are shown in Figs 20 and 21.

Fig 20 Satisfactory ARCP outcomes in acute medical specialties

Fig 21 Satisfactory ARCP outcomes in non-acute medical specialties

Overall, the mean ARCP satisfactory outcome was lower in acute medical specialties (67.8%) compared with non-acute medical specialties (81.9%).

The unsatisfactory ARCP outcomes in acute and non-acute medical specialties is shown in Figs 22 and 23.

Fig 22 Unsatisfactory ARCP outcomes in acute medical specialties
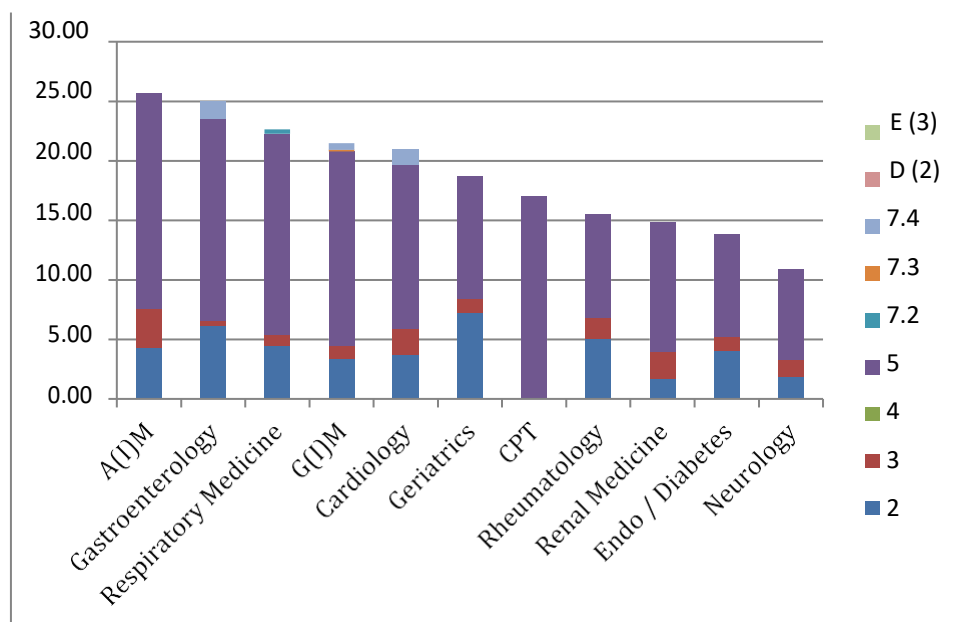
Fig 23 Unsatisfactory ARCP outcomes in non-acute medical specialties
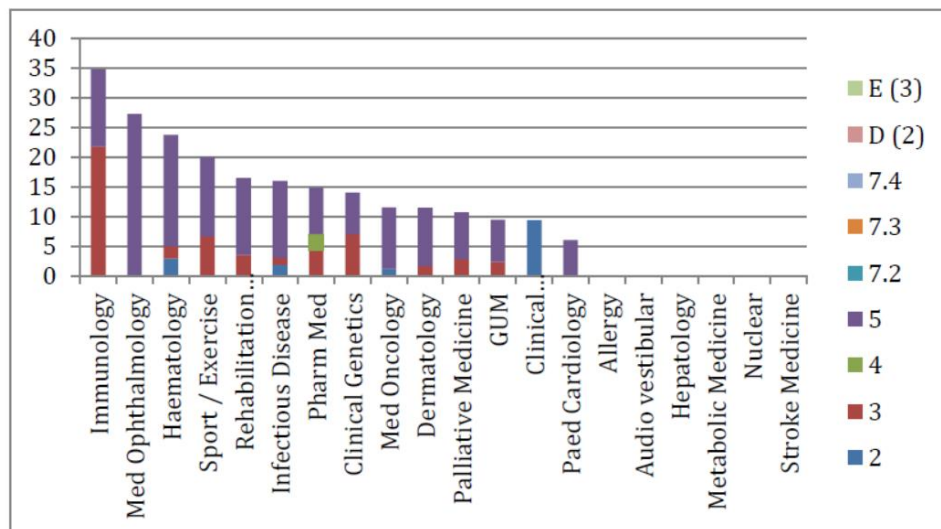
The mean ARCP unsatisfactory outcome for acute medical specialties was slightly higher (18.7%) than non-acute medical specialties (16.1). There was a high proportion of outcome 5s in both groups.

2.4   HST workforce census data

Fig 24 Overall quality of specialty training
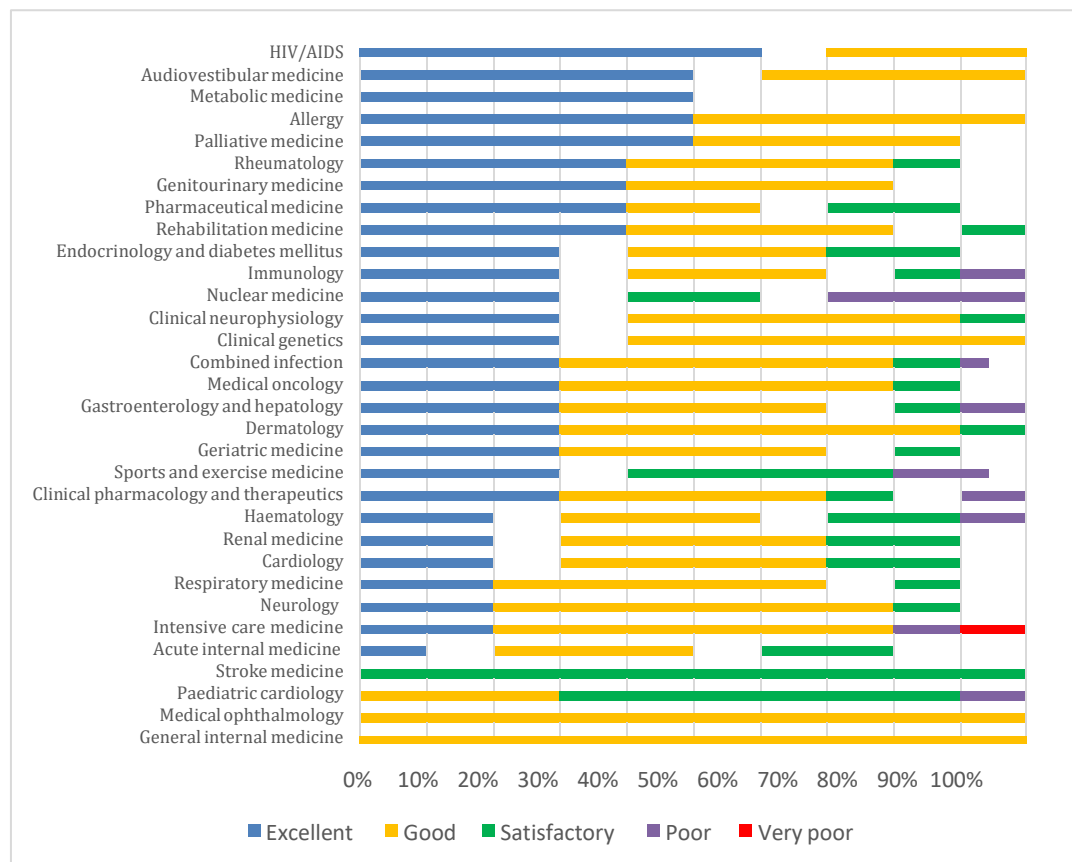
Fig 25 Overall quality of GIM training
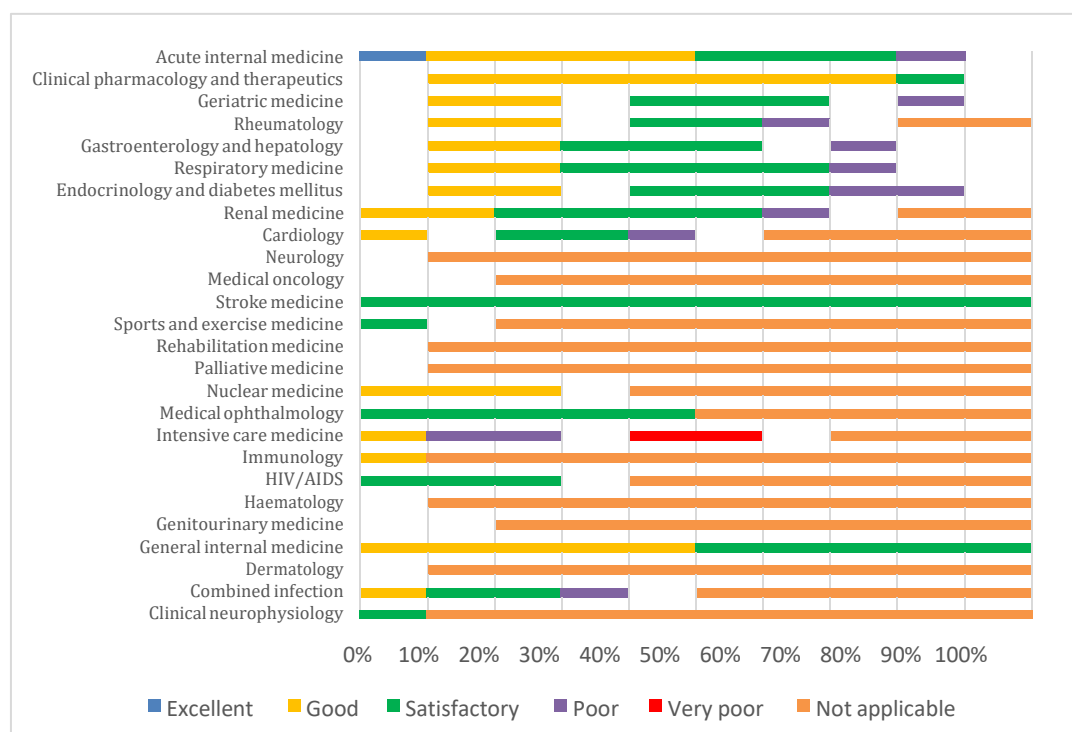
Specialties where 100% trainees replied to not doing any GIM were excluded from the analysis

The overall quality of training was significantly higher in the main specialty compared with

GIM. 74% of HST reported their quality of specialty training was excellent or good compared

with 21% for GIM training.

HSTs reporting that they have been asked to cover rota gaps and whether they have actually covered gaps is shown in Figs 26 and 27.

Fig 26 HSTs reporting they have been asked to cover rota gaps
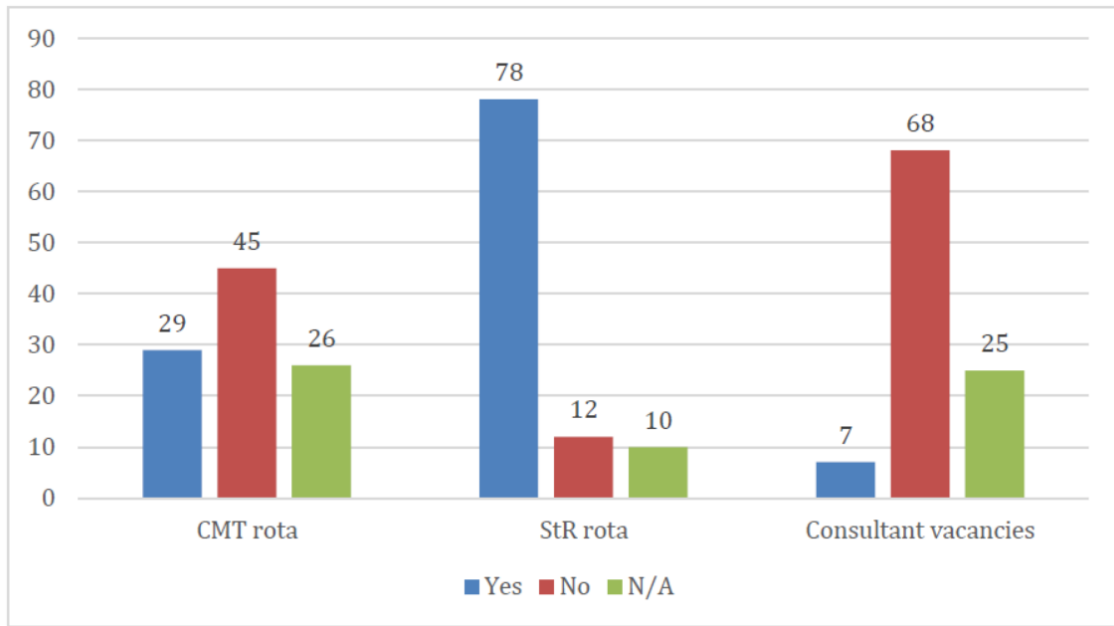
Fig 27 HSTs reporting that have actually covered rota gaps
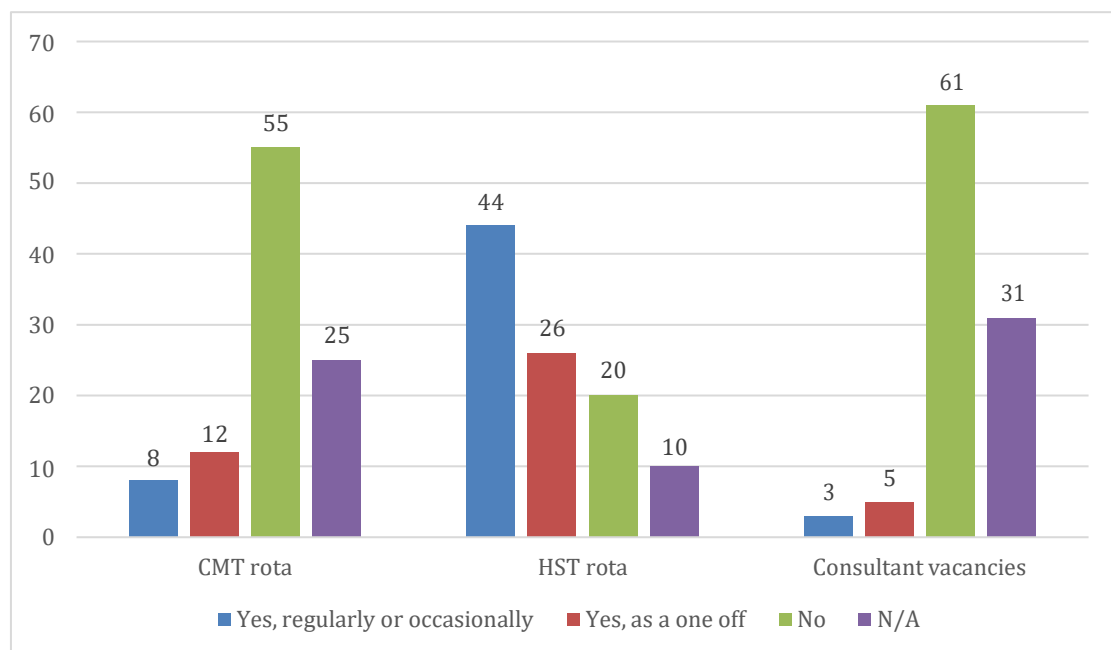
HSTs reporting of gaps by specialty is shown in Figs 28 and 29.

Fig 28 HSTs reporting of being asked to cover gaps by specialty
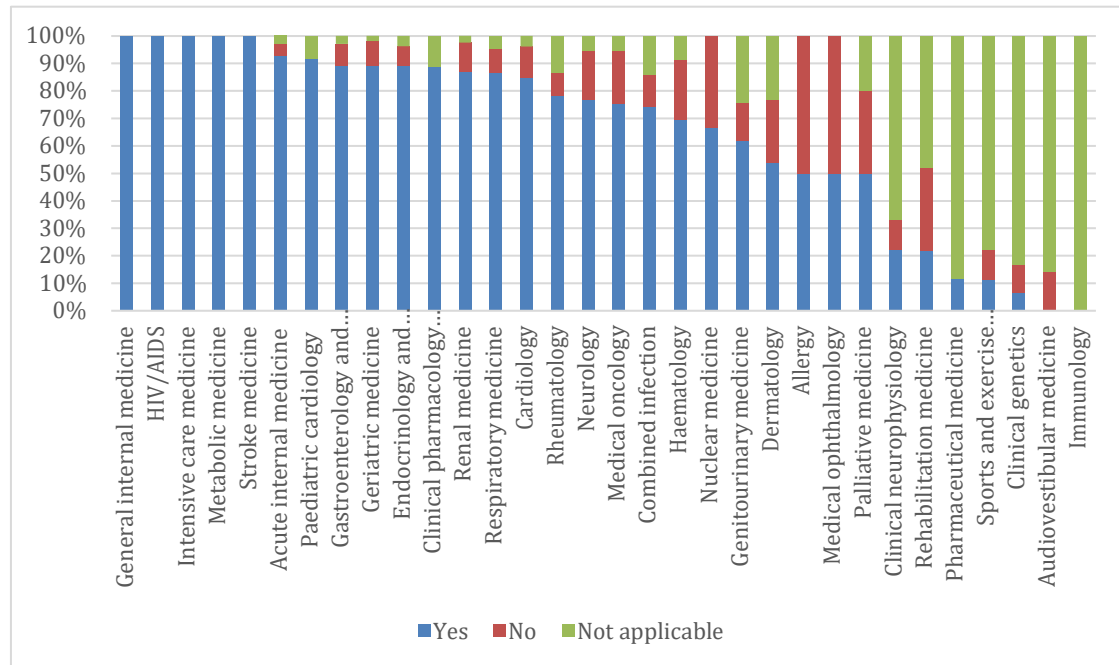
Fig 29 HSTs reporting actually covering gaps by specialty
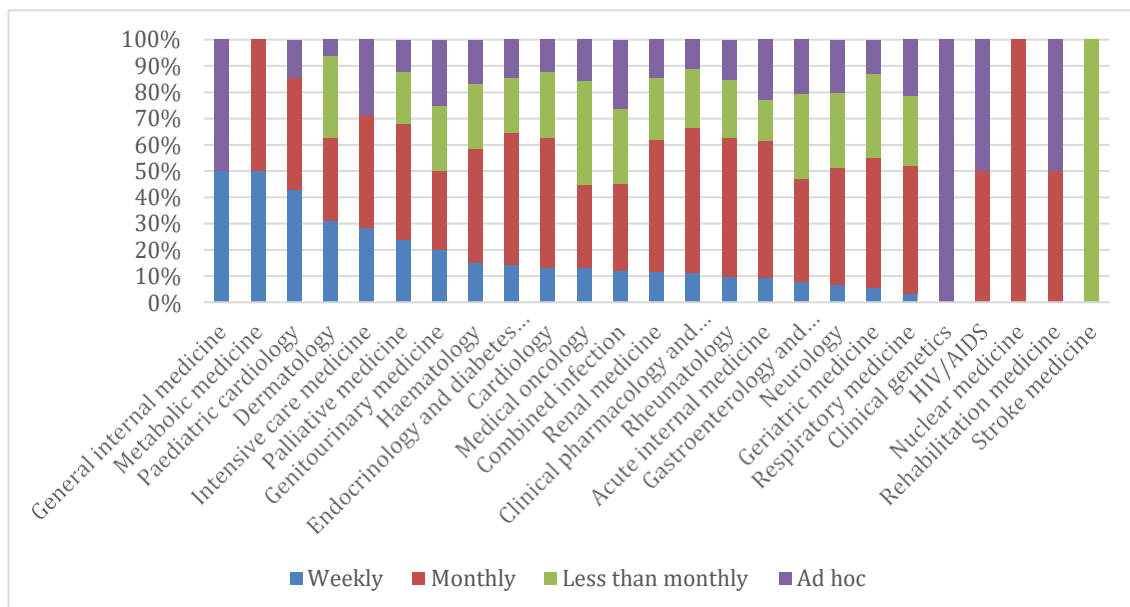
The frequency of HSTs being asked to cover gaps and actually covering gaps is significantly higher in many of the acute medical specialties.

2.5   Penultimate year assessments

Fig 30 Satisfactory WPBA completion as at PYA – 2016/2017
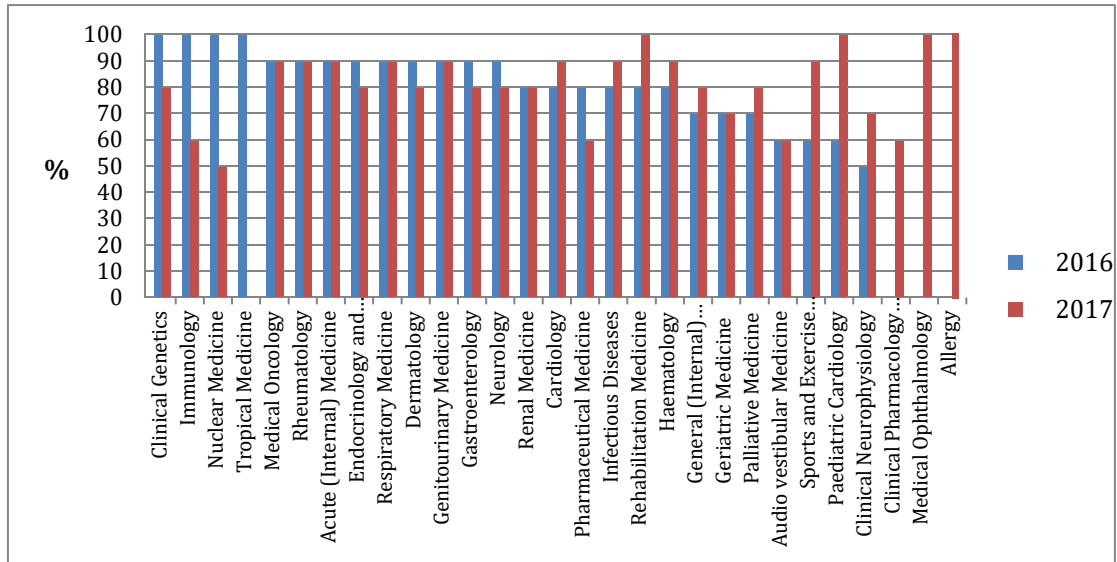
The average percentage of trainees who had satisfactory completion of WPBA at the time of their PYA in 2017 was 84%. There was some variation between the specialties with nuclear medicine, clinical pharmacology and therapeutics, pharmaceutical medicine, immunology and audiovestibular medicine at the lower end.

Fig 31 Active in audit/quality improvement project (QiP)
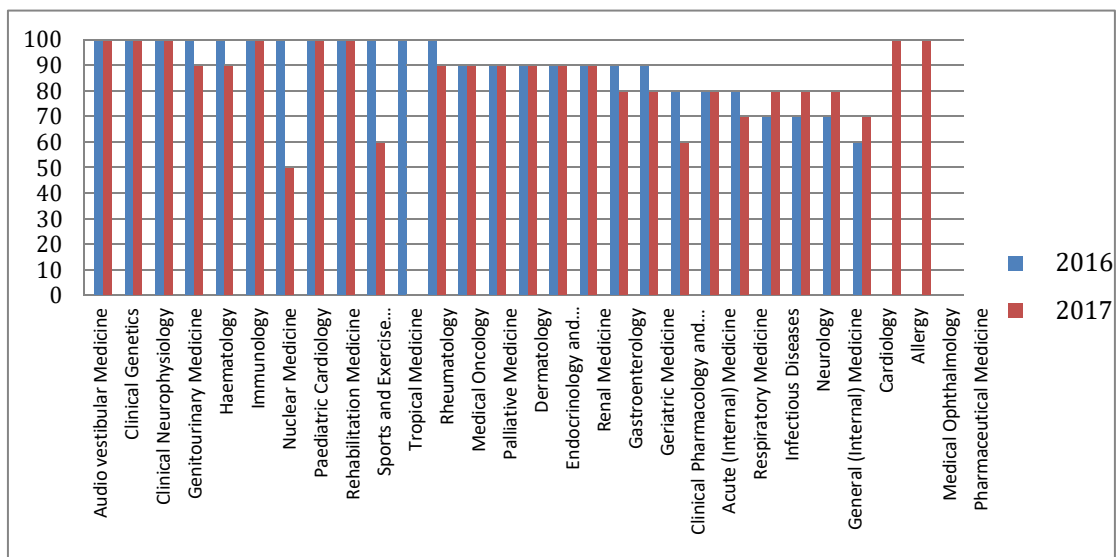
The average percentage of trainees who demonstrated satisfactory activity in audit/quality improvement projects (QiP) was 87.4%. 8 of the 10 specialties with the lowest percentage of PYA trainees active in audit or QIPs were in the acute specialties.

