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1. Foreword

The first report on the state of physicianly training in the UK was published in 2017. This report was based on a novel national quality assurance framework developed by the Joint Royal Colleges of Physicians Training Board (JRCPTB) for evaluating the quality of post-foundation physician training using multiple key quality datasets. This represented a further development in an ongoing process to improve postgraduate medical education and training. The report provided an evidence-based benchmark for future comparisons.

This second report evaluates data from the same six key quality datasets across the now 30 physicianly specialties and three subspecialties, both nationally and by specialty and region, and compares data and looks at the trends from the first report.

The main issues highlighted by the first report were rota gaps in the acute medical specialties which consequently affected workload and created an imbalance between service delivery and the specialty training experience. This had a significant negative impact on all the General Medical Council (GMC) themes and standards for postgraduate medical education and training, including a potential impact on patient safety.²

There have been other reports from various organisations since around the negative impact of rota gaps on quality of training as well as on overall morale, work–life balance and quality of care.^{3–5} The conflict between service versus training is well recognised and specific concerns around the impact of service delivery of general internal medicine on specialty training are discussed further within this report.

The other themes from the first report included issues affecting smaller specialties and some single specialty issues affecting curriculum delivery and sustainability. This report will evaluate whether these concerns are continuing or have changed by evaluating the evidence from the quality datasets and comparing with trends from the previous report.

We hope this report will provide further evidence to help drive up the quality of our postgraduate physician training which will ultimately improve the quality of patient care.

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2. Executive summary

The main findings arising from the current analysis of the six key datasets are summarised below. Overall, four major themes were identified which affected the quality of training in the physicianly specialties in the UK. These included:

- > rota gaps in the acute medical specialties that affect workload
- > an imbalance of the service delivery of general internal medicine (GIM) that affects the specialty training experience
- > commissioning and redesign of services impacting on training
- > single specialty issues affecting deliverability of curricula.

The first two themes are the same as in the first report and continue to affect most of the acute medical specialties. These are shown to have a significant negative impact on many of the GMC themes and standards of medical education and training, including the potential of affecting patient safety. The third theme is new with many more specialties affected by service redesign and commissioning. This has an impact on training, particularly on the learning environment, supervision and curriculum delivery. The last theme includes single specialty issues which particularly affect the deliverability of curricula. Some of the single specialty issues are new, while some from the first report have improved and these are detailed in the report.

This report provides comparative data from multiple sources on the quality of training by specialty and region. It highlights areas of concern as well areas of good practice and excellence. We hope this report will provide further evidence for specialist advisory committees (SACs), heads of schools and deaneries, and local education offices (LEOs) to address some of the concerns within their areas. Although some of the challenges, such as rota gaps and the imbalance between service and training are on a national scale, we would hope triangulated data from multiple sources demonstrating a significant impact on the quality of training which inevitably affects quality of patient care will help drive improvements and a change in policies and processes.

The JRCPTB will continue to support a programme of work to measure and enhance the quality of training. The new internal medicine (IM) programme, which is in line with the Shape of Training recommendations, commenced in August 2019.^{6,7} We hope this will help to ensure equity across programmes which contribute to GIM and also readdress some of the imbalance between the service delivery of GIM and its impact on specialty training. The generic professional capabilities (GPCs), as outlined in the GMC framework, have been embedded in the new IM curriculum.⁸ These will be included in all the medical specialty curricula, emphasising the importance of these professional qualities as well as promoting flexibility in postgraduate training.

The GIM and acute internal medicine (AIM) registrar quality criteria were launched in March 2018 in order to improve and support the educational experience of doctors undertaking the demanding role of the medical registrar. Wider implementation of these criteria with joint collaborative working with Health Education England (HEE), NHS Education for Scotland (NES), NHS Employers, NHS Improvement and the British Medical Association (BMA) will help enhance their effectiveness in improving the quality of training and experience.

This report also presents some of the differential outcomes of trainees by specialty and region from the equality and diversity (E&D) perspective. Differential attainment is an important issue and it is a collective responsibility for all organisations to ensure fairness and equity for all trainees. The JRCPTB will continue to fully support the active use of E&D data to improve the training experience for all trainees as well as support interventions which have been shown to be of benefit.

3. The state of physicianly training in the UK

3.1 Introduction

The Federation of the Royal Colleges of Physicians of the UK is a partnership between the Royal College of Physicians of London (RCP), the Royal College of Physicians of Edinburgh and the Royal College of Physicians and Surgeons of Glasgow. Teams within the Federation deliver four key aspects of the service which includes specialty curricula development and training (for which the JRCPTB is responsible), continuing professional development (CPD) and examinations.

The JRCPTB improves patient care by setting and maintaining standards for the highest quality of physician training in the UK. The key roles of the JRCPTB embrace curriculum design and implementation, the recommendation to the GMC of trainees for certification, and supporting the GMC in quality management.

In 2017, the JRCPTB published the first report on the state of physicianly training in the UK.¹ The main aim of the report was to evaluate the quality of training across medical specialties using multiple key quality datasets to provide an evidence-based benchmark for future comparisons. This second report uses the same quality assurance framework and compares data from the first report and evaluates trends.

3.2 Data

The key quality datasets used for production of this report are summarised in Fig 1. The rationale for their selection and use, and the key strengths and weaknesses of each dataset, are discussed in detail in the first report. The additional datasets used to inform the report include the annual specialty reports (ASRs), recruitment data and the annual RCP workforce census data.

The methodology for collating and analysing the data were the same as for the first report. Data were classified into six themes – a global theme giving a high-level picture of the state of physicianly training and then five further themes which have been mapped to the GMC themes for standards of medical education and training and promoting excellence.² This has enabled detailed analysis of the various components that contribute to the quality of training.

Fig 1 Key quality datasets for state of physicianly training report

Specialties affected	Issues
GMC national training survey (NTS)	> Includes generic and specialty-specific data > Trainee and trainer survey data
Annual review of competency progression (ARCP) outcomes	> Outcomes by deanery and specialty > Comparison of 2015 and 2017 outcome data
Membership of the Royal College of Physicians (MRCP) exam outcomes	 Includes MRCP(UK) 1 and 2, practical assessment of clinical examination skills (PACES) data by region, gender, ethnicity, primary medical qualification (PMQ) Core medical training (CMT) 1 and 2 completion Specialty-specific data trends
New consultants survey / post- certification of completion of training (CCT) survey; annual RCP census	> Trends for CCT, consultant posts, quality of training, GIM vs specialty training experience; E&D trends
Penultimate year assessments (PYA) and external adviser (EA) reports	> Quality of process; educational supervisor reports (ESR); achieving curricular requirements, workplace-based assessments (WPBAs) and targets set
Monitoring visit reports	> Specialty- and programme-specific issues
Annual specialty reports (ASRs)	> Quality assurance concerns; areas of good practice > Triangulates information from other data sources
Recruitment data	> Trends in recruitment for CMT and specialty training programmes from 2015–18

4. Physicianly training themes

4.1 Global theme

The JRCPTB is responsible for core medical training (CMT) and the training of 30 medical specialties, typically training from specialist trainee (ST) year 3 to 7, and three subspecialties. Aviation and space medicine is the newest specialty that the JRCPTB has become responsible for since the last report.

Each medical specialty varies in size and complexity. Some are associated with acute unscheduled care and linked with dual training in GIM while others have little or no acute component. The breakdown of trainees in different specialties and their contribution to the acute take is shown in Appendix A, Table 1.

The data sources used to inform this theme included the GMC national training survey (NTS) (generic and specialty-specific questions (SSQs), annual review of competency progression (ARCP), membership of the Royal College of Physicians (MRCP) exam data, higher specialty training (HST) workforce census data / new consultants (post-certification of completion of training (CCT)) survey, penultimate year assessments (PYA) reports and ASRs.

The major challenges identified in the GMC NTS in 2018 continue to include the increasing workload pressures of the more acute physicianly specialties, particularly those dual training with GIM, and differing challenges of curriculum delivery and sustainability for the less acute and smaller specialties. This is similar to the first report. However, some specialty-specific issues have improved since 2017, and other new issues have arisen. In addition, service redesign and commissioning are having a greater impact on more specialties. These are discussed within the report.

The 2018 GMC NTS generic data of 7,740 medical trainees continued to show that specialties contributing substantially to the acute take, with the exception of genitourinary medicine (GUM), showed the largest increase in deanery / LEO red flags compared with 2015, while specialties with little or no contribution to the acute take generally recorded the greatest increase in green flags. The top 10 specialties showing the highest number of deanery / LEO red or green flags in 2018 compared with 2015 are shown in Table 1.