2.6. Monitoring visit reports

A summary of the reports from the monitoring visits with JRCPTB representation from the training year 2017–18 are shown below.

General Internal Medicine, Daisy Hill Hospital, Northern Ireland – May 2018
This was a cyclical review of the GIM programme in a busy district general hospital. The main issues reported were around middle grade rota gaps and intermittent locum cover compromising trainee experience (attendance at clinics in particular); affecting clinical supervision and access to study leave. Other issues noted around quality of induction especially for the out-of-sync trainees; rota details not being available until late; poor handover especially in the emergency department; lack of educational resources for trainers and trainees; poor simulation facilities and a high level of educationally unproductive tasks with poor phlebotomy especially at weekends.

The report was very clear, concise and mapped to the GMC domains. It was graded to the GMC's risk ratings which was based on impact (on patient safety; risk of trainees not progressing and training experience), likelihood and risk. The RAG rating system had clear domains. There was a targeted action plan with realistic timelines and line of responsibility.

Cardiology, Yorkshire and Humber – July 2017
This was a targeted specialty programme visit to address concerns raised from the GMC NTS with repeated red flags on many domains. Issues highlighted requiring action included induction, access to simulation, clinical supervision, curricular requirements versus trainee perception of competence / use of OOP in final years of training, training in generic competencies, regional teaching, organisation and strategic leadership of the programme and poor training environment.

There are three separate programmes within the region (east, south and west) which work relatively independently and the review was critical of the overarching organisation and strategic leadership of the programme.

The impact of the service demands of GIM on specialty training were noted to be significantly impacting on specialty training (access to catheter labs, ECHO and pacing training) particularly in the early specialty training (ST) years. Experience between units was variable and training opportunities differed and many trainees were unable to meet their core competencies.

Clinical supervision was a major concern at each of the tertiary centres with trainees entirely providing the non-interventional cardiology service (including ECHOs) without any clinical supervision. This has led to serious untoward incidents affecting patient safety at some units. Trainees were frequently using their zero days to attend training opportunities particularly for procedural competencies. Trainees were unable to attend their local and regional teaching mainly due to their workload particularly around GIM service and on- call commitments. The seriousness of these concerns has been acknowledged and the requirements and action plan to address each concern has been compiled mapped to the HEE quality framework.

Cardiology, Blackpool – April 2018
This was a targeted visit following a very poor GMC NTS in 2017 with 10 out of 17 red flags. These included, overall satisfaction, clinical supervision, teamwork, handover, supportive environment, adequate experience, curriculum coverage, educational governance, educational supervision and study leave.

The initial feedback from trainees was that there was some improvement in their training. They mentioned that although service provision can predominate, they received good exposure to many procedures, especially if they were proactive. They said that although there were difficulties accessing some training, when they got the training it was excellent. A targeted action plan was put into place and it was reassuring to see the 2018 GMC survey was much improved with only one red flag in regional teaching.

Cardiology, Northampton – January 2018
This was a targeted specialty programme visit following a poor 2018 GMC survey with 11 out of 18 red flags in the following indicators: overall satisfaction, workload, clinical supervision (in and out of hours), educational supervision, reporting systems,

teamwork, handover, supportive environment, induction and study leave. Previous GMC NTS has repeated red flags particularly for workload. The main barriers to effective training identified at the visit included rota gaps (1 in 12 on-call rota had equivalent of is 1 in 6.5), high GIM component which significantly impacted on workload, specialty training experience, including opportunity to do clinics, acquire procedural skills, attend regional teaching (particularly due to GIM rota that didn't account for teaching days) and lack of consultant supervision. Recommendations included improvements to readdress the balance between GIM and specialty exposure as well as addressing the training barriers. These included improving the middle grade cover; exploring other workforce solutions for routine work; adopting a consultant of the week model; supporting consultants with time in job plan for teaching and training; buddying arrangements with CMTs to improve learning and feedback; improving access to clinics and teaching by changing rota arrangements.

Pharmaceutical medicine (PM) – spring 2018

The GMC undertook the review of PM as part of the small specialty review. They met with the lead dean, the faculty and representatives of the PM virtual deanery and visited a number of training sites that deliver training. There were many areas which worked well including processes around standards of safety, induction and support provided by educational supervisors. However, some areas of improvement were identified. These included improving the quality management processes and ensuring evidence is collated which informs the quality of training; clarifying roles and responsibilities of specialty advisors; developing clear guidance for identification and support of doctors in difficulty; clarifying the ARCP process to meet all the requirements of the Gold Guide and continue to support and develop trainers. The PM virtual deanery welcomed the GMC's report and are working through their recommendations.

In summary, monitoring visits were done in a cyclical or targeted fashion. There were variable methods of conducting reviews and reporting and standardising the method of reporting mapped to the GMC themes and/or the HEE quality framework would allow better comparisons between training programmes and regions.[5]

3.0 Theme 2: Educational governance and leadership

The data sources used to inform this theme include the GMC NTS (generic and SSQ data), ARCP outcomes, MRCP outcomes, HST census data / new consultants (post-CCT) survey results, PYA reports and monitoring visit reports. Data from the specialist recruitment office provided some of the equality and diversity data.

3.1 GMC NTS – generic data

Table 16 GMC NTS red flags by indicators for higher medical training

No	Indicator (higher medical training)	2015	2016	2017	2018	2015/2018 difference
1	Clinical supervision out of hours	39	54	40	44	+ 5
2	Adequate experience	22	29	30	35	+13
3	Curriculum coverage (new in 2017)			31	32	N/C
4	Rota design (new in 2018)				31	N/C
5	Induction	12	19	14	30	+18
6=	Overall satisfaction	9	8	30	27	+18
6=	Reporting systems (new in 2016)		30	22	27	N/C
8	Workload	33	10	27	25	- 8
9	Local teaching	32	30	19	23	- 9
10	Handover	17	11	9	19	+ 2
11	Study leave	19	13	9	14	- 5
12	Feedback	11	10	12	13	+ 2
13=	Clinical supervision	24	26	13	12	-12
13=	Educational governance (new in 2017)			12	12	N/C
15	Supportive environment	12	11	13	11	- 1
16	Regional teaching	23	25	22	9	-14
17=	Educational supervision	1		9	6	+ 5
17=	Teamwork (new in 2017)			7	6	N/C

Table 17 GMC NTS green flags by indicators for higher medical training

No	Indicator (higher medical training)	2015	2016	2017	2018	2015/2018 Difference
1	Clinical supervision out of hours	14	23	42	42	+28
2	Workload	29	53	34	35	+ 6
3	Teamwork (new in 2017)			29	29	N/C
4	Rota design (new in 2018)				28	N/C
5	Regional teaching	28	25	36	26	- 2
6=	Local teaching	6	9	10	22	+16
6=	Educational governance (new in 2017)			30	21	N/C
8	Supportive environment	10	4	21	21	+11
9	Reporting systems (new in 2016)		13	13	17	N/C
10	Induction	26	29	13	15	-11
11	Handover	5	15	10	13	+ 8
12	Curriculum coverage (new in 2017)			11	7	N/C
13=	Study leave	7	8	4	7	+0
13=	Feedback	3	3	4	4	+1
15	Overall satisfaction		3	10	3	N/C
16	Adequate experience	0	0	0	0	N/C
17=	Clinical supervision	0	0	0	0	N/C
17=	Educational supervision	0	0	0	0	N/C

3.2   GMC NTS – SSQ data

The CMT quality criteria were launched by JRCPTB in 2015 with the purpose of driving up the quality of training environments for CMT to enhance the educational experience of trainees.[6] The criteria are grouped into four domains and are classified as either 'core' or 'best practice' and are expected to be met over the course of the 2-year programme. The four domains are:

- structure of the programme
- delivery and flexibility of the programme
- supervision and other ongoing support available to trainees
- communication with trainees.

Questions related to each of the domains are included in the GMC NTS as programme-specific questions. The data analysis from 2,745 trainees (1,377 CMT1 and 1,368 CMT2) in 2018 is summarised in Fig 32. A wide degree of regional variation was noted across the breadth of the criteria.

Fig 32 CMT quality criteria – trainee survey results 2018 (compared with 2017)

High level of agreements nationally

- 93% of trainees agreed they have a single, named ES to oversee CMT training for a minimum of 12 months, although Northern Ireland remain an outlier in this criteria with only 41% in agreement. More than 90% of trainees in 14/17 regions have reported this criterion being met in each of the last 2 years.
- 90% of trainees agreed they received 1 hour or more curriculum-relevant teaching on average each week. More than 90% of trainees in 8/17 regions have reported this criterion being met in each of the last 2 years.
- 88% of trainees agreed they had on-call rotas covering 4 or more months.
- 86% of trainees had the opportunity to attend skills laboratory or simulation training (using scenario) at least once a year.

Low levels of agreement nationally

- 24% of CMTs overall agreed they normally have protected teaching time at outpatients clinics, where their attendance is bleep-free, which remains the same as 2017.
- 27% of trainees overall agreed they normally have protected teaching for formal training (eg PACES) where their attendance is bleep-free, which also remains the same as 2017.
- Highest levels of decline in agreement were seen in the following indicators:
  - B6.1 Opportunity to 'act up' as a medical registrar, down 4% overall to 50%
  - C1 Representation on appropriate professional/educational committees down 3% overall to 54%.

Overall improvements seen

- On-call rotas covering 4 months in length showed the highest overall improvement on 2017, up 8% at 56%.
- Attendance at 40 outpatients clinics by the end of CMT up 7% to 28%.
- Rotas being published 6 weeks in advance 56% (+8%).
- 69% shifts patterns allowing attendance at post-take ward rounds.
- Opportunity to have re-ARCP review (79%).

3.3 ARCP outcomes

Fig 33 Proportion of outcome 5s by deanery / LETB proportion – CMT
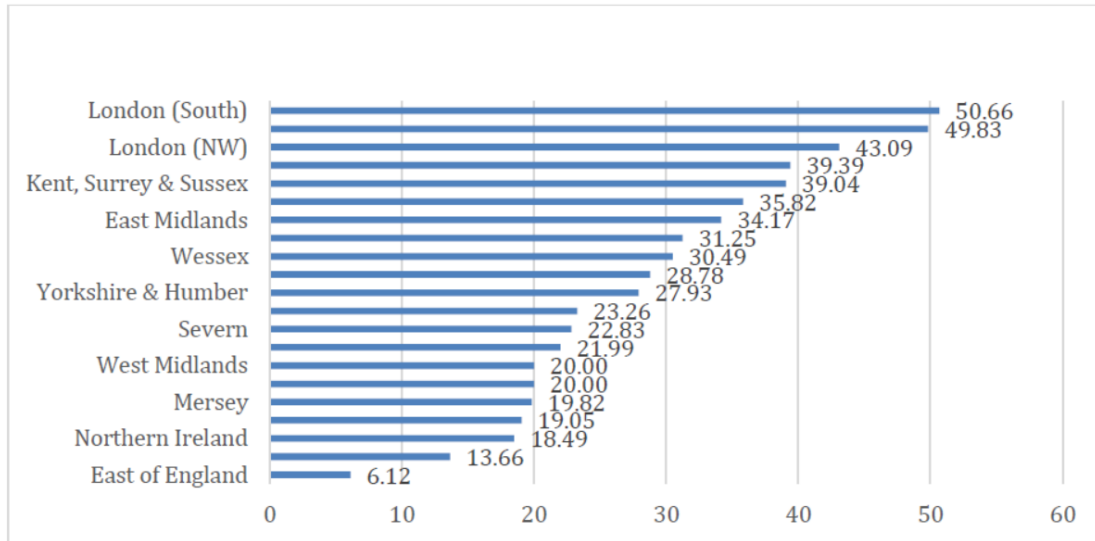
Fig 34 Reasons for reported outcome 5s – CMT
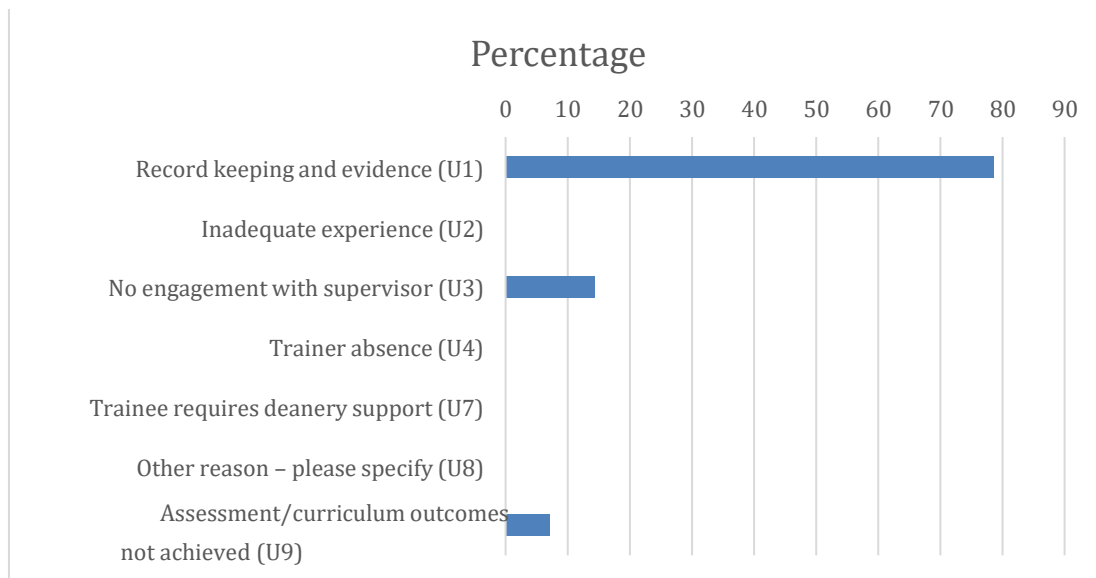
There was a wide variation in the proportion of outcome 5s awarded by deanery/LETB (6.1-50.7%). The reasons for outcome 5s are not reported by the GMC so JRCPTB portfolio data was reviewed. Although the numbers of outcomes do not correlate directly between the two datasets, in most cases the outcome was due to unsatisfactory record keeping/evidence (U1) on trainee's e-portfolios. In a small number of cases, lack of engagement with supervisors (U3) and non-achievement of curriculum outcomes was noted.

Fig 35 Proportion of outcome 5s by deanery/LETB proportion – HST
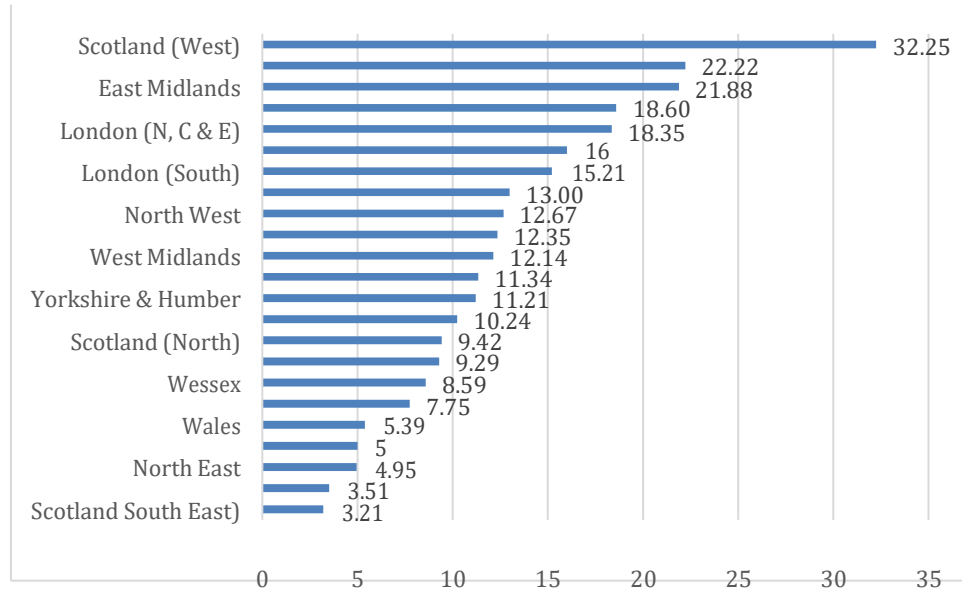
Fig 36 Reasons for reported outcome 5s in HST by deanery/LETB
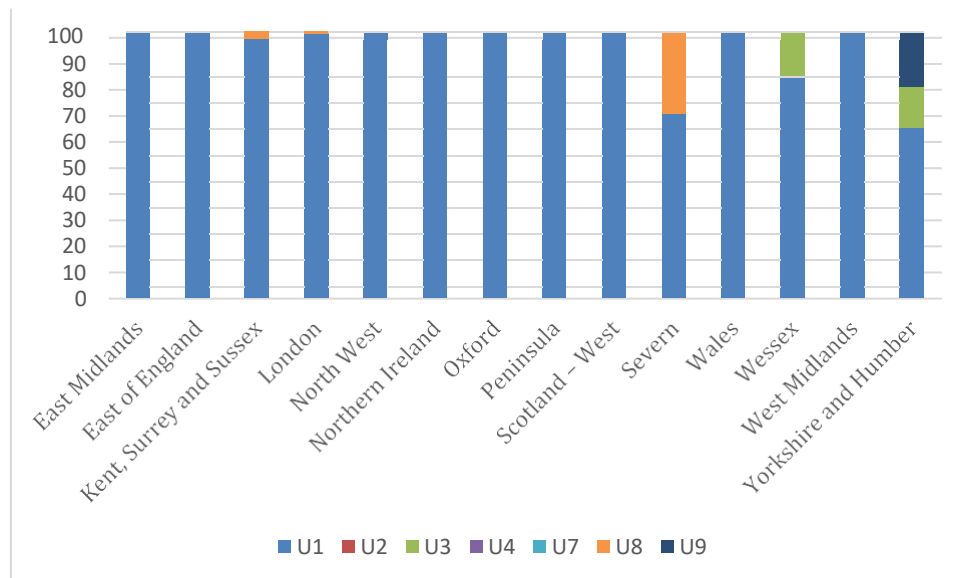
The proportion of outcome 5s awarded in HSTs were variable by deanery / LETB (3.2%–32.2%).

In most cases, the outcome 5s were due to U1 (unsatisfactory record-keeping/evidence) on trainee's e-portfolios.

3.4   MRCP outcomes

The MRCP pass rates by ethnicity and place of graduation are shown in Fig 37 and Table 18.

Fig 37 MRCP (UK) outcomes – Pass rates by ethnicity (2016–18)
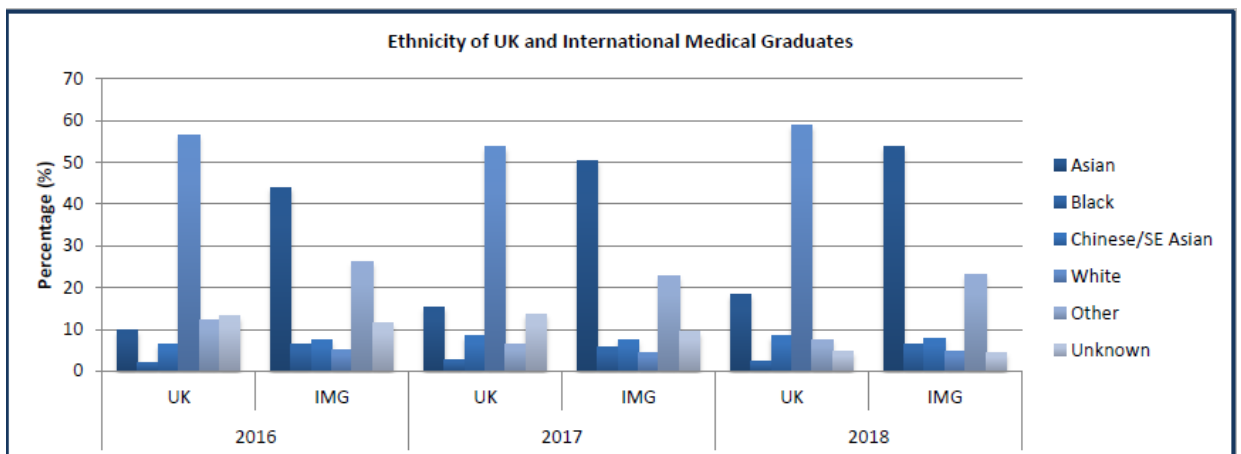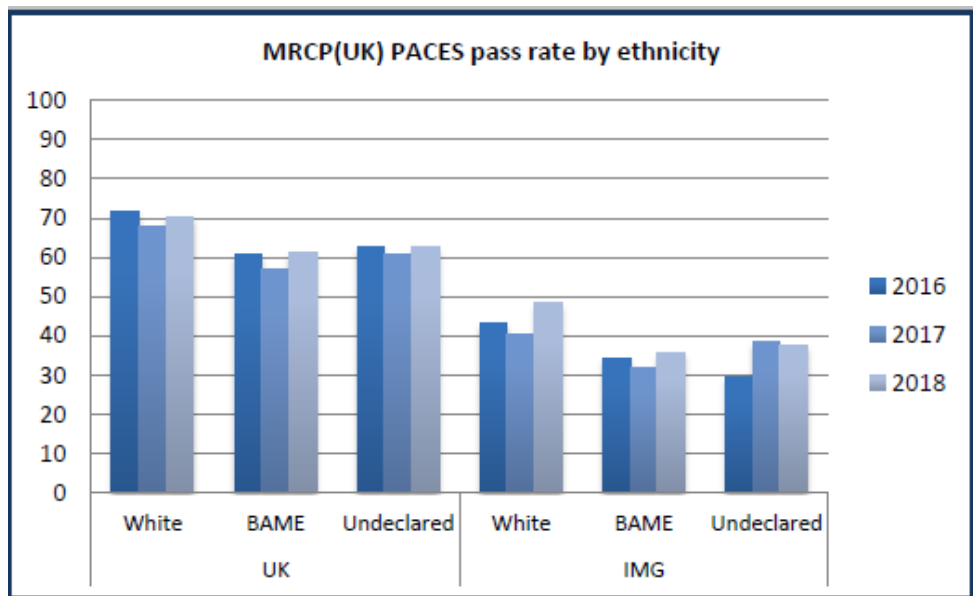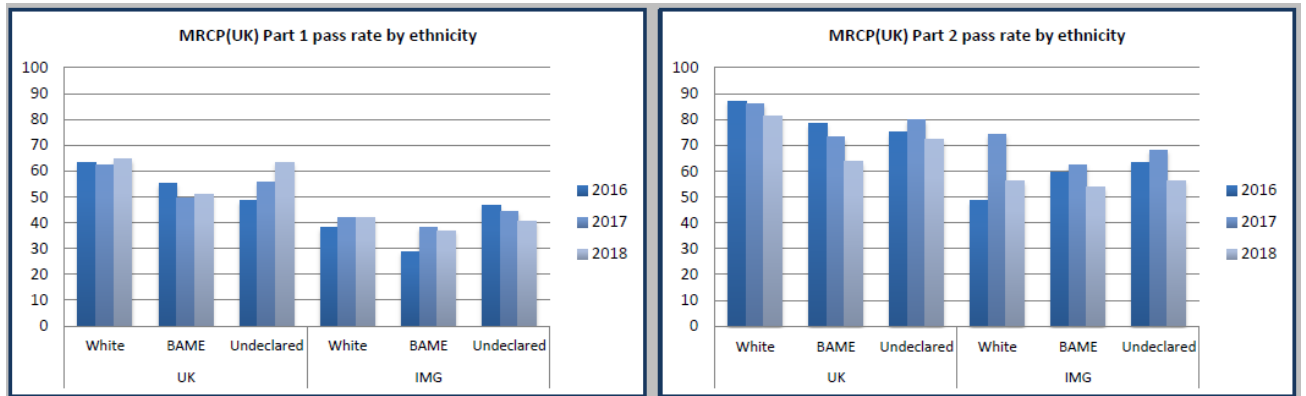
Table 18 MRCP pass rates by ethnicity 2014–18

Pass rates by Ethnicity UKG	2014	2015	2016	2017	2018	Difference	
Part 1-White	58.9	64.0	63.0	62.3	64.6	→	2.23
Part 1-BAME	49.2	42.5	55.2	49.3	50.8	→	1.48
Part 1-Undeclared	46.1	50.4	48.4	55.8	63.3	↑	7.52
Part 2-White	93.6	88.6	87.1	86.2	81.4	↓	-4.84
Part 2-BAME	83.8	74.1	78.4	73.0	63.6	↓	-9.45
Part 2-Undeclared	84.3	79.0	75.0	79.8	72.3	↓	-7.54
PACES-White	70.2	71.6	71.6	67.7	70.3	→	2.58
PACES-BAME	59.7	64.4	60.8	57.2	61.0	↑	3.88
PACES-Undeclared	64.3	60.6	62.5	61.0	62.5	→	1.47

Pass rates by Ethnicity IMG	2014	2015	2016	2017	2018	Difference	
Part 1-White	40.5	41.3	38.0	41.8	41.9	→	0.08
Part 1-BAME	36.9	38.6	28.8	38.2	36.9	→	-1.22
Part 1-Undeclared	48.6	48.1	46.7	44.5	40.6	↓	-3.95
Part 2-White	73.8	75.7	48.4	74.3	56.1	↓	-18.21
Part 2-BAME	63.6	63.3	59.6	62.4	53.8	↓	-8.67
Part 2-Undeclared	72.0	71.7	63.3	68.2	56.3	↓	-11.91
PACES-White	36.4	50.7	43.2	40.5	48.3	↑	7.76
PACES-BAME	34.3	31.8	34.3	31.8	35.7	↑	3.84
PACES-Undeclared	41.2	37.5	29.5	38.5	37.5	→	-0.94

Ethnicity UKG	2014	2015	2016	2017	2018	Difference	
Asian	12.3	13.0	9.7	15.3	18.3	→	2.98
Black	2.3	2.1	2.1	2.8	2.4	→	-0.38
Chinese/SE Asian	7.1	7.0	6.4	8.3	8.3	→	-0.02
White	57.0	57.0	56.5	53.6	58.9	↑	5.26
Other - Mixed	7.4	7.1	12.2	6.4	7.5	→	1.14
Unknown	13.9	13.9	13.1	13.6	4.6	↓	-8.98

Ethnicity IMG	2014	2015	2016	2017	2018	Difference	
Asian	53.1	54.1	44.0	50.5	53.8	↑	3.32
Black	8.3	7.6	6.3	5.6	6.4	→	0.79
Chinese/SE Asian	7.4	7.2	7.3	7.5	7.8	→	0.37
White	5.7	5.0	4.9	4.4	4.7	→	0.32
Other - Mixed	12.0	12.4	26.1	22.7	23.0	→	0.35
Unknown	13.5	13.7	11.4	9.4	4.2	↓	-5.15

The MRCP pass rates are significantly lower in the ethnic minority groups and this is most notable in the PACES exams. The international medical graduates (IMG) performance is lower when compared with the UK graduates. The overall performance remains consistent with previous data. The pass rate for part 2 exam decreased for UK and IMGs.

The MRCP pass rates by gender are shown in Table 19.

Table 19 MRCP (UK) outcomes – Pass rates by gender (2012–16)

Pass rates by Gender UK	2014	2015	2016	2017	2018	Difference
Part 1 - Male	58.2	65.1	62.1	63.0	61.7	-1.35
Part 1 - Female	51.3	56.3	57.9	52.7	58.4	5.69
Part 2 - Male	88.3	84.5	85.8	82.0	78.4	-3.57
Part 2 - Female	90.3	83.0	80.9	80.5	70.7	-9.77
PACES - Male	64.0	65.5	62.9	61.9	63.1	1.22
PACES - Female	68.5	70.4	69.8	65.5	69.3	3.84

Pass rates by Gender IMG	2014	2015	2016	2017	2018	Difference
Part 1 - Male	40.4	41.6	37.5	42.8	39.8	-3.02
Part 1 - Female	36.5	38.1	35.6	34.0	34.8	0.88
Part 2 - Male	65.8	66.9	62.4	64.7	54.8	-9.81
Part 2 - Female	64.2	62.6	57.9	62.2	53.0	-9.19
PACES - Male	31.2	28.9	30.2	28.9	32.6	3.63
PACES - Female	43.0	43.9	41.3	45.1	44.6	-0.45

The overall performance in the Part 2 exam decrease for male and female for both UK and international candidates. The female IMGs performance is lower for Part 1 and male IMG performance is lower for PACES.

The specialist certificate exam (SCE) pass rates of UK graduates and by ethnicity and primary medical qualifications (PMQ) are shown in Figs 38 and 39 and Table 20.

Fig 38 UK trainee pass rates by SCE (2016–18)
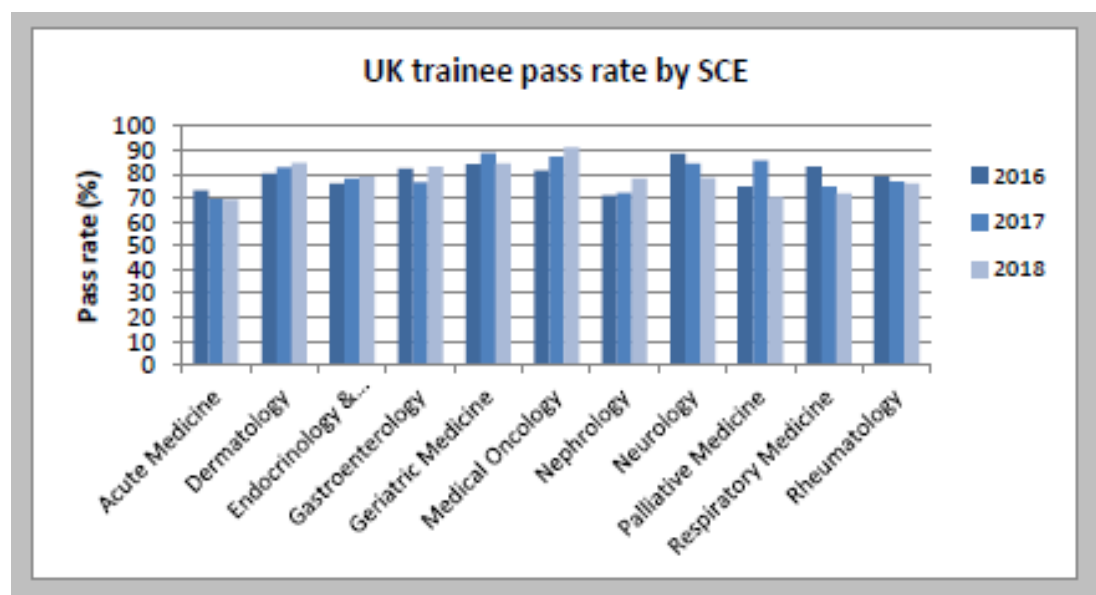
Fig 39 SCE pass rates by PMQ and ethnicity (2014–18)
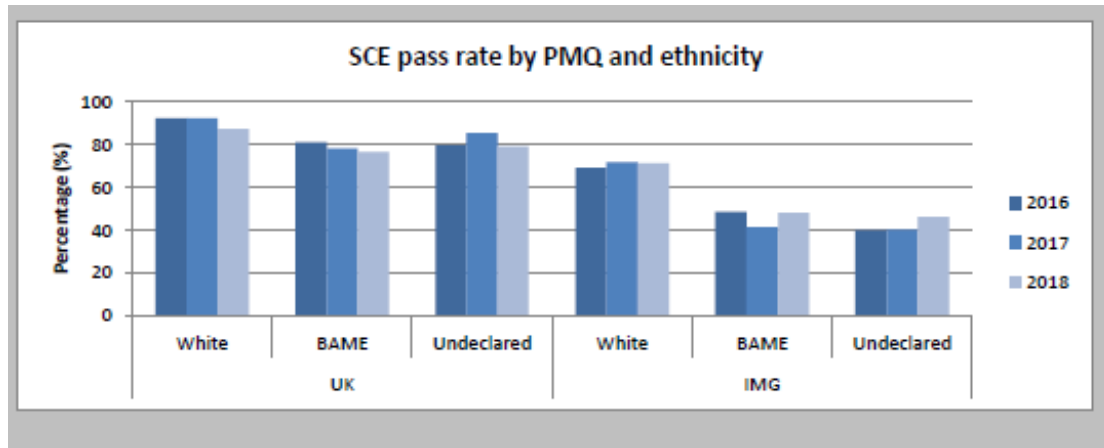
Table 20 SCE pass rates by ethnicity for UK graduates and IMGs (2014–18).

IMG pass rates by ethnicity	2014	2015	2016	2017	2018	Difference
SCE-White	62.7	73.0	69.1	71.8	71.3	-0.52
SCE-BAME	40.7	41.9	48.5	41.5	48.0	6.49
SCE-Undeclared	46.2	43.9	39.9	40.2	46.2	5.95
UKMG pass rates by ethnicity	2014	2015	2016	2017	2018	Difference
SCE-White	88.0	91.0	92.2	92.2	87.3	-4.90
SCE-BAME	76.3	78.9	81.2	78.2	76.3	-1.85
SCE-Undeclared	83.6	80.9	79.7	85.5	79.2	-6.33

The SCE pass rates for UK trainees remained stable for five SCEs, decreased for three and increased for three exams. The British Asian and minority ethnic group has a lower pass rate compared with the UK white graduates. The IMGs have significantly lower pass rates when compared with the UK graduates particularly the British white group. There has been some variability noted in the last few years.

3.5   Penultimate year assessments

Fig 40 Satisfactory educational supervisor report at PYA (2016/2017)
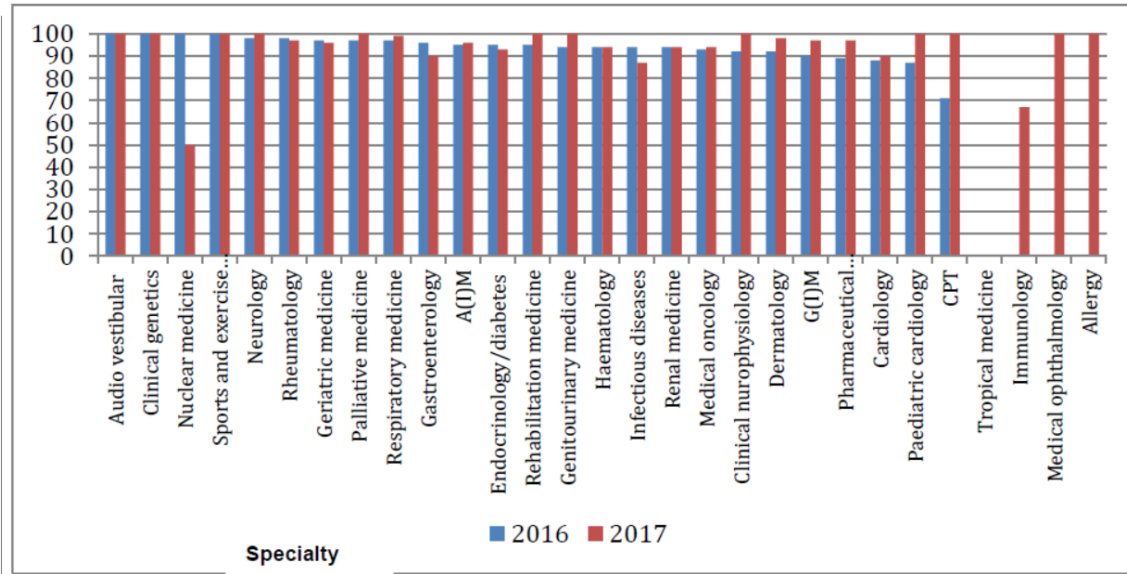
The average percentage of trainees across the 29 specialties who had satisfactory educational supervisor reports at the time of PYA was 91%. There was significant variability between specialties.

Fig 41 Attendance at management course at the time of PYA (2016/2017)
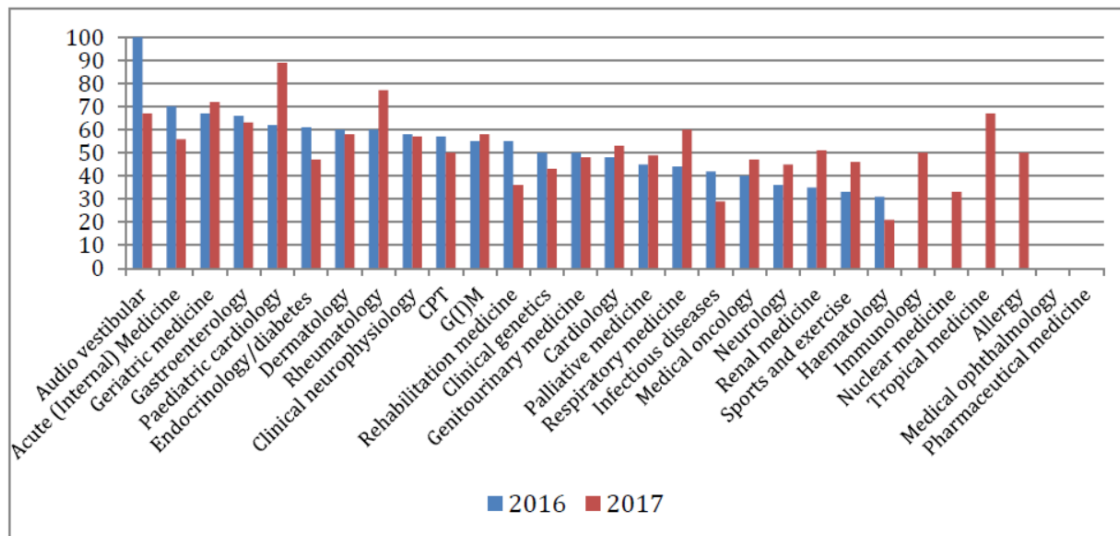
The average percentage of trainees presenting for PYAs who had evidence of having attended a management course was 52.6%. Significant variability was noted with 89% attendance in paediatric cardiology, 56% in acute medicine and 21% in haematology which was the lowest.

3.6 Equality and diversity data

Trainees are recruited into CMT and HST annually with two recruitment rounds. This recruitment is carried out by the specialty recruitment office (SRO) and coordinated by the RCP. Applicants are required to provide personal information which includes the nine protected equality and diversity (E&D) characteristics which are required to be requested and monitored as part of the provisions of the Equality Act, 2010.

Recruitment data from 2015 to 2018 was analysed for this report. The average age of all applicants in 2018 is 30 having been 29 between 2015–17.

The ratio of male to female applicants is shown in Fig 42.

Fig 42 Ratio of male / female applicants 2015/2018
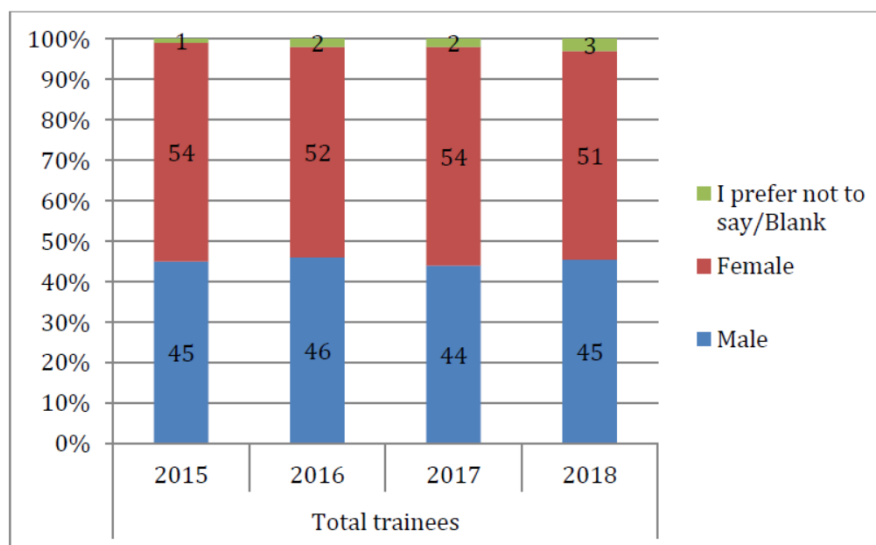
There is significant variability in the applicants by specialty and this is shown in Fig 43. The top female-dominated specialties included palliative medicine, clinical genetics, dermatology and GUM whereas cardiology, SEM, CPT and gastroenterology remained more the male-dominated specialties.

Fig 43 Ratio of female/male applicants by specialty in 2018
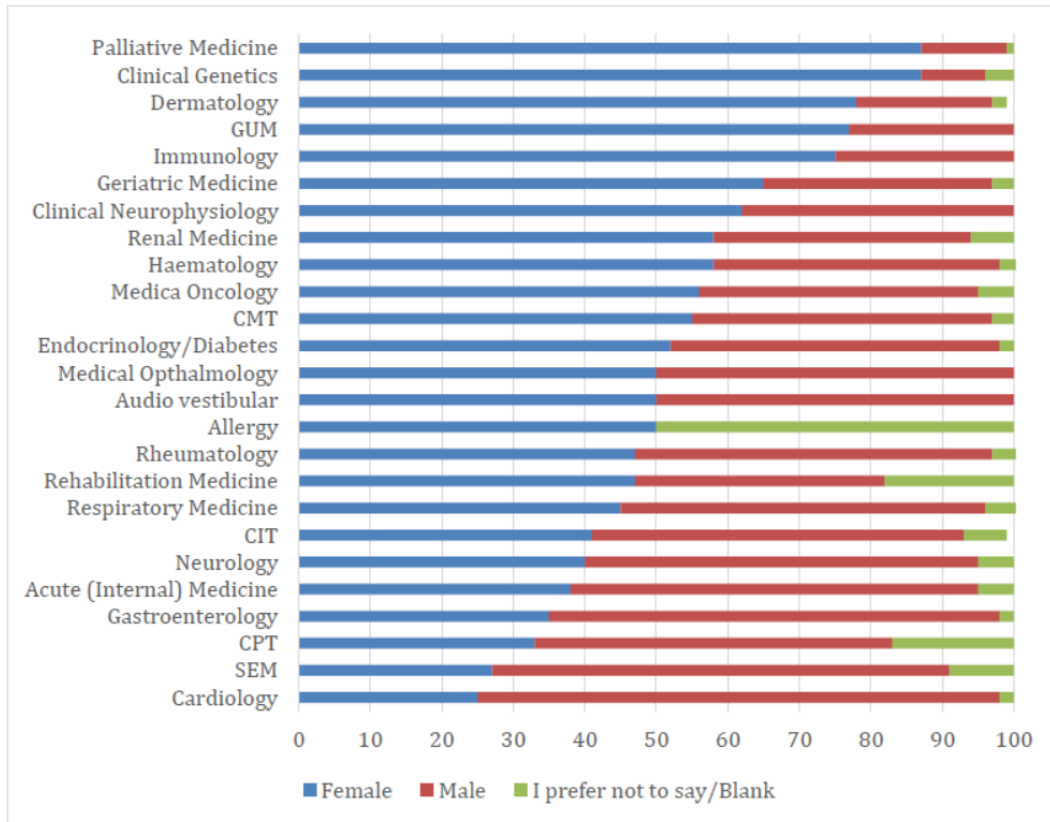
Fig 44 Ethnicity of all applicants in 2018
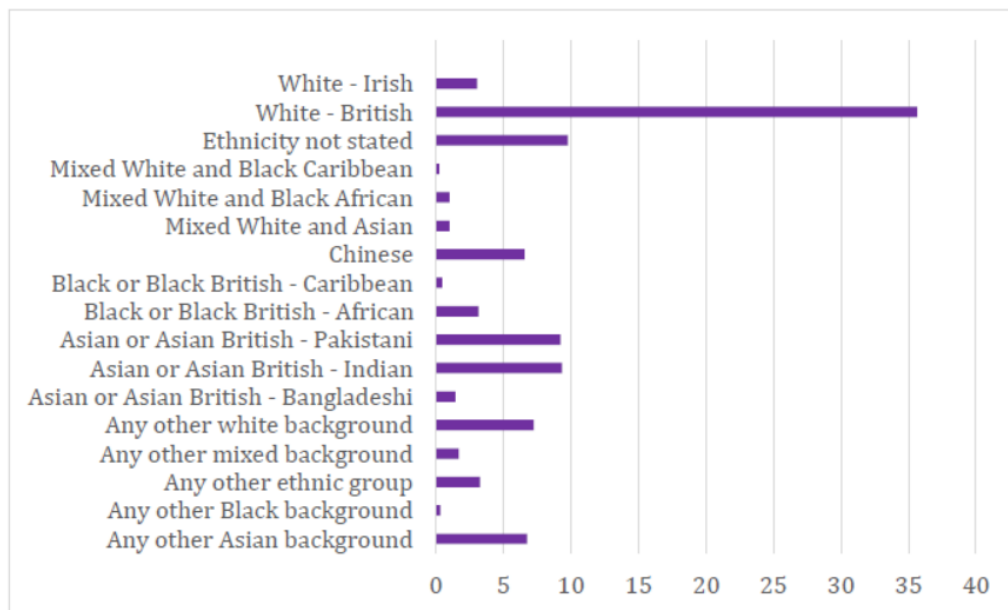
Of the total applicants in 2018, the top three ethnic groups were white British (35.6%) followed by Asian British Indian (9.3%) and then Asian British Pakistani (9.2%).

For the analysis of the ethnicity by specialty, some of the ethnic groups were merged. This comprised of, white (white Irish and British); Indo-Asian (Asian or Asian British, Indian or Pakistani, Bangladeshi, any other Asian; Chinese; Black, African/Caribbean (black, black British, African, Caribbean, any other black); mixed (mixed white and Asian, black African, black Caribbean, any other mixed); any other and not stated. There were differences noted in the ethnic mix of some specialties (Fig 45).