Table 1 Specialties that had the highest number of deanery / LEO red or green flags in 2018 (compared with 2015)

Specialty (red flags)	Number in 2018 (increase since 2015)	Specialty (green flags)	Number in 2018 (increase since 2015)
Gastroenterology	62 (+34)	Palliative medicine	58 (+38)
Geriatric medicine	55 (+26)	Clinical genetics	35 (+24)
Renal medicine	38 (+19)	Genitourinary medicine	31 (+20)
Cardiology	32 (+18)	Dermatology	36 (+19)
Core medical training	29 (+17)	Neurology	13 (+13)
Haematology	27 (+15)	Allergy	11 (+10)
Respiratory medicine	31 (+12)	Paediatric cardiology	7 (+7)
Endocrinology and diabetes	31 (+10)	Sport and exercise medicine	15 (+7)
Rheumatology	15 (+ 9)	Clinical pharmacology and therapeutics	6 (+6)
Acute internal medicine	40 (+ 6)	Medical oncology	14 (+6)

Note: Number in brackets indicates the increased number of flags compared with the 2015 GMC NTS

The top 10 indicators showing the highest percentage of repeated deanery / LEO red and green flags from 2015 to 2018 are shown in Tables 2 and 3.

Table 2 Top 10 repeated red flags in 2015 to 2018

	2015/16	2016/17	2017/18
Indicator (red flags)	% (repeated/all)	% (repeated/all)	% (repeated/all)
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)

Note: Number in brackets shows the number of repeated red flags (for the same specialty and deanery) out of all the deanery red flags across the medical specialties for that indicator.

Table 3 Top 10 repeated green flags in 2015 to 2018

	2015/16	2016/17	2017/18
Indicator (green flags)	% (repeated/all)	% (repeated/all)	% (repeated/all)
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)

Note: Number in brackets shows the number of repeated red flags (for the same specialty and deanery) out of all the deanery green flags across the medical specialties for that indicator.

Clinical supervision for acute medical specialties continues to remain a major concern, particularly out of hours. Adequate experience also remains a significant issue and is thought to be due to a combination of rota gaps and overall GIM workload, both of which adversely affect the specialty training experience and curriculum coverage. The heavy workload also impacts on the trainees being able to attend their scheduled teaching. The converse remains true for specialties which don't contribute to the acute medical take which have a disproportionately high number of green flags for clinical supervision, regional teaching and workload. There have been some new quality indicators added to the GMC NTS since the first report. These include reporting systems in 2016 and educational governance, teamwork and curriculum coverage in 2017.

The GMC NTS mean overall satisfaction scores for the higher medical training specialties was 80.93 in 2018 which was down 2.83 on 2015. Specialties contributing to the acute take had the lowest mean scores. Overall, there was a downward trend in the mean scores for most specialties from 2015 to 2018 (Appendix A; Table 2). For CMT, the mean score was 70.24, down 6.61 on 2015. The overall satisfaction scores for CMT are the lowest compared with the other main core training programmes including psychiatry, anaesthetics and core surgery in all years from 2015 to 2018. The trend analysis from 2013–18 is shown in Appendix A, Table 3.

Data from 2,745 core medical trainees showed that the top five indicators for red flags in 2018 (compared with 2015) included: supportive environment, reporting systems, overall satisfaction, clinical supervision (out of hours) and handover (Appendix A, Table 4). This is similar to the results for the medical specialties contributing to the acute take.

In addition to the GMC NTS, the evidence from the other data sources to support this theme are presented in detail in Appendix A, Section 1.0.

Quality assurance / concerns

Overall, the major themes affecting the quality of training across the core medical and specialty programmes are similar to the last report. There has, however, been an increase in specialties affected by commissioning and service redesign which has also impacted on training.

The themes are evidenced from the analysis of the six key quality datasets and triangulated with the data provided in the ASRs. Comparisons have also been made from the datasets in the first report in order to look at trends. These themes are summarised below and shown in tabular form with the relevant data source in Fig 2.