Fig 45 Ethnicity of applicants in 2018 by specialty
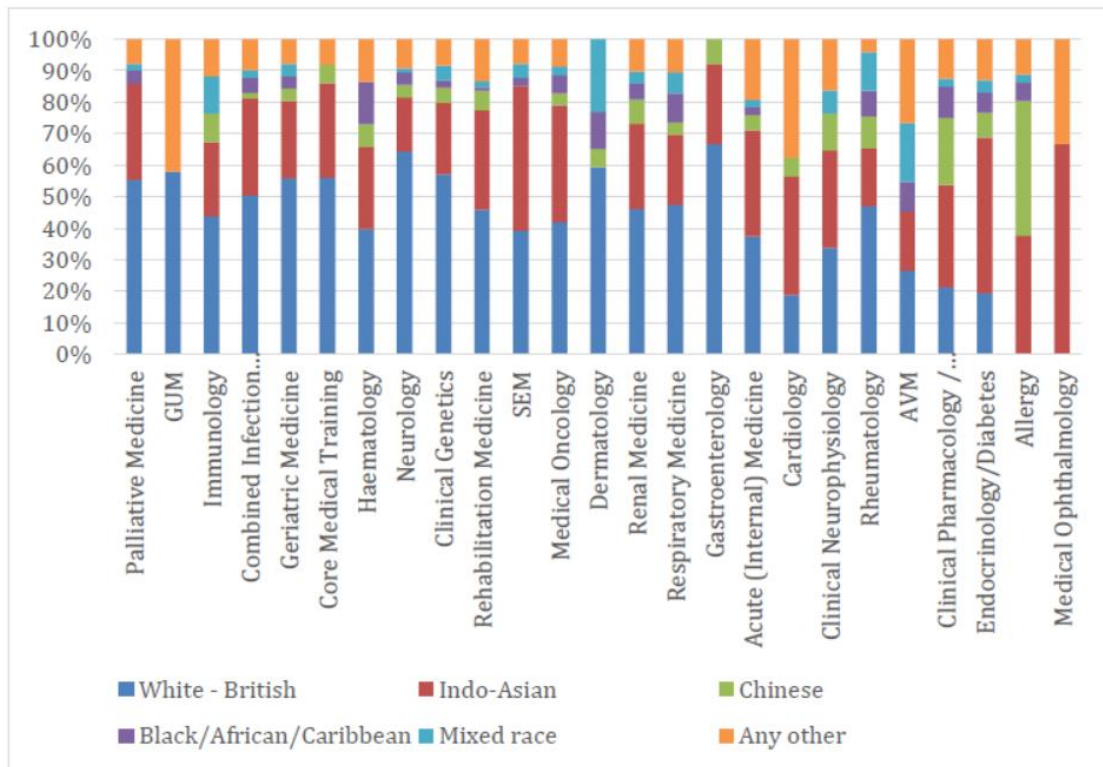
Fig 46 Less than full time (LTFT) applicants (2015–17)
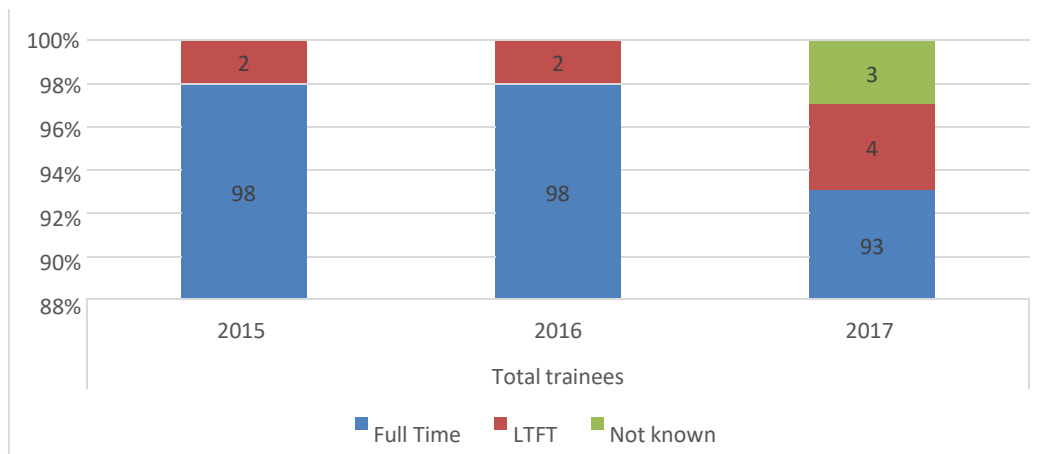
Fig 47 LTFT applicants by specialty in 2017
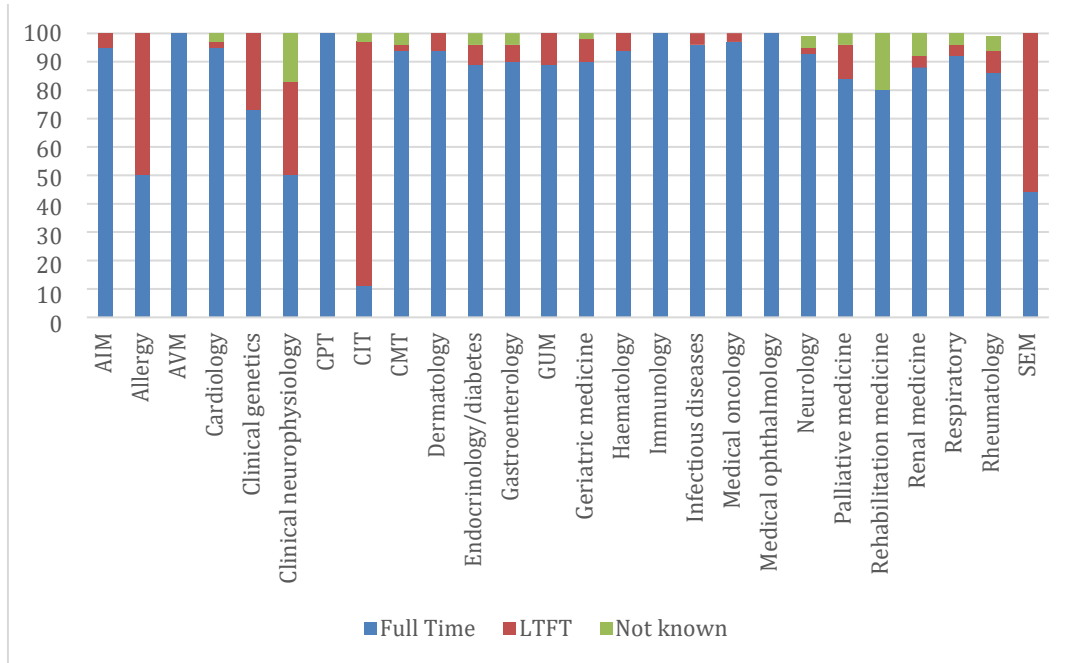
Fig 48 Applicants with a disability (2015–18)
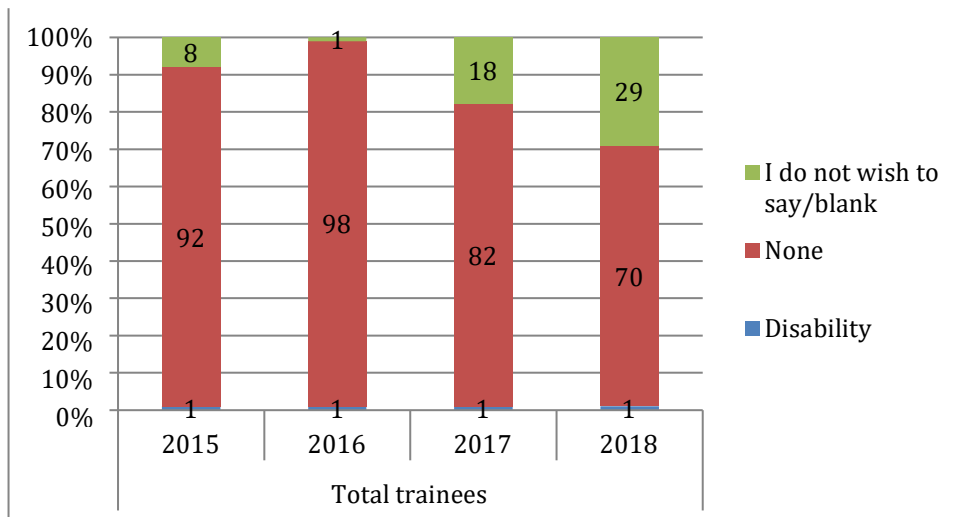
Fig 49 Applicants' sexual orientation (2015–17)
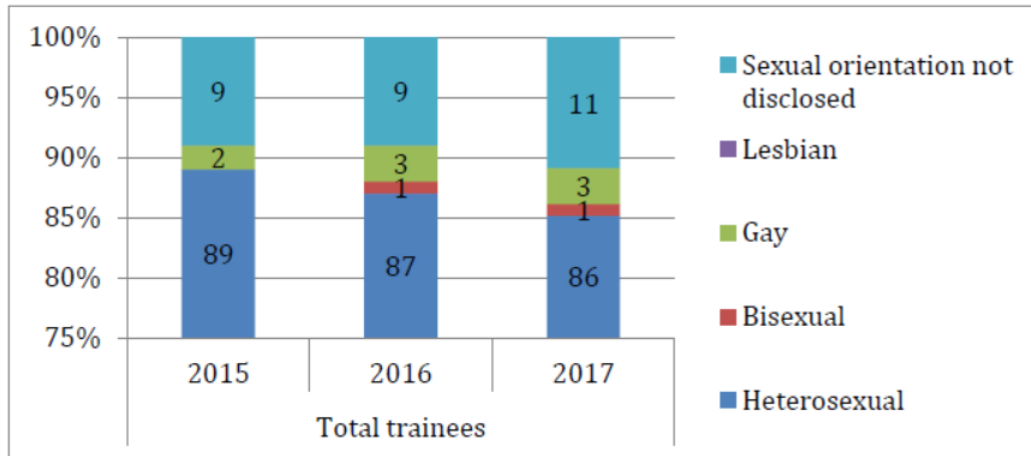
Fig 50 Applicants' marital status
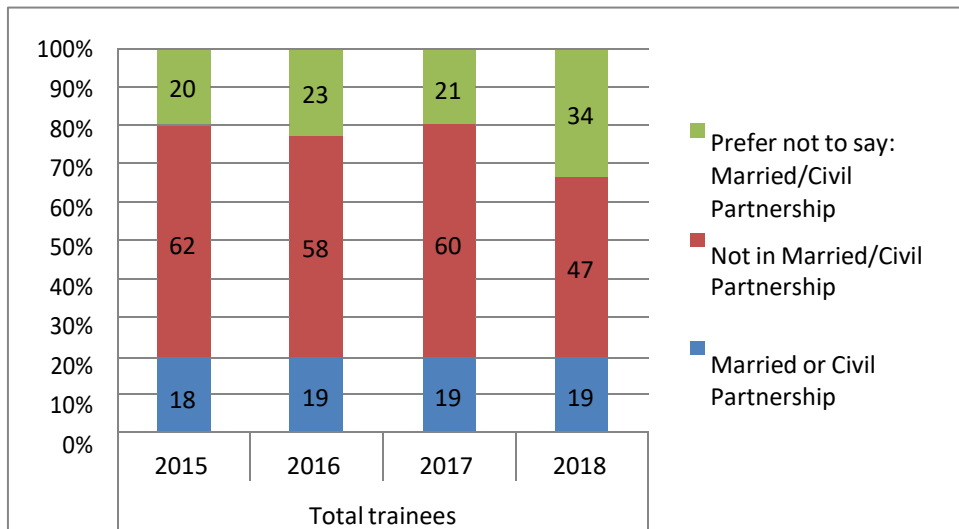
Fig 51 Applicants' religious beliefs
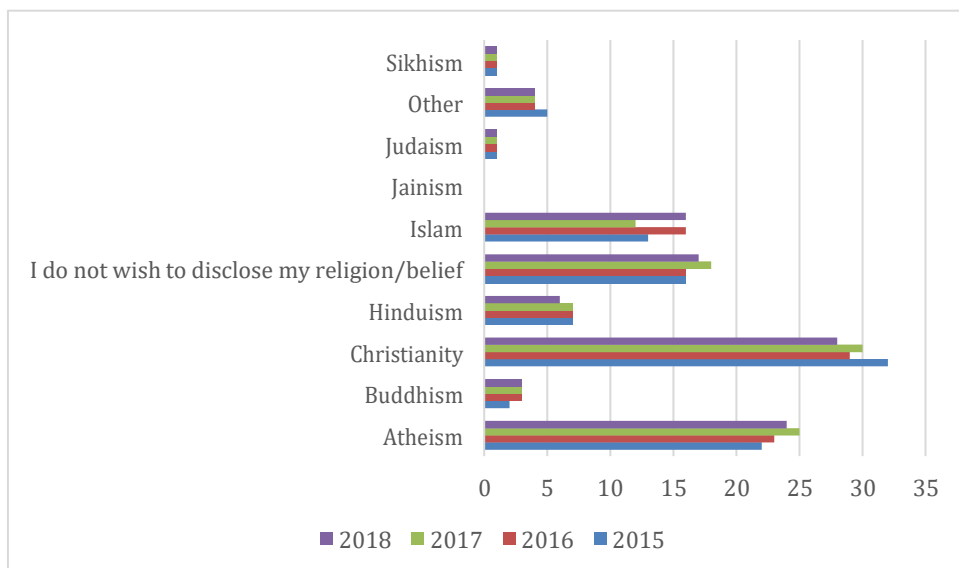
The ARCP outcome data was examined from an E&D perspective and this is shown in Figs 52–54.

Fig 52 Percentage of ARCP unsatisfactory outcomes by age
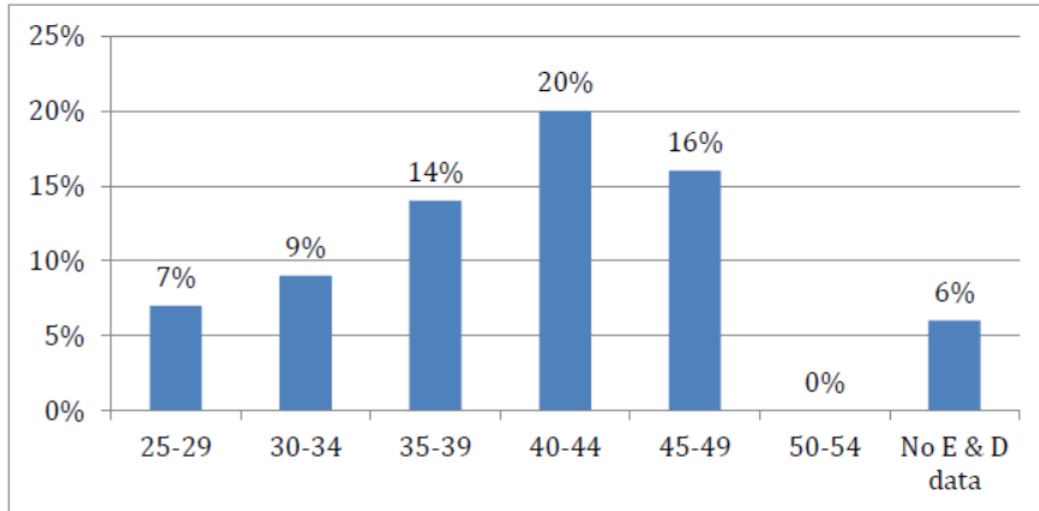
Fig 53 Percentage of ARCP unsatisfactory outcomes by gender
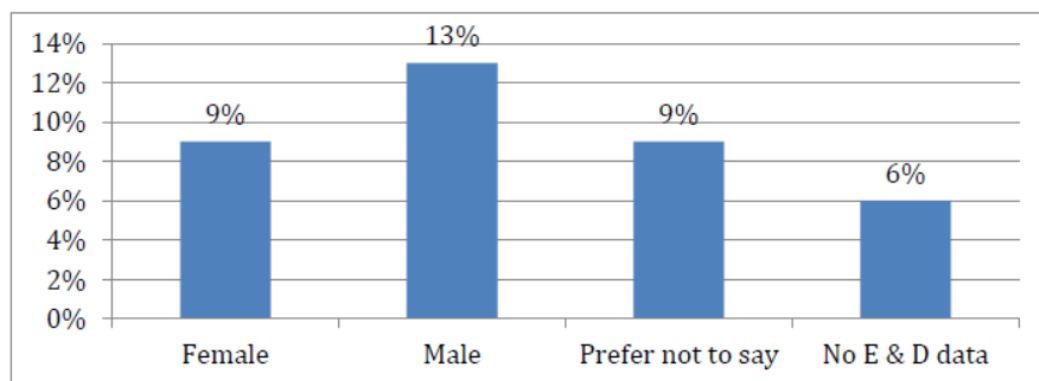
Fig 54 Percentage of ARCP unsatisfactory outcomes by ethnicity
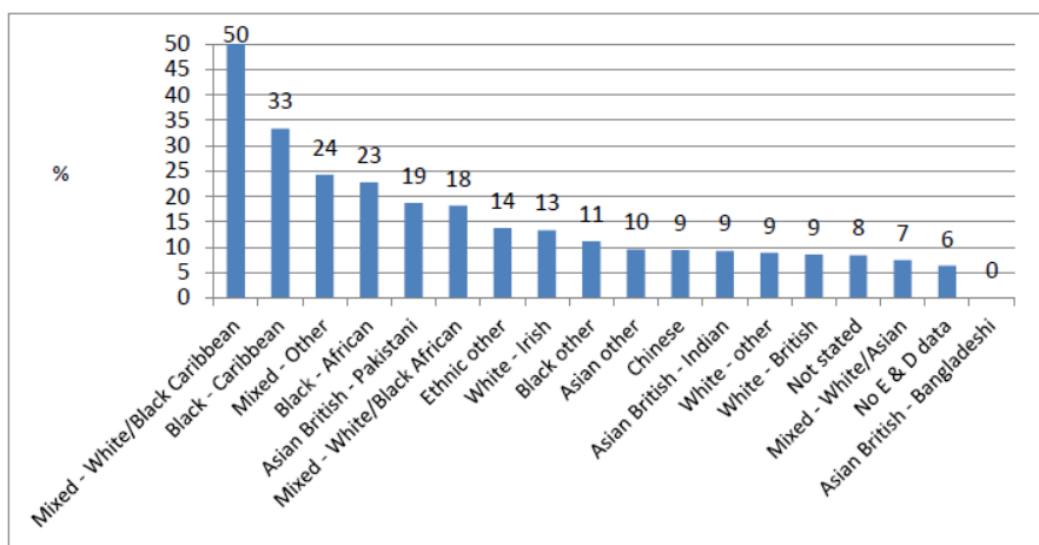
4.0 Theme 3: Supporting learners

The data sources used to inform this theme include the GMC NTS (generic and SSQ data), ARCP outcomes, HST census data and PYA reports. The data analysis from the GMC NTS and SSQs has been presented earlier in the report and will be referenced to where appropriate for this theme.

4.1   ARCP outcomes

Fig 55 Out of programme (OOP) ARCP outcomes by specialty
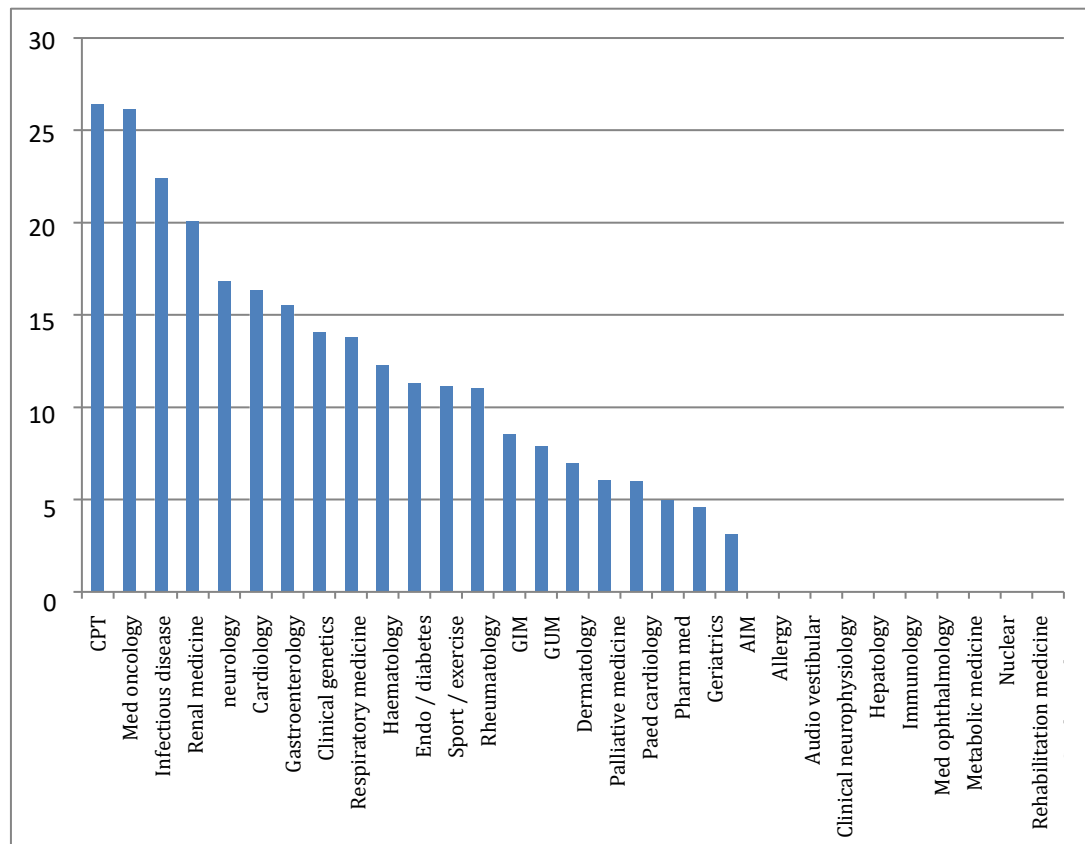
The ARCP out of programme (OOP) and HST census data highlighted the specialties which have more HSTs in academia. These included CPT, allergy, metabolic medicine, clinical genetics, neurology, CIT, renal and cardiology. The lowest proportion of HSTs in academia was in AIM and geriatrics (Figs 55 and 56).

4.2   HST census data

Fig 56 HSTs who are in academia by specialty
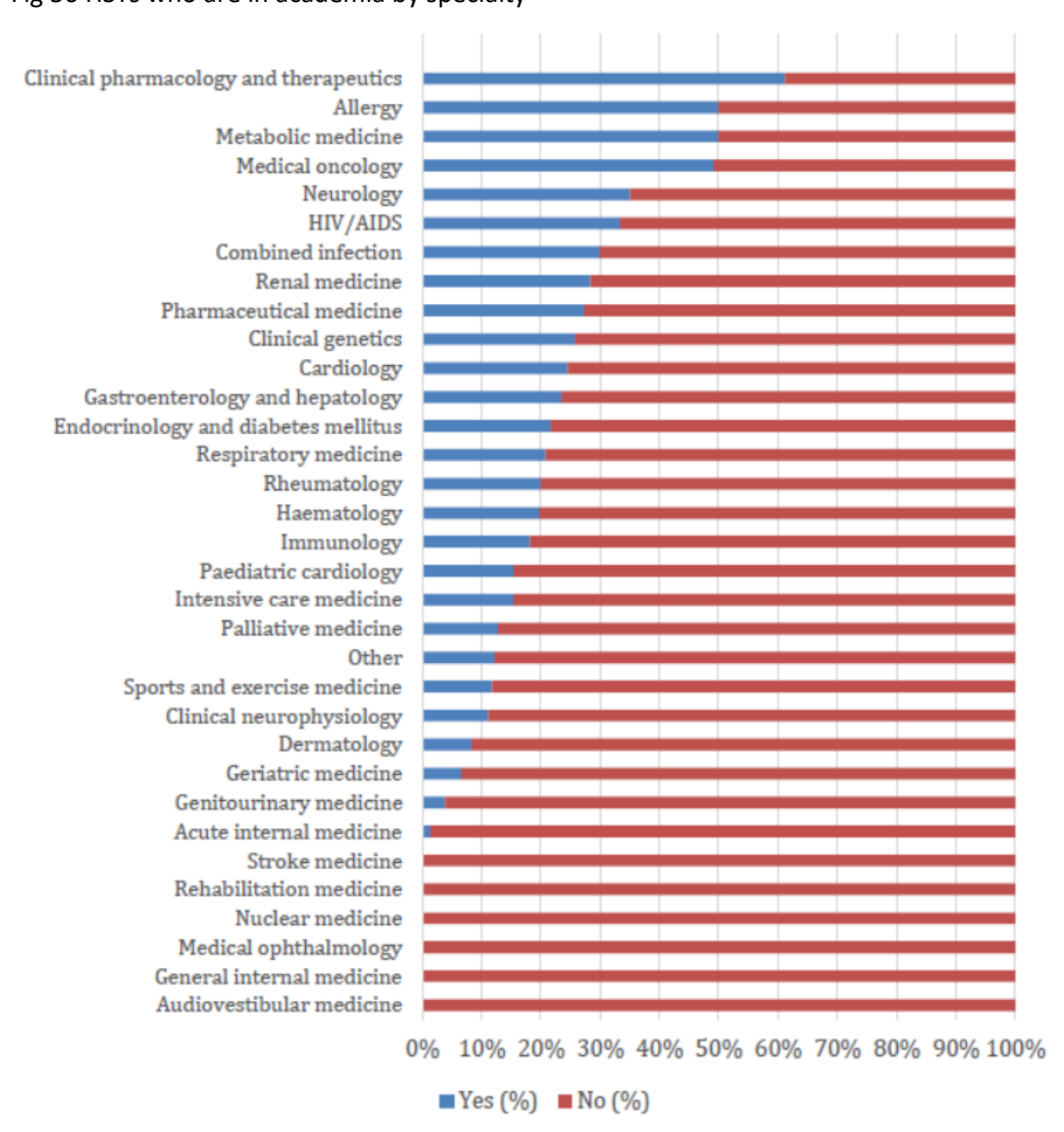
The overall satisfaction of HSTs in their main specialty and in the GIM component are shown in Figs 57 and 58.

Fig 57 Overall satisfaction of training in main specialty
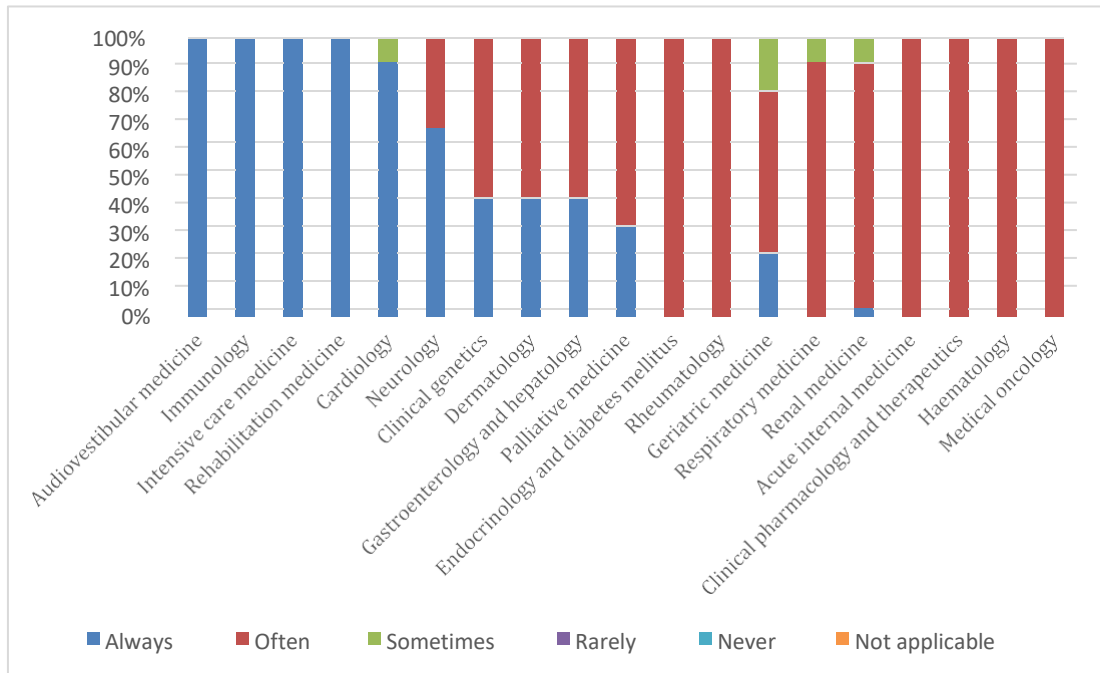
Fig 58 Overall satisfaction of training in GIM component
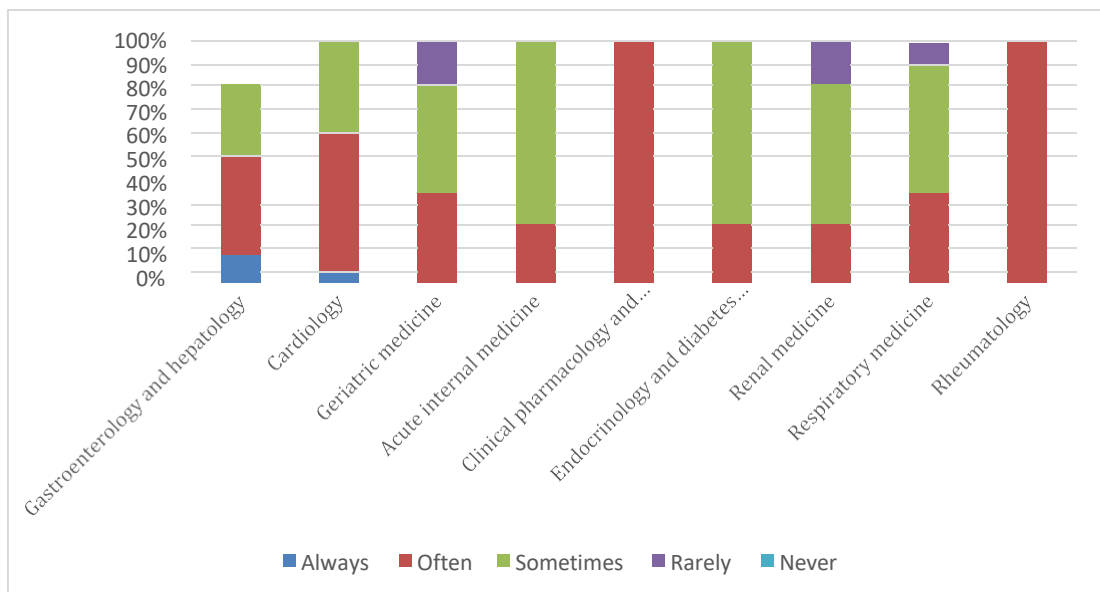
The overall satisfaction of training in the GIM component is poorer than the main specialty with higher proportion of responses where HSTs felt satisfied only sometimes or rarely.

4.3   Penultimate year assessments

Figs 59 Adequate research skills at PYA (2016/2017)
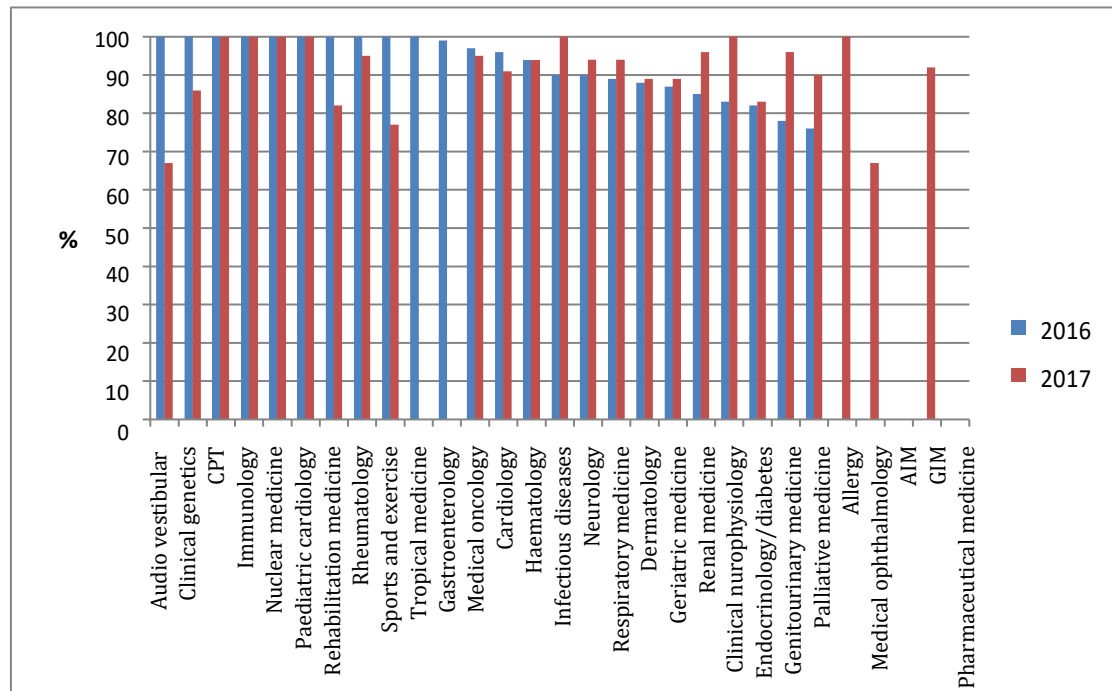
5.0 Theme 4. Supporting educators

The data sources used to inform this theme include the GMC NTS (generic and SSQ data), HST census data/new consultants / post-CCT survey, PYA reports and monitoring visit reports. The analysis from many of the datasets has been presented earlier in the report and will be referenced to where appropriate for this theme.

Data from the GMC trainer survey has also been analysed to augment the evidence for this theme.

5.1 Census data and new consultant (post CCT) survey

Data for the new consultant appointments in 2017–18 is shown in Figs 60–61.[7]

Fig 60 Consultant appointments 2017–18 by large specialty

Appointment of consultant physicians | By large specialty
Data for Scotland unavailable

Number of posts

Legend: Successful — Unsuccessful
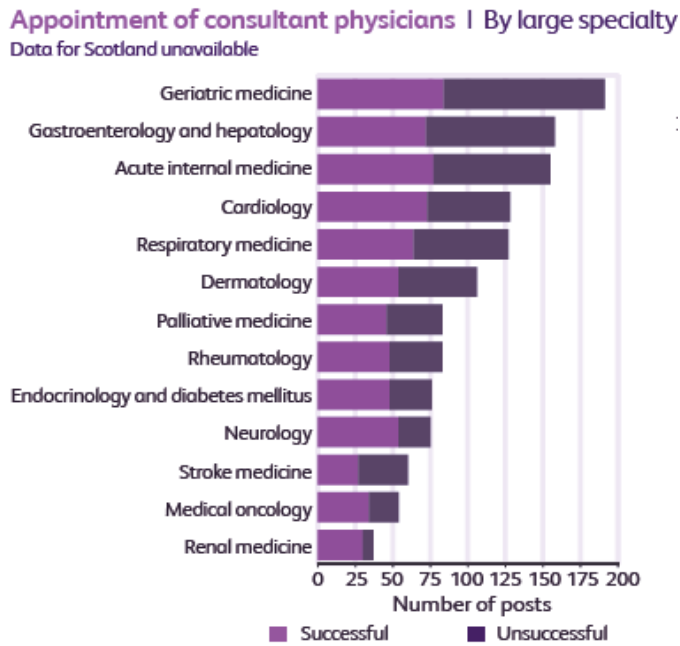
Fig 61 Consultant appointments 2017–18 by small specialty

Appointment of consultant physicians | By small specialty
Data for Scotland unavailable

Number of posts

Legend: Successful — Unsuccessful
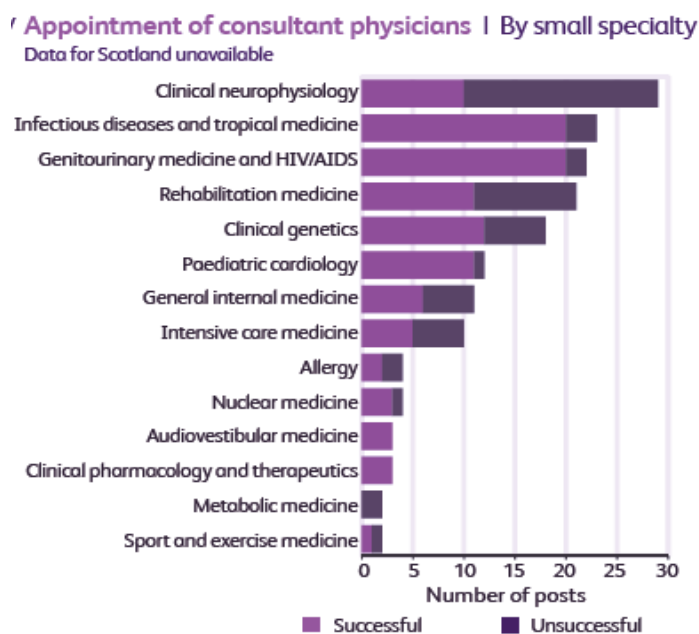
Fig 62 Mean PAs contracted and worked per week
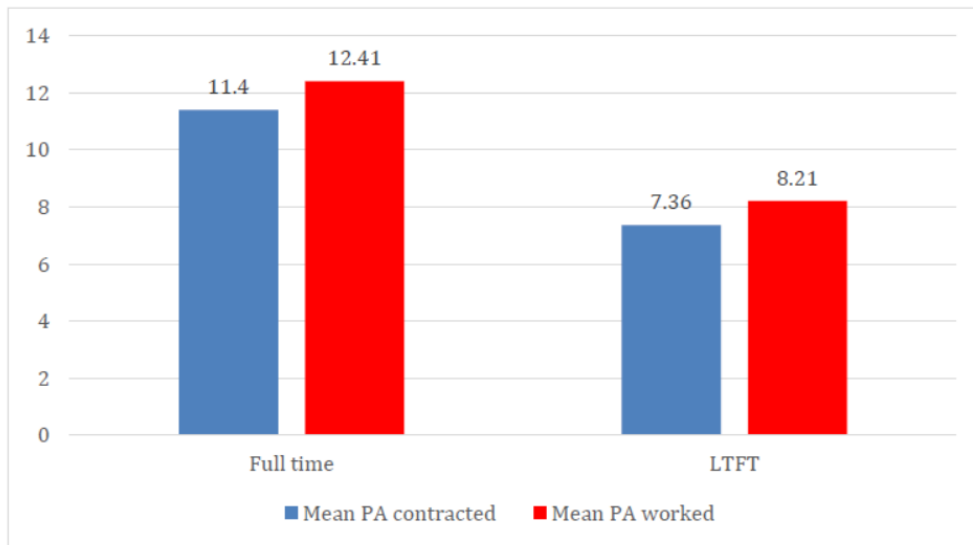
Fig 63 Mean PAs contracted and worked by specialty
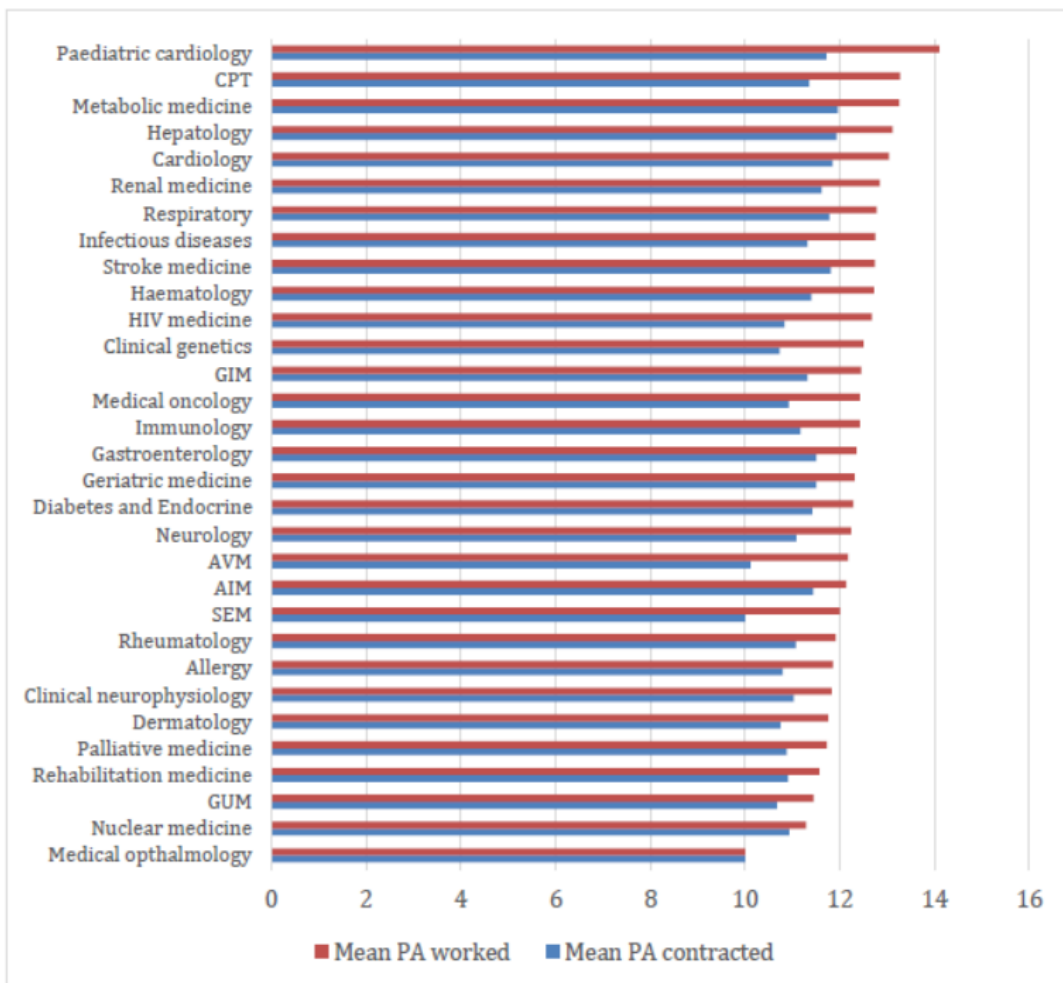
Fig 64 Frequency of HST rota gaps (from consultant census data)
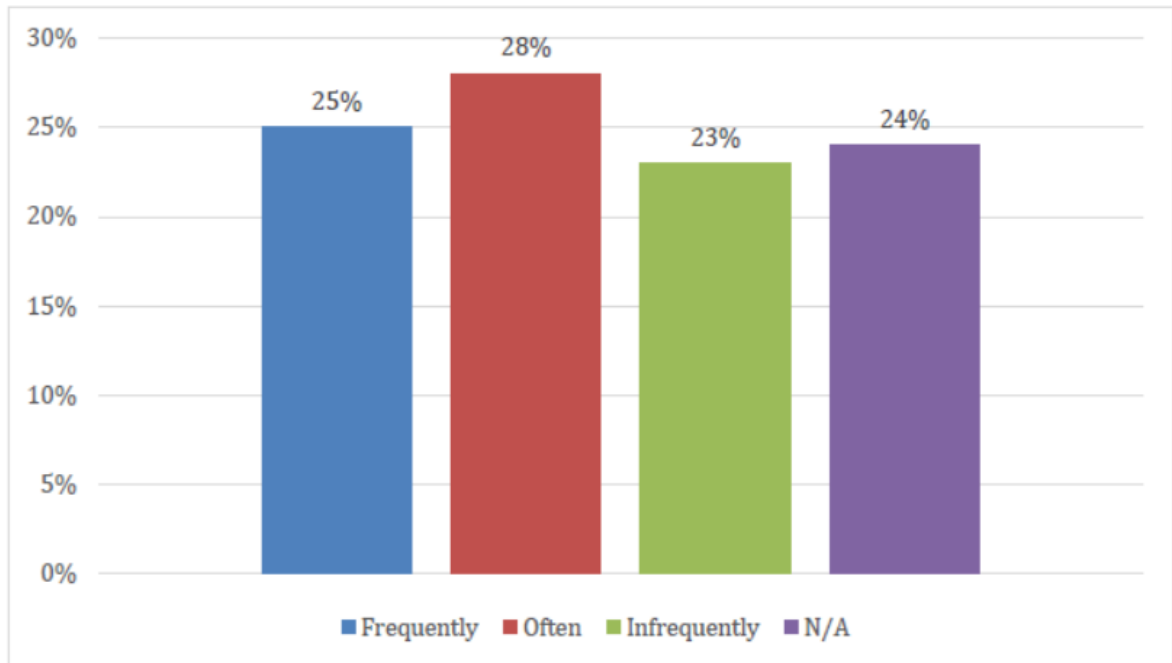
Fig 65 Impact of HST rota gaps (from consultant census data)
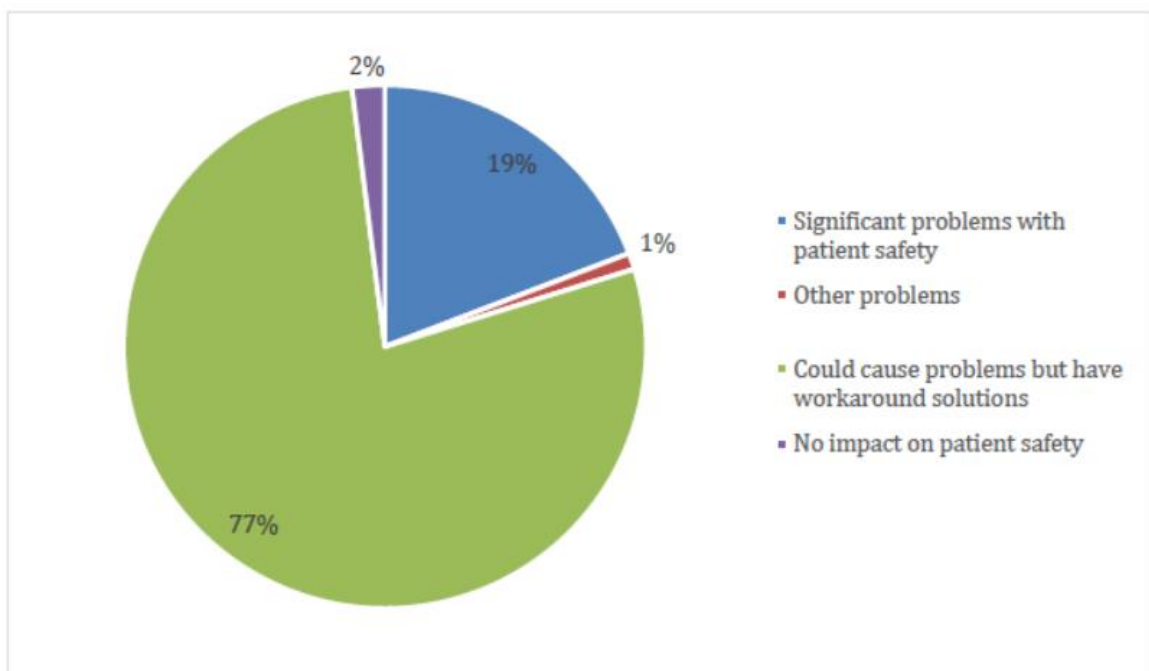
Fig 66 Consultant job satisfaction – specialty
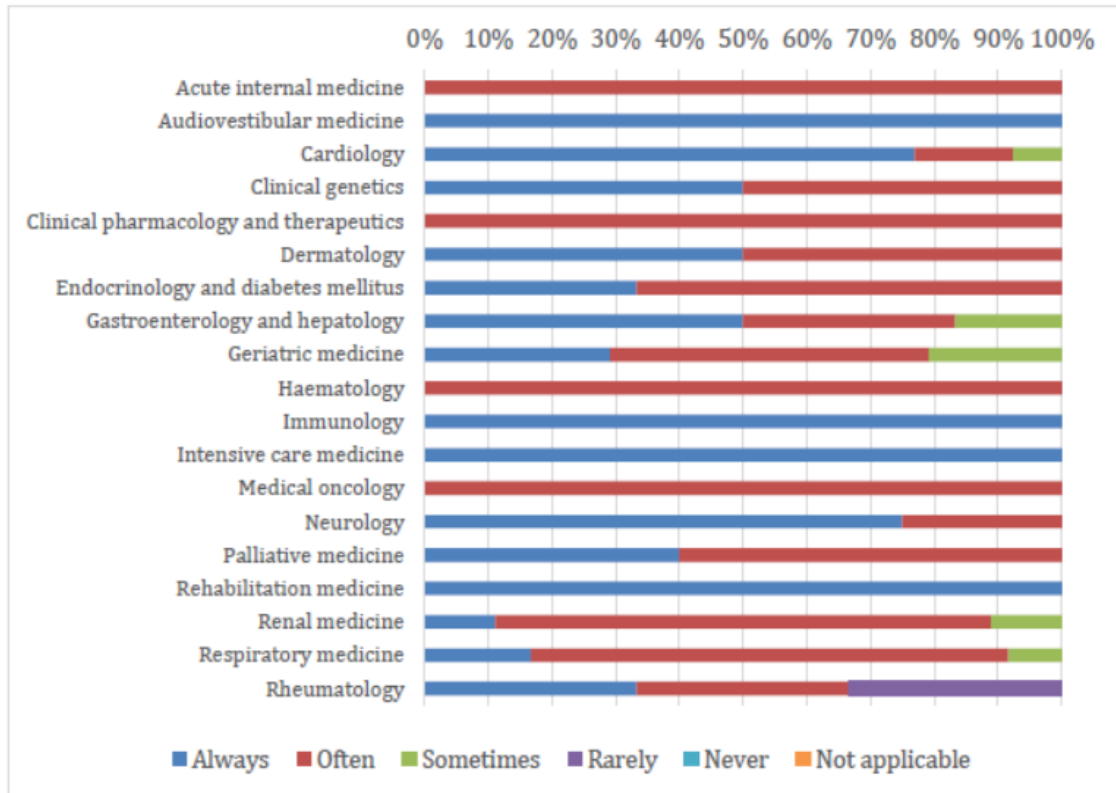
Fig 67 Consultant job satisfaction – GIM
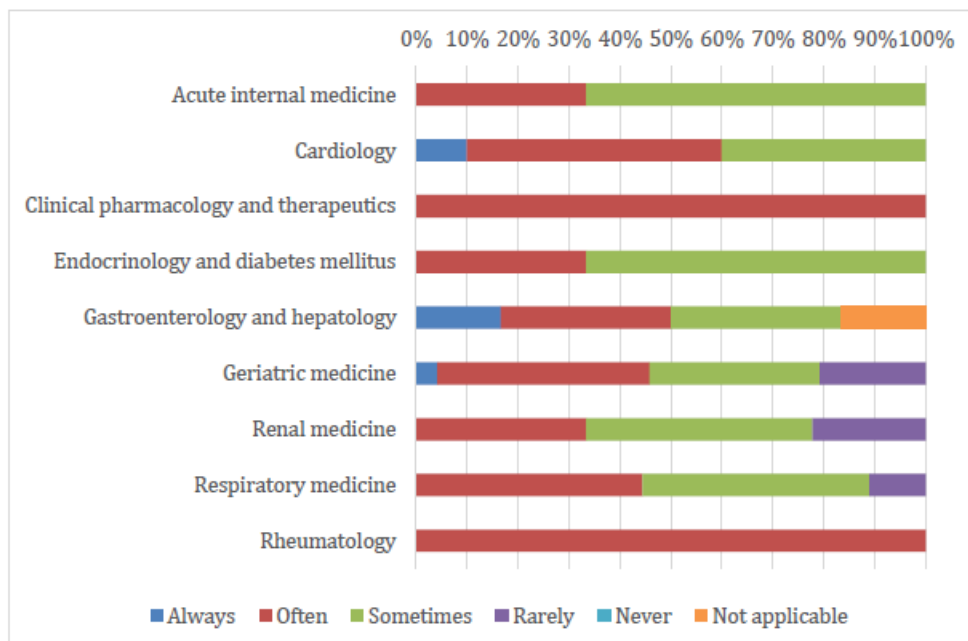
5.2   GMC national trainer survey

The GMC national trainer survey has been in place since 2017 and gathers feedback from trainers to help local education providers and deaneries / LETBs to evaluate and improve the quality of training. The trainer survey is comprised of a set of generic questions which evaluates trainers' perceptions of training providers' compliance with the GMC standards. The questions cover a range of domains including overall satisfaction, workload, curriculum coverage, educational governance, handover, resources for trainers, rota design, supportive environment, support for trainers, time for training and trainer development.

5.2.1   GMC national trainer survey by specialty

Trainers from 29 HMT specialties participated in the 2017 and 2018 GMC trainer survey. The average response rate across all 29 specialties was 72% with the range being 45 (55–100%). A breakdown of the response rate for each specialty is shown in Fig 68.

Fig 68 GMC national trainer survey – response by specialty
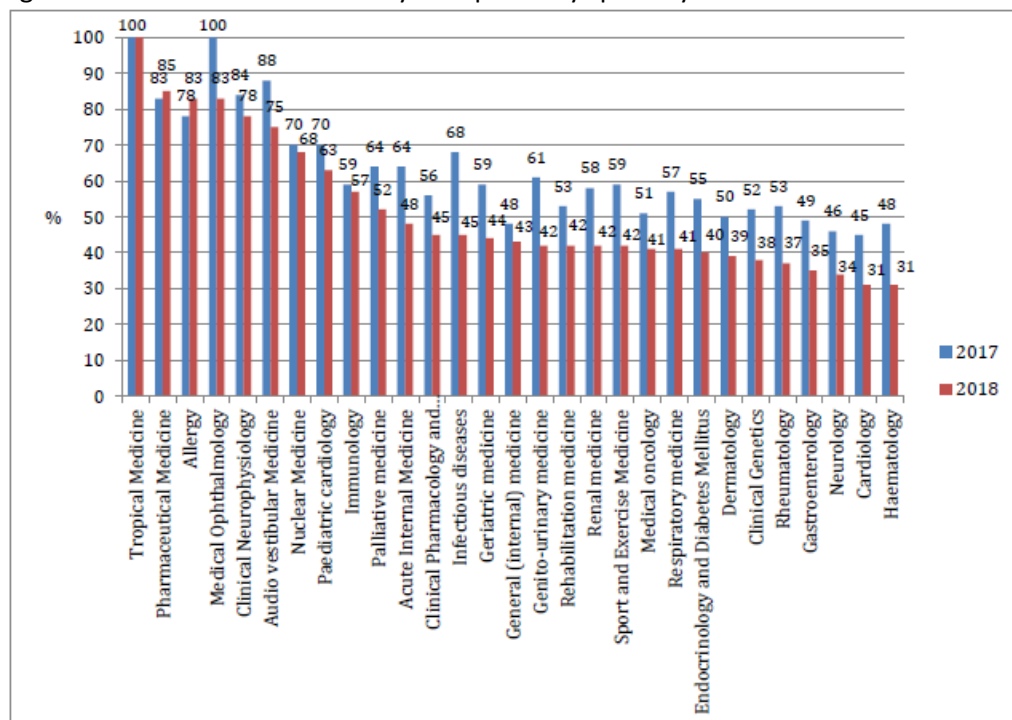
The distribution of red and green flags by domain in the top five specialties are shown in Figs 69 and 70.

Fig 69 Distribution of red flags by domain in the top five specialties
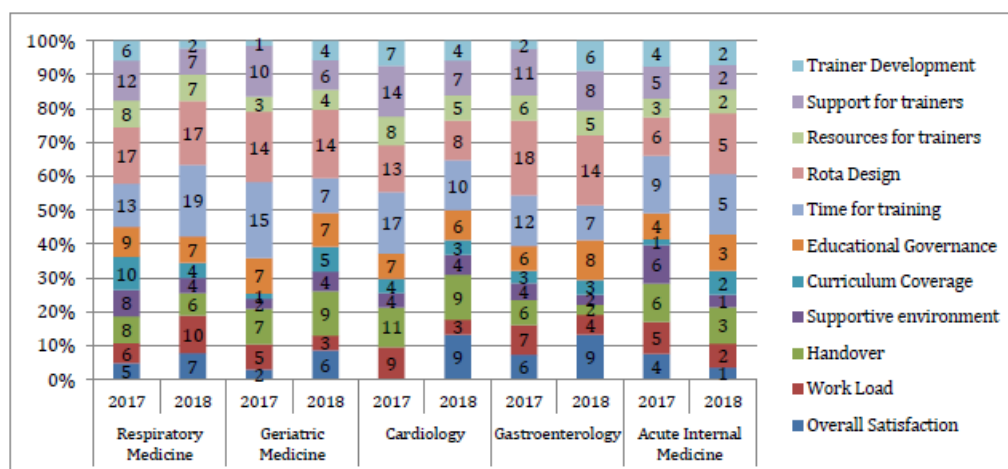
Fig 70 Distribution of green flags by domain in the top five specialties
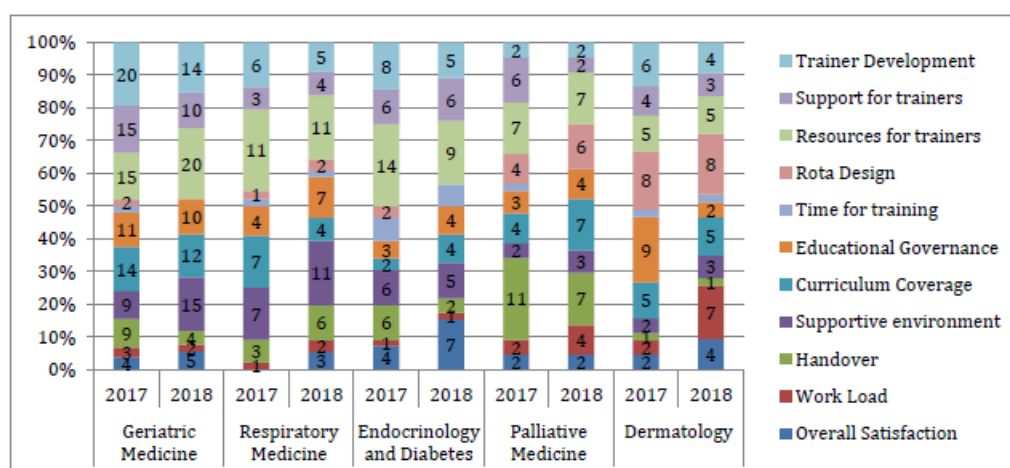
639 trust red flags were recorded across the 29 HMT specialties in 2017. Seven of the ten specialties with the highest number of red flags were specialties contributing to the acute take. In 2018, the number of red flags reduced by 180 to 461 (-28%). Red flags were lower in 2018 in all specialties except geriatric medicine, GIM and dermatology. The number of red flags recorded for each specialty in is shown in Fig 71.

Fig 71 Trust red flags by specialty (2017–18)
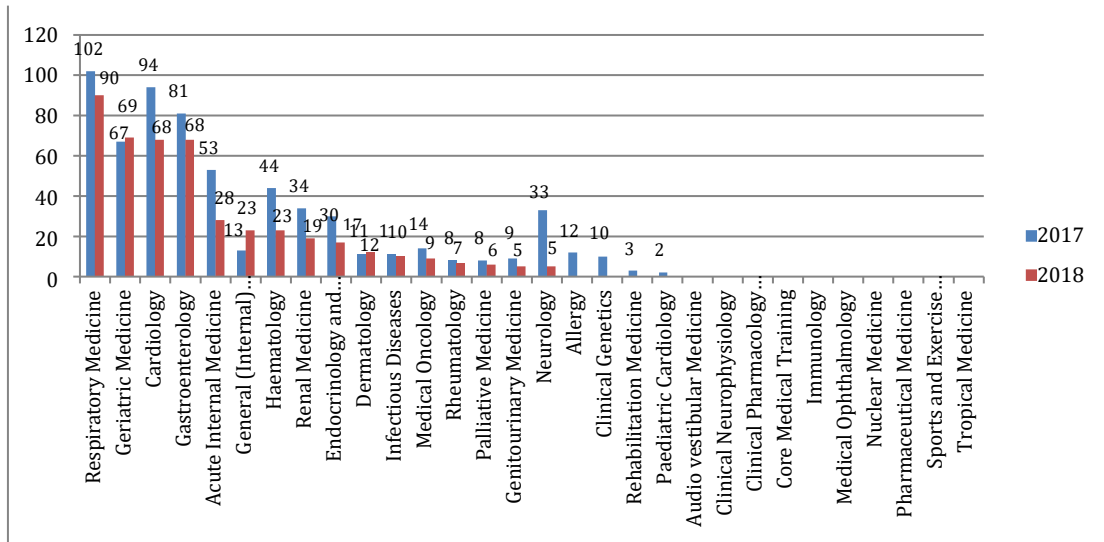
5.2.2 GMC trainer survey – red flags

The overall number of red flags have reduced in all domains (Fig 72). Support for trainers saw the highest reduction by percentage (-48%) followed by resources for trainers (-41%) and trainer development (-38%). The number of red flags recorded for each specialty, and the domains they were recorded in is shown in Fig 73.

Fig 72 Overall number of red flags by domain (2017–18)

Fig 73 Number of red flags recorded for each specialty by domain – 2017

Fig 74 Number of red flags recorded for each specialty by domain – 2018
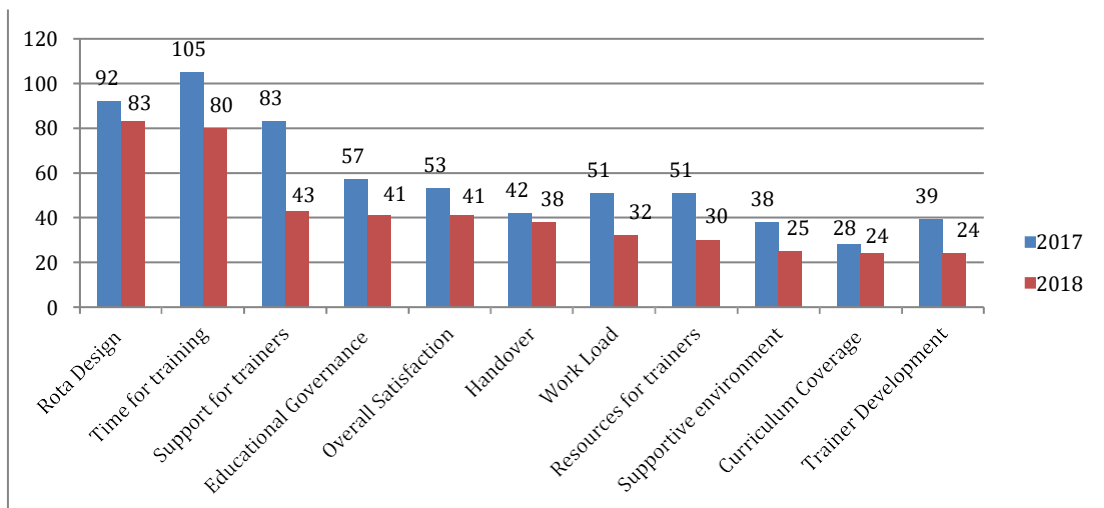
Of the 461 trust red flags recorded for all medical specialties in 2018, 85% (392/461) were in LETBs in England, 6% (28/461) in Scotland, 6% (28/461) in Wales and 3% (13/461) in Northern Ireland. In comparison to 2017, red flags were down 2% in England, down 1% in Scotland, up 2% in Wales and up 1% in Northern Ireland. A breakdown of trust red flags by deanery/LETB in Fig 75.

Fig 75 Trust red flags by deanery (2017–18)
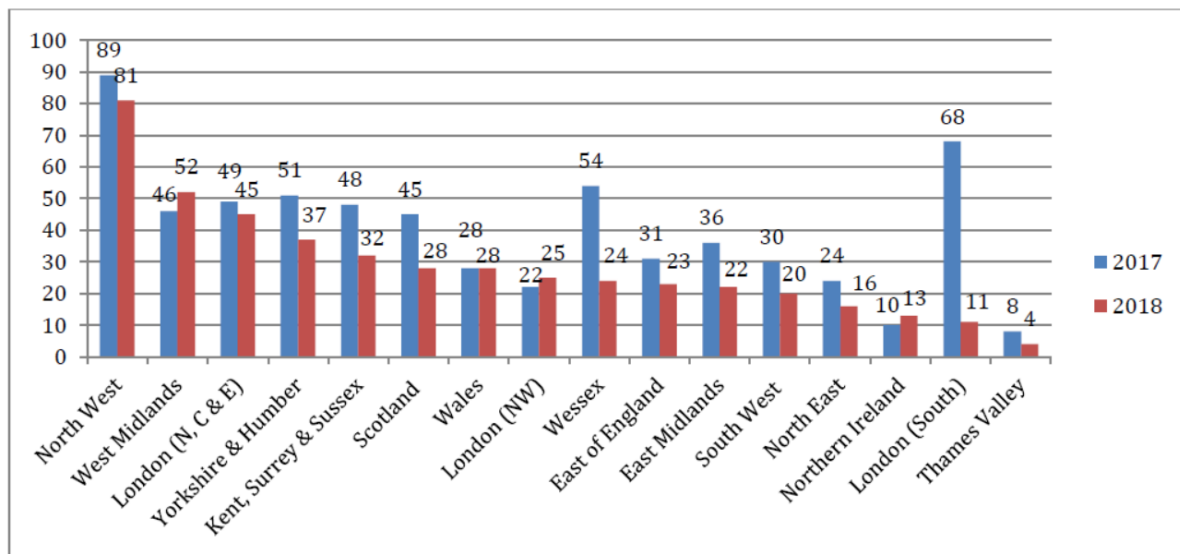
Fig 76 Trust red flags for each deanery by domain (2017)
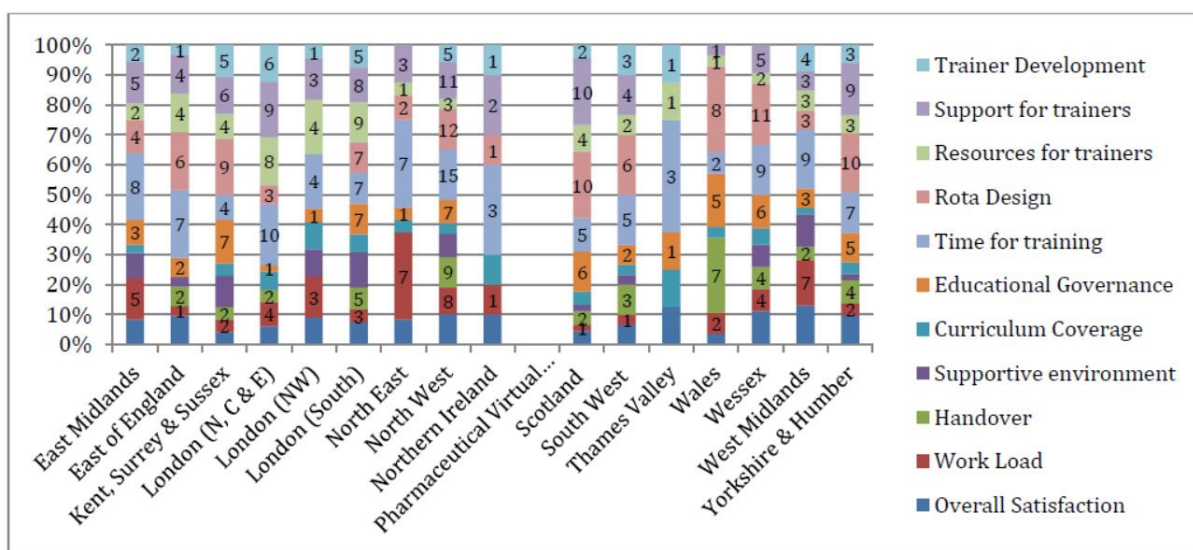
Fig 77 Trust red flags for each deanery by domain (2018)
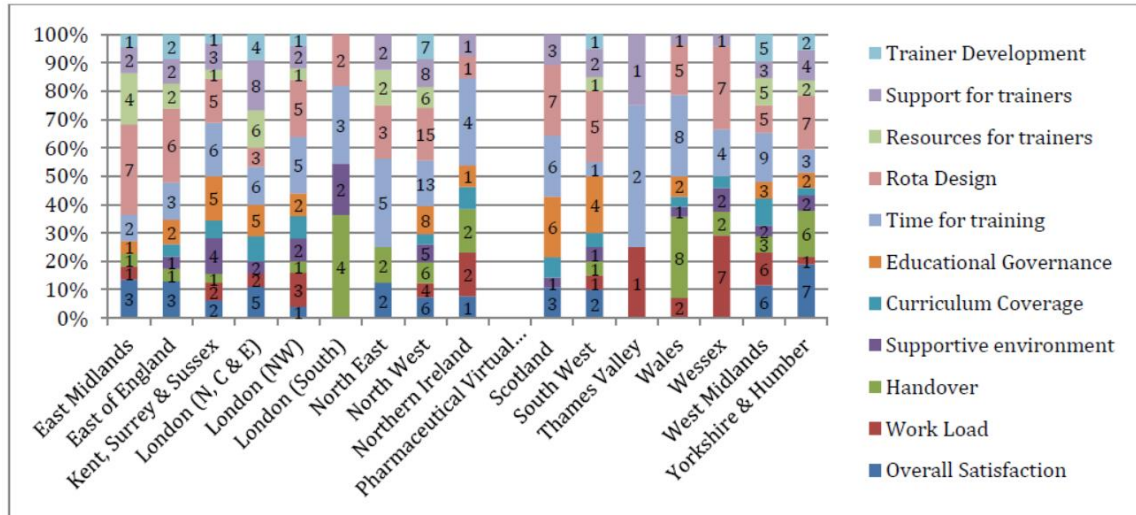
5.2.3 GMC trainer survey – green flags

507 trust green flags were recorded across the 29 HMT specialties in 2018. Seven of the ten specialties with the highest number of green flags were specialties contributing to the acute take. In 2018, the number of green flags reduced by 136 to 507 (-21%). Green flags were lower in 2018 in all specialties except respiratory medicine, GIM, neurology, nuclear medicine and clinical neurophysiology. The number of green flags recorded for each specialty is shown in Fig 78.

Fig 78 Trust green flags by specialty (2017–18)

Fig 79 Overall number of green flags by domain (2017–18)

Fig 80 Number of green flags recorded for each specialty by domain – 2017

Fig 81 Number of green flags recorded for each specialty by domain – 2018
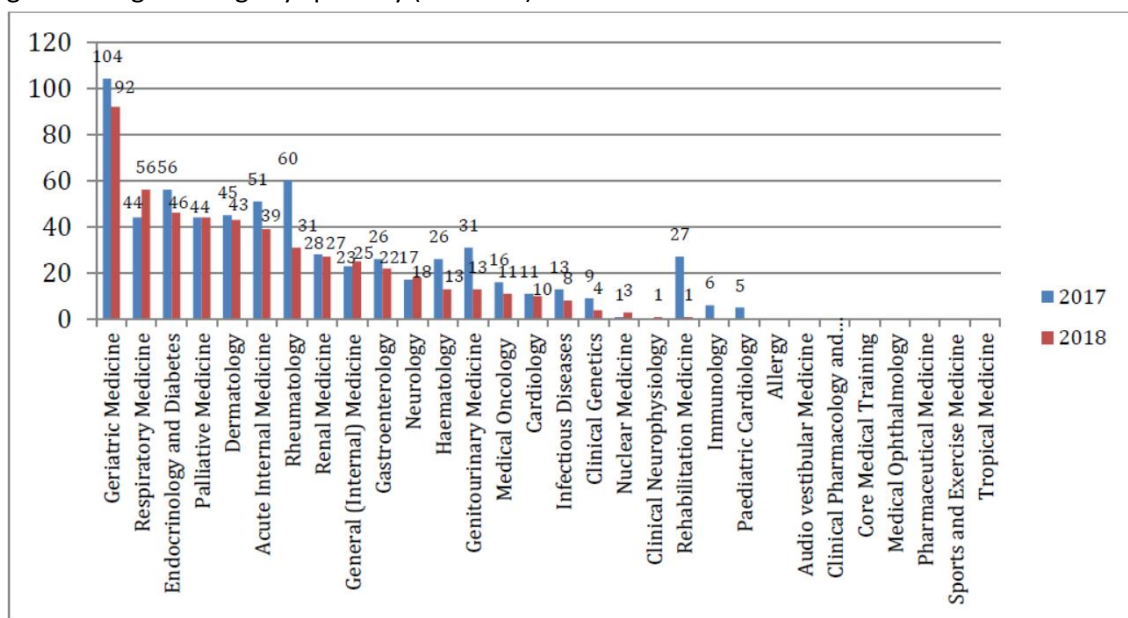
Fig 82 Trust green flags by deanery (2017–18)
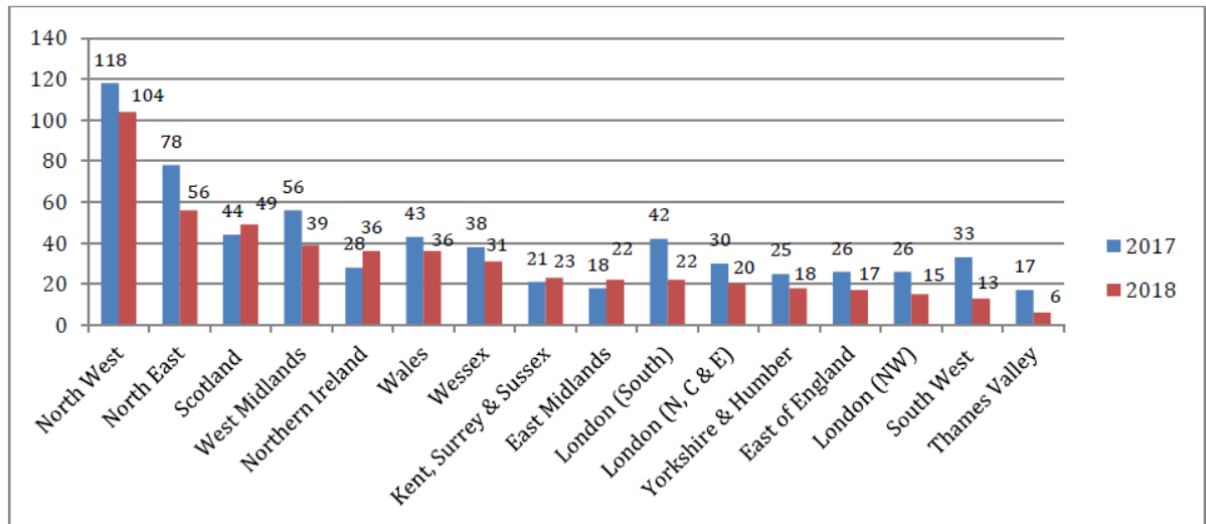
Fig 83 Trust green flags for each deanery by domain (2017)
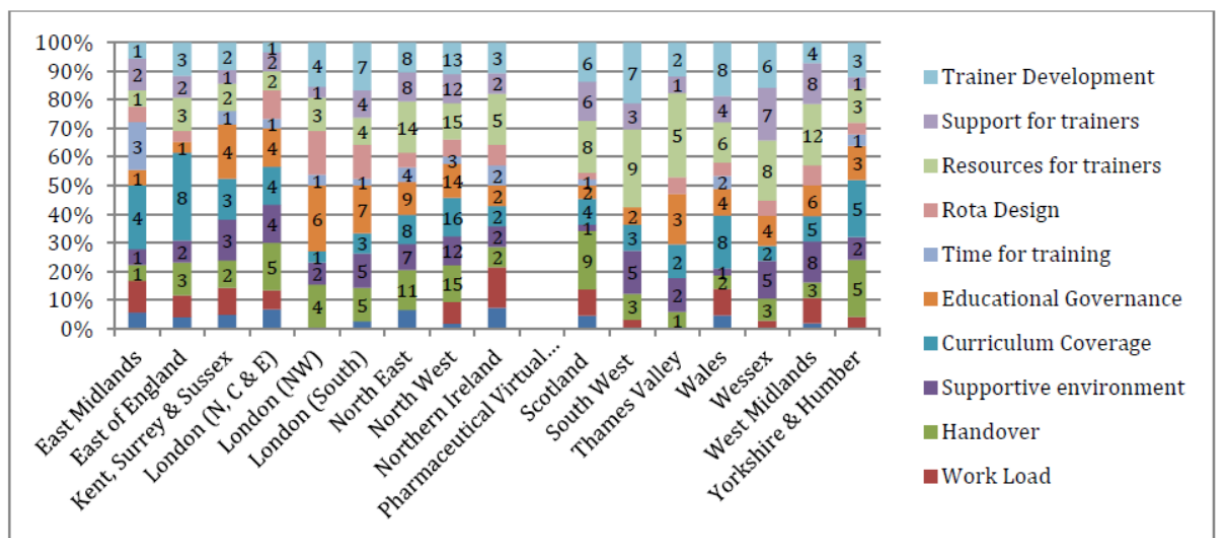
Fig 84 Trust green flags for each deanery by domain (2018)
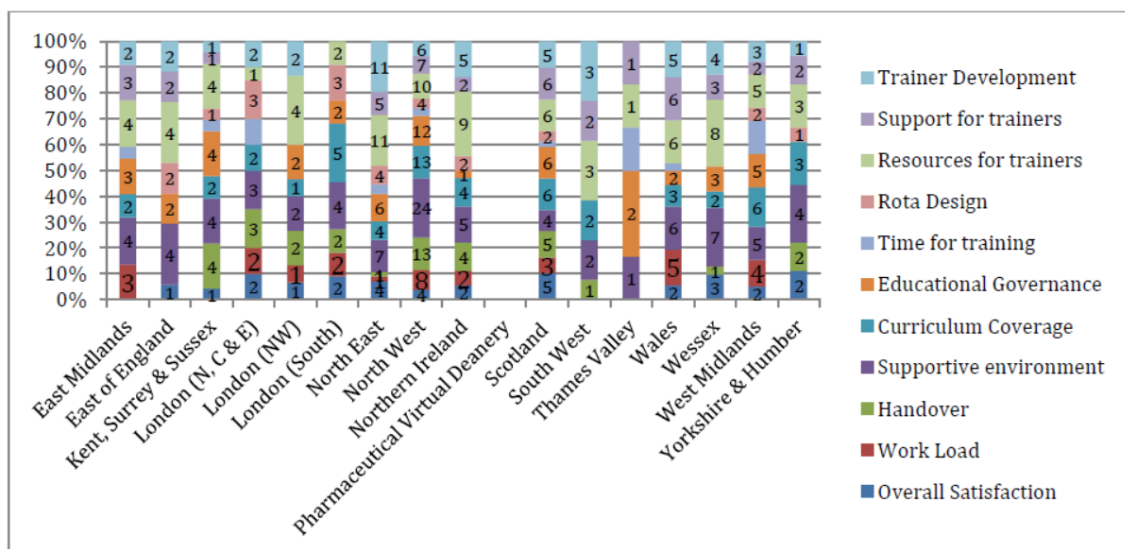
6.0   Theme 5: Developing and implementing curricula and assessments

The data sources used to inform this theme include the GMC NTS (generic and SSQs), ARCP, MRCP outcomes and PYA reports. Data analysis from the GMC NTS and SSQs already presented earlier in the report will be referenced where appropriate.

6.1   ARCP outcomes

Fig 85 Proportion of satisfactory/unsatisfactory/OOP ARCP outcomes by specialty
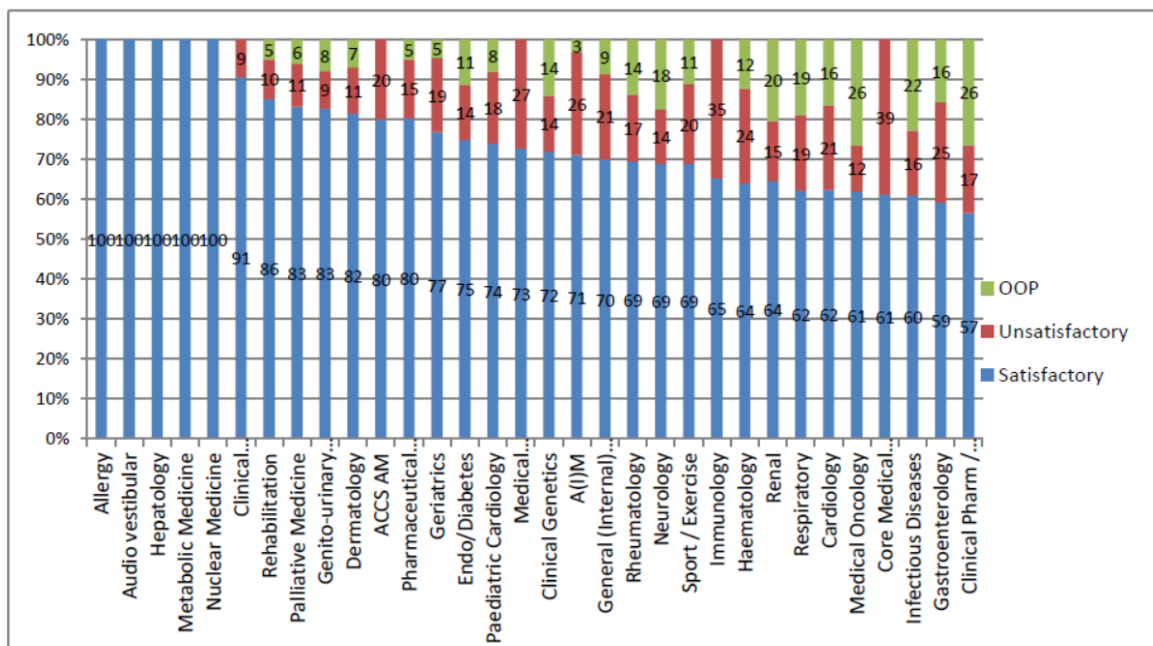
Fig 86 Proportion of ARCP outcome 5s by specialty
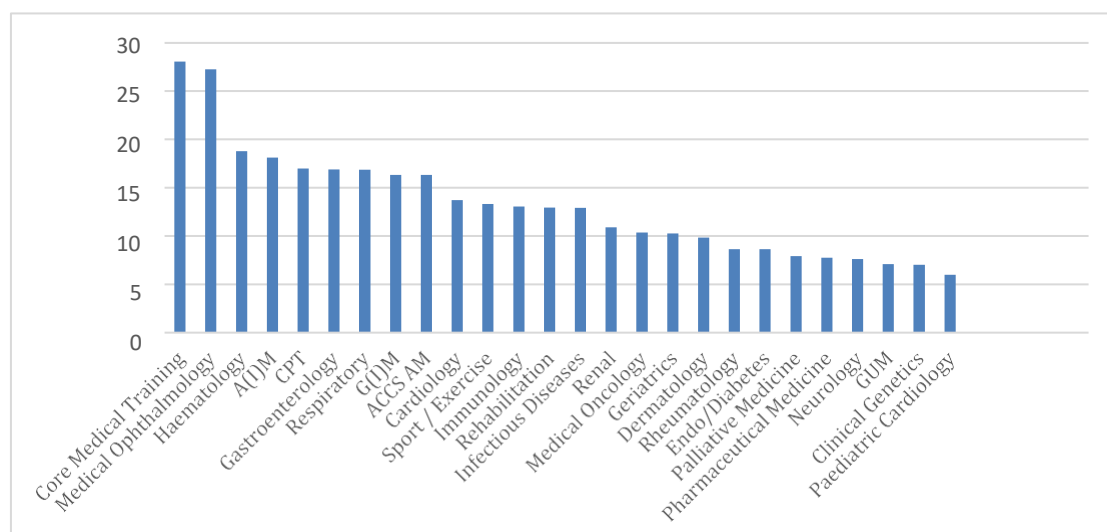
Fig 87 Proportion of ARCP outcome 2s by specialty
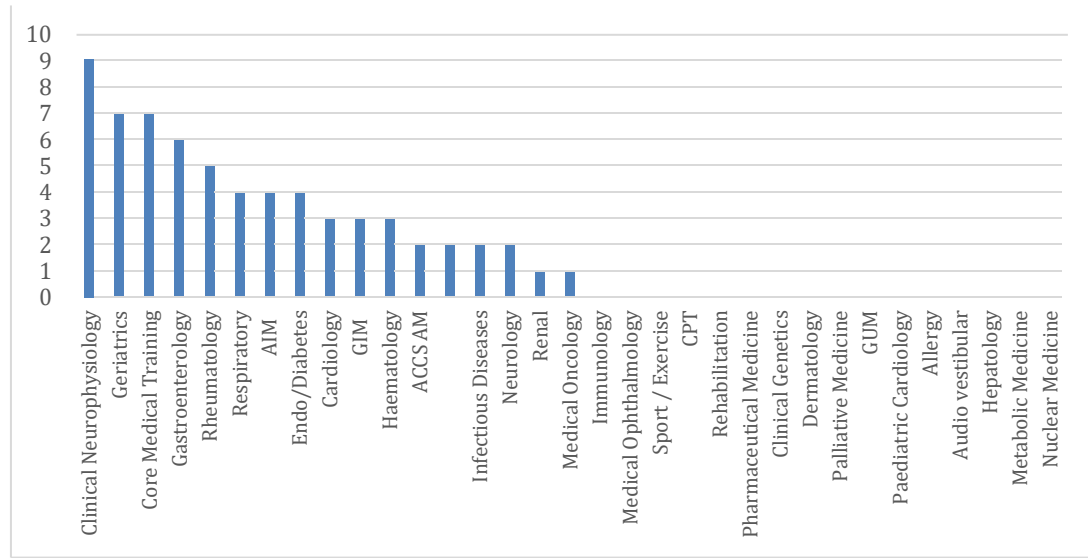
Fig 88 Proportion of ARCP outcome 3s by specialty
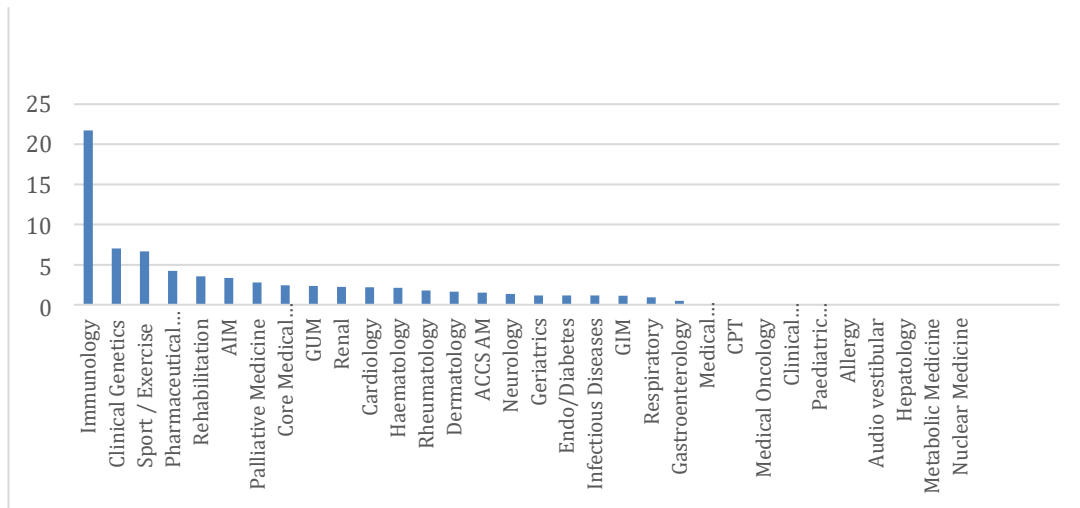
Fig 89 Proportion of ARCP outcome 4s by specialty
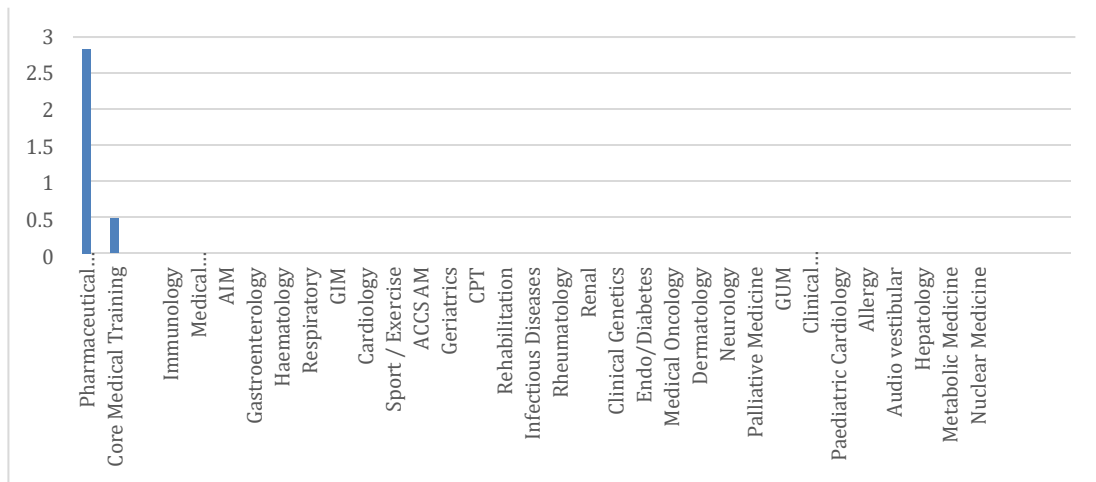
6.2 MRCP outcomes

Table 21 Overall specialty certificate exam (SCE) pass rates (2014–18)

Pass rates - overall	2014	2015	2016	2017	2018	Difference	
Acute Medicine	55.5	49.1	59.2	52.6	54.5	➡	1.90
Dermatology	45.7	63.8	55.8	54.2	57.6	⬆	3.40
Endocrinology & Diabetes	42.6	41.8	51.3	51.2	51.2	➡	0.00
Gastroenterology	53.5	55.7	65.0	59.1	67.3	⬆	8.20
Geriatric Medicine	77.0	79.7	77.2	79.2	76.2	⬇	-3.00
Medical Oncology	54.1	61.7	60.8	54.3	67.5	⬆	13.20
Nephrology	35.8	49.3	38.5	37.7	48.3	⬆	10.60
Neurology	59.0	48.7	63.2	52.8	51.7	➡	-1.10
Palliative Medicine	61.8	67.1	67.1	76.1	61.5	⬇	-14.60
Respiratory Medicine	60.0	62.4	64.0	62.1	51.9	⬇	-10.20
Rheumatology	50.5	56.6	54.6	49.7	62.8	⬆	13.10

Fig 90 SCE in acute medicine (2015–18)
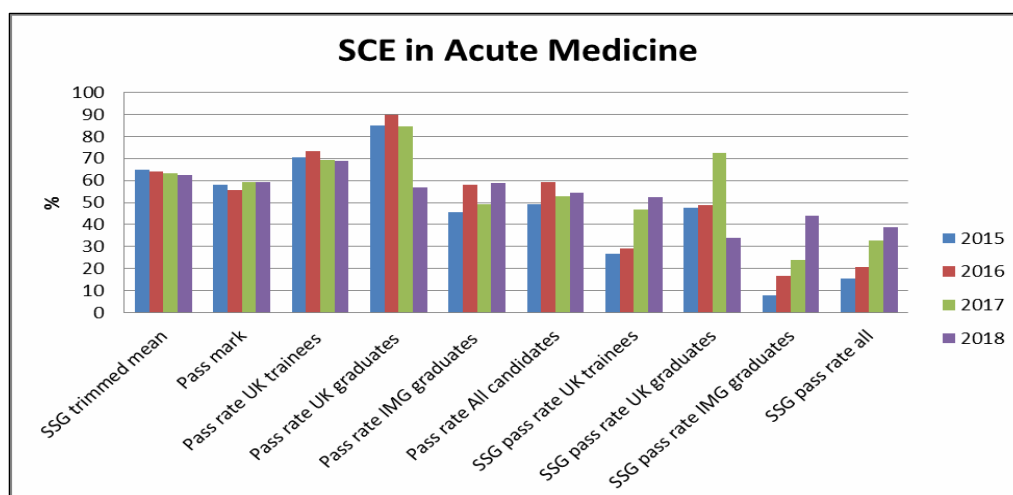
Fig 91 SCE Dermatology (2015-2018)
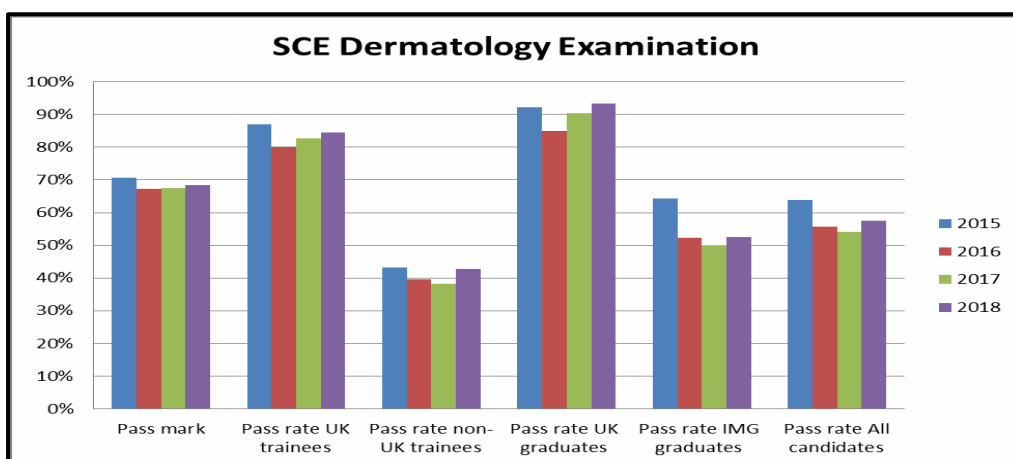
Fig 92 SCE in endocrinology and diabetes (2015–18)
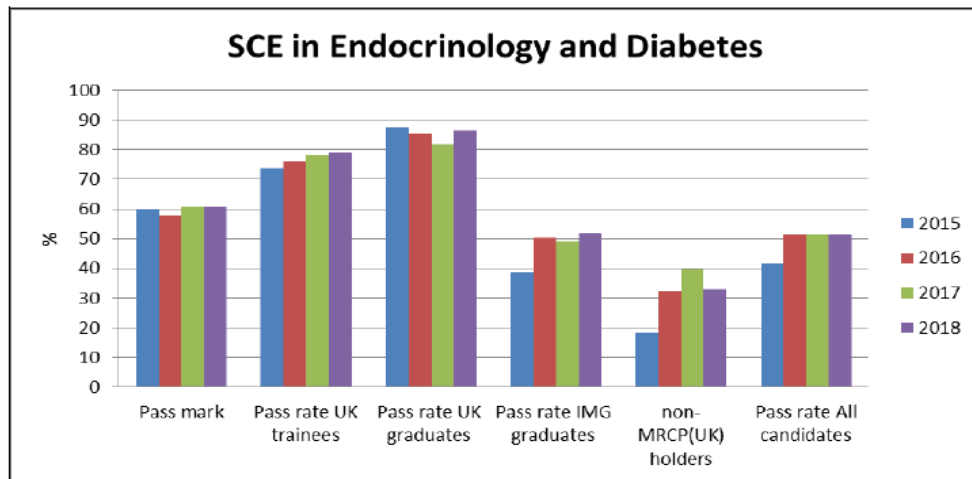
*Note: from 2014 the pass mark was established by using UK trainees as the cohort of reference

Fig 93 SCE in gastroenterology (2015–18)
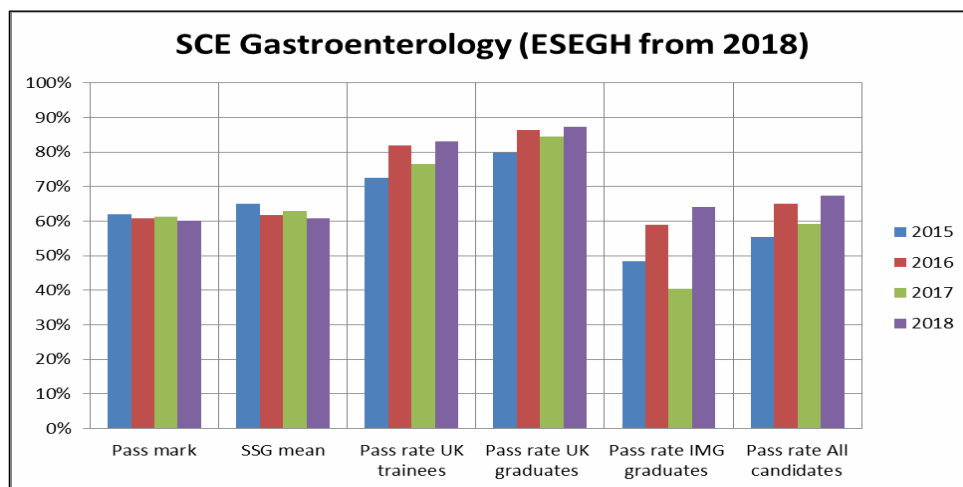
Fig 94 SCE in geriatric medicine (2016–18)
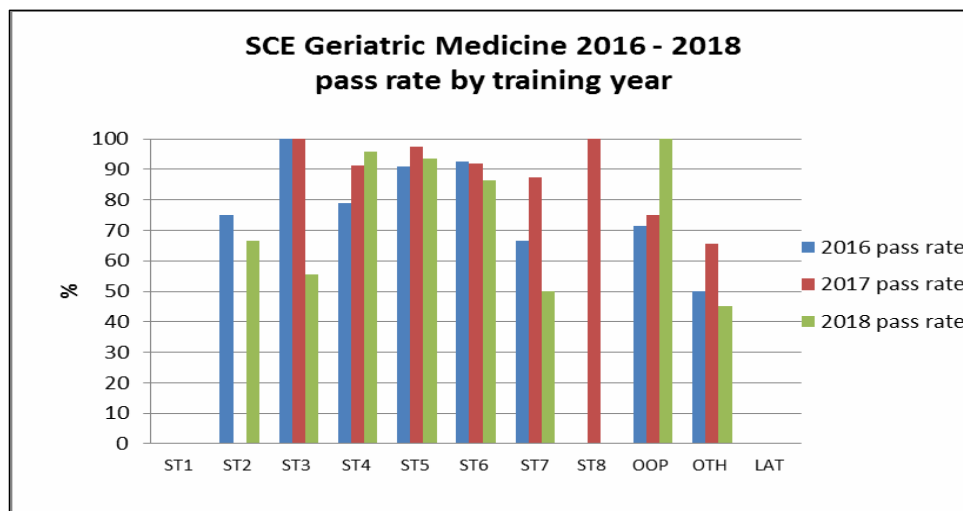
Fig 95 SCE in gastroenterology (2015–18)
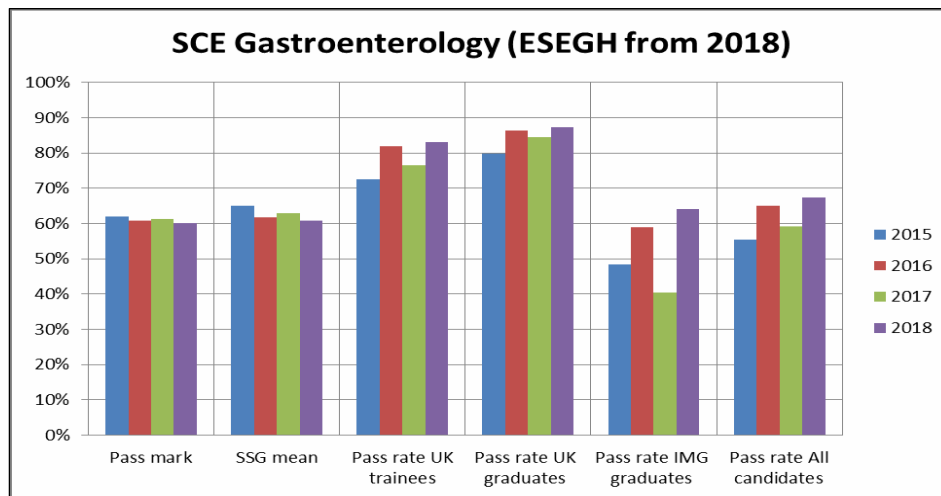
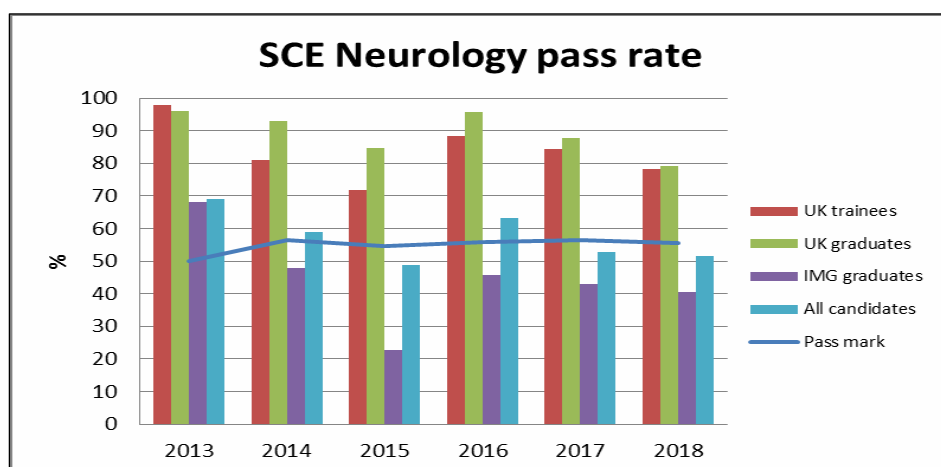Fig 96 SCE in medical oncology (2014–18)
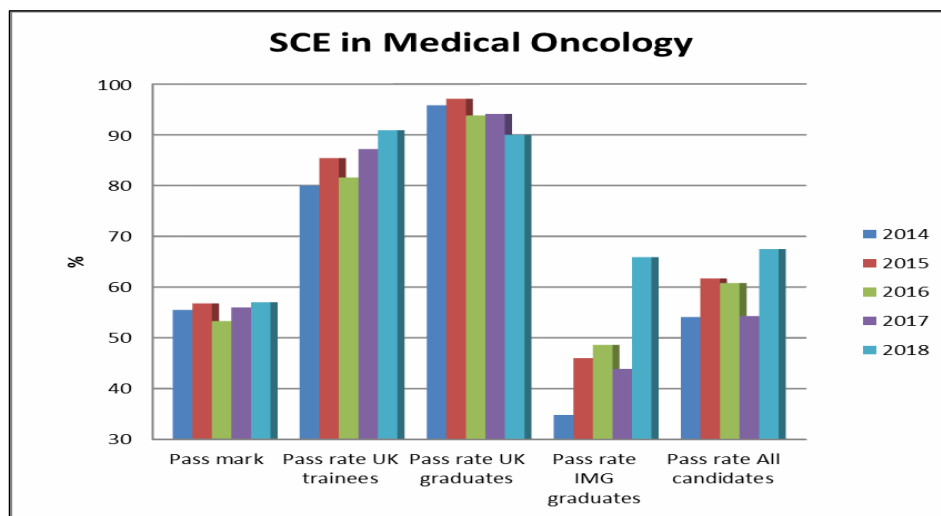
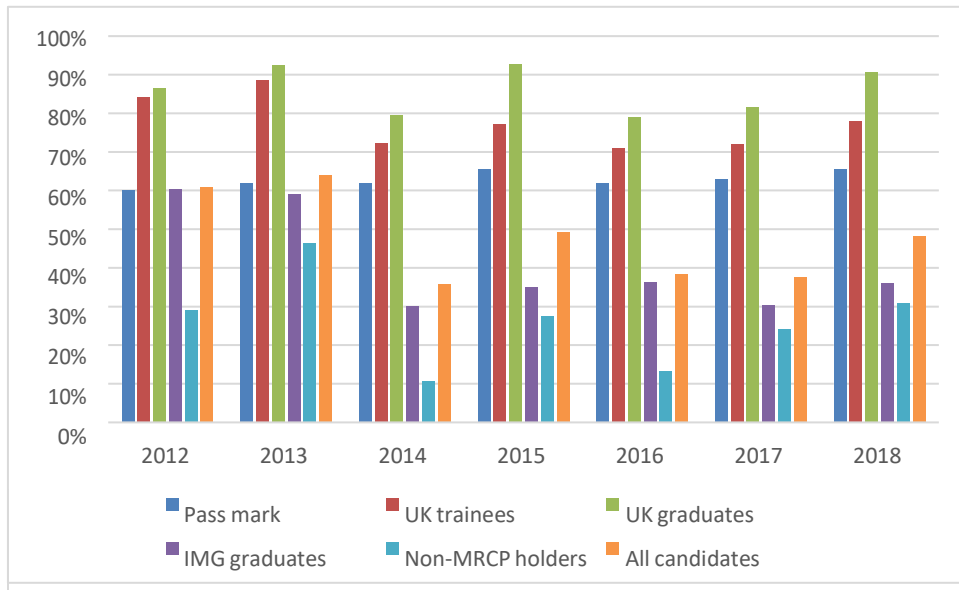Fig 97 SCE in neurology (2013–18)

Fig 98 SCE in nephrology (2012–18)
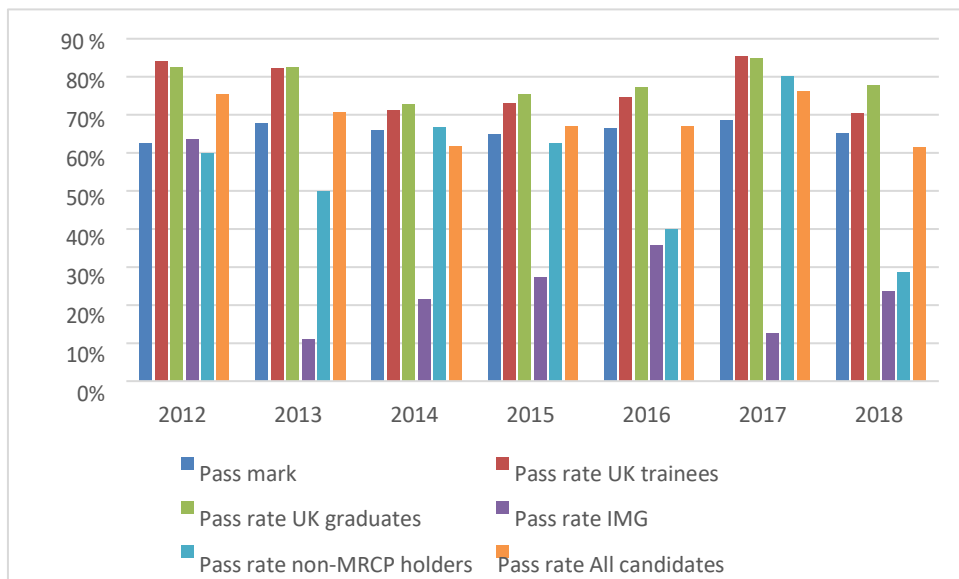

Figure 99 SCE in palliative medicine (2012–18)

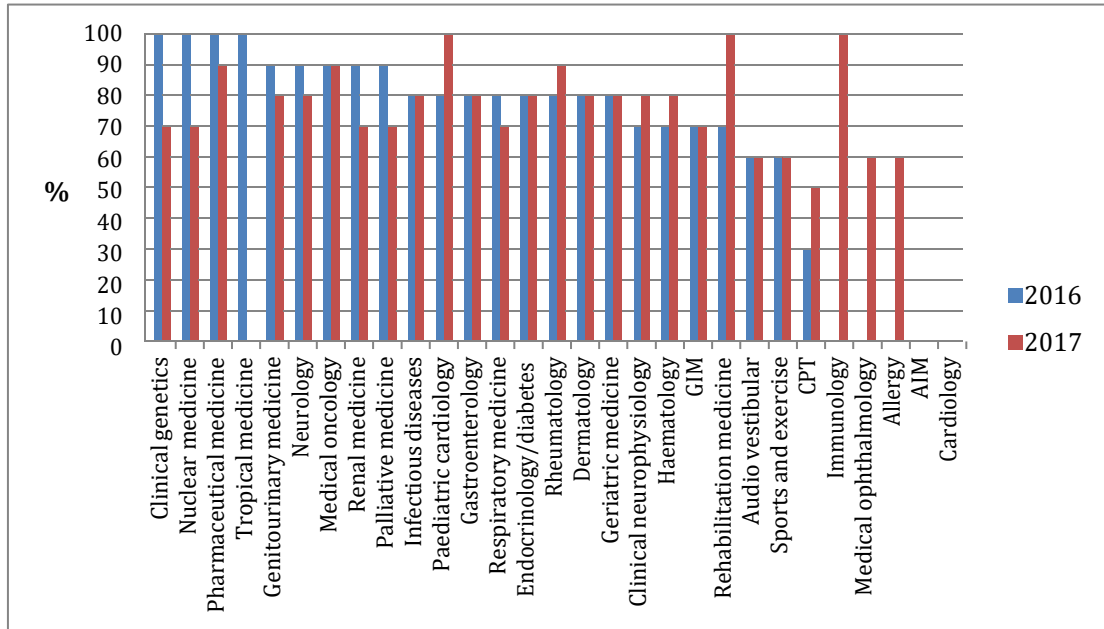Fig 100 SCE in respiratory medicine (2015–18)
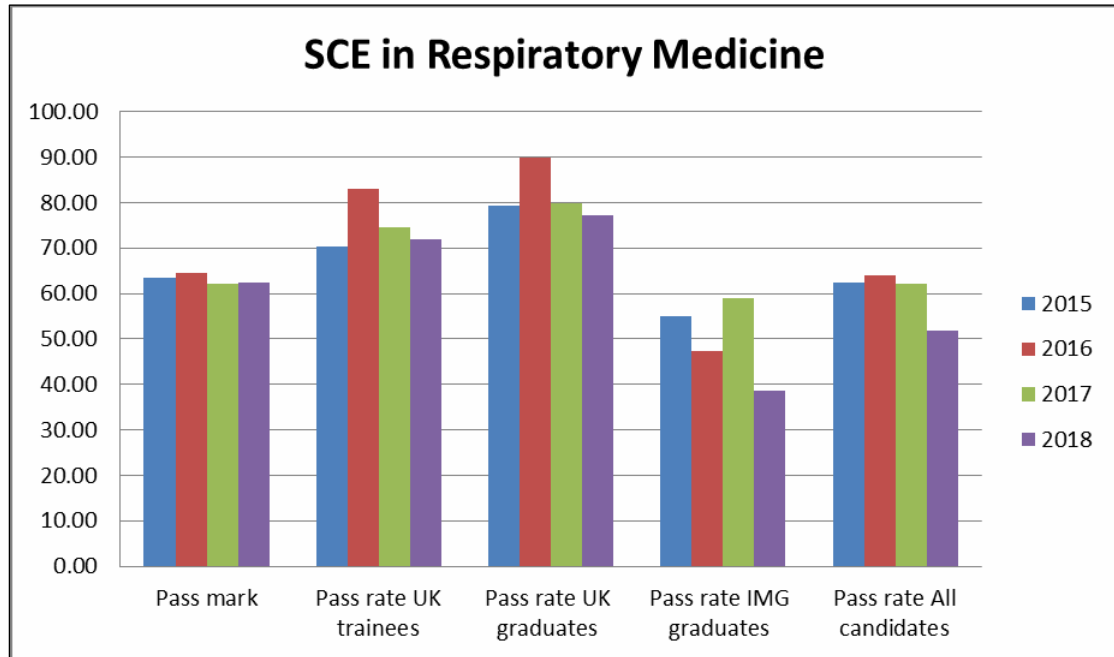
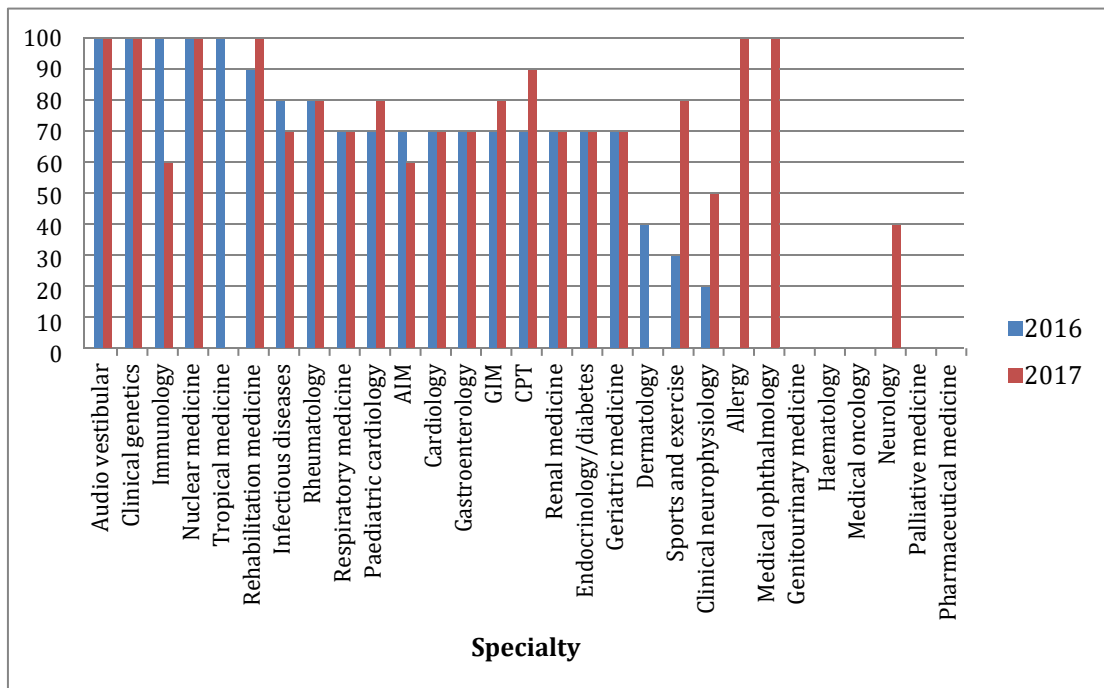Fig 101 SCE in rheumatology (2014–18)
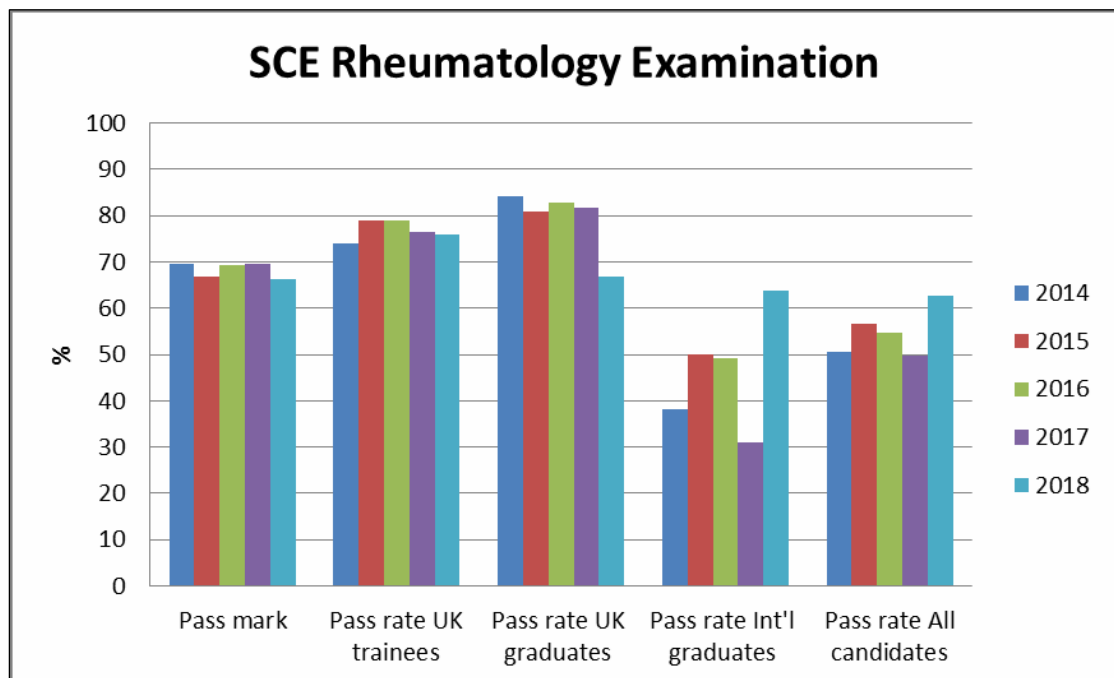
6.3   Penultimate year assessments

Fig 102 Satisfactory e-Portfolio at PYA (2016–17)

The average percentage of trainees across 25 specialties who had this indicator as part of their PYA and had a satisfactory e-Portfolio at the time of their PYA was 79.6%.

Fig 103 Valid ALS to CCT (by specialty) (2016–17)

The average percentage of trainees across the 21 specialties presenting for PYA who require a valid advanced life support (ALS) Certificate and who had evidence of a valid certificate up to their anticipated CCT date was 79.4%.

Fig 104 SCE pass at the time of PYA (2016–17)
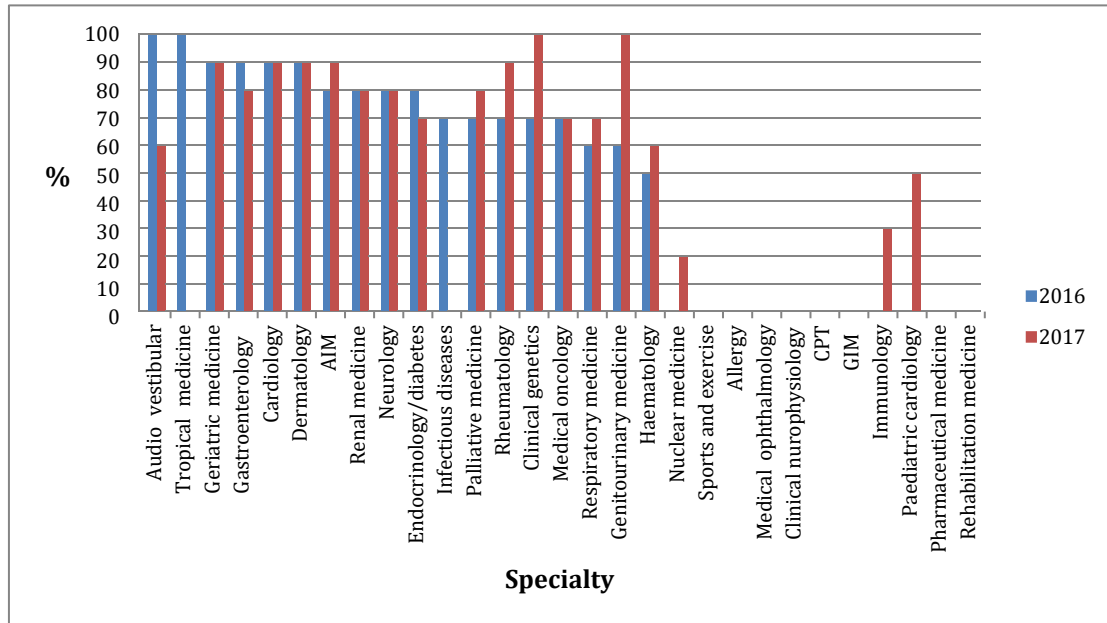
The average percentage of trainees across the 19 specialties who had passed their SCE by the time of their PYA was 69.5%.

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