1 Rota gaps in acute medical specialties that affect workload

Rota gaps in acute medical specialties remain an ongoing concern. They affect workload and have a significant negative impact on overall satisfaction, training experience, clinical supervision (both in and out of hours), attendance at local and regional teaching, access to study leave and educational resources. The main specialties affected include AIM, cardiology, CMT, diabetes and endocrinology, gastroenterology, GIM, geriatrics, haematology, rehabilitation medicine, renal medicine, respiratory medicine and stroke medicine.

2 An imbalance of the service delivery of GIM that affects specialty training experience Many acute specialties dual training with GIM have ongoing concerns with the imbalance of GIM (both daytime and on-call cover) compromising the specialty experience. Many data sources provide evidence to show up to 90% of the GIM component of posts are heavily service-based with very little training value. The quality of GIM training also negatively impacts on recruitment into the acute medical specialties.

3 Commissioning and redesign of services impacting on training

There has been an increase in specialties affected by commissioning and service redesign arrangements which are having a negative impact on training. These include clinical genetics, dermatology, GUM, haematology, nuclear medicine, palliative medicine, rehabilitation medicine and rheumatology.

4 Single specialty issues affecting deliverability of curricula
Some of the issues highlighted within individual specialties from multiple data sources are listed in Fig 3.

In addition, administrative issues within educational organisations have been reported in many specialties, including endocrinology and diabetes, gastroenterology, geriatric medicine, neurology, palliative, renal and rehabilitation medicine. This is in relation to insufficient administrative support for organising and carrying out ARCPs, PYAs and other educational reviews. These issues were particularly noted in London and Kent, Surrey and Sussex deaneries / LEOs.

On a more positive note, there have been areas of improvement, particularly in some of the single and smaller specialty issues since the first report and these are summarised below:

> Clinical pharmacology and therapeutics (CPT)

Improved trainee/trainer knowledge of workplace-based assessment (WPBA) requirements. The decision aid has been re-written to improve clarity. A web page has been created on the British Pharmacological Society (BPS) website to showcase good practice in portfolio completion and coverage of curriculum competencies all of which have improved quality of interactions between trainees and trainers and competency development (PYA, EA reports).

> Audiovestibular medicine

Improvement in the timing and flexibility of diploma requirements. Their SAC has worked with the JRCPTB to approve some more training sites (ASR).

> Cardiology

Some improvement in acquiring procedural competencies (cardiac magnetic resonance (MR), pericardiocentesis and echocardiography (ECHO) by embedding training in simulation programmes (SSQ, ASR)).

> Paediatric cardiology

More focus on training and education provision, including active job planning of educational activities which has led to notable improvements in the GMC NTS domains compared with 2015 in certain units (10 green flags in 2018 survey including overall satisfaction) and significant improvement in supportive environment (GMC NTS, SSQs, ASR).

> Respiratory medicine

Gaps in pulmonary physiology training improved by the British Thoracic Society adding specific pulmonary physiology training within their courses (ASR, PYAs, EA reports).

Noteworthy practice:

There are many examples of good practice within different training programmes and in different regions. Some of these could potentially be adopted across other programmes and regions. These findings are summarised in Fig 3.

Fig 2 Thematic analysis of quality assurance concerns

Global theme: quality assurance concerns							
Major theme Rota gaps in the acute medical specialties that affect workload.	Major theme Imbalance of service delivery of GIM affecting specialty experience.	Major theme Commissioning and redesign of services impacting on training.	Major theme Single specialty issues.				
Sub themes Negative impact on: overall satisfaction, training experience clinical supervision in and out of hours, attendance at local and regional teaching. Specialties affected: acute medicine, cardiology, CPT, diabetes and endocrinology, gastroenterology, GIM, geriatric medicine, haematology, neurology, rehabilitation, renal, respiratory and stroke medicine. Evidence: GMC NTS, SSQ, post-CCT survey and HST census data, visit reports, ASRs, recruitment data, GMC trainer survey.	Sub themes CGIM posts – 90% service-based. Compromises specialty experience in cardiology, diabetes and endocrinology, gastroenterology (unable to attend endoscopy, clinic lists), infectious diseases, renal (compromising subspecialty experience), respiratory medicine (clinics cancelled to cover medical admissions unit), rheumatology. Impacts on recruitment of acute medical specialties: geriatrics and diabetes and endocrinology down 15%. Evidence – GMC NTS generic, SSQ, post-CCT and HST census data, PYA, visit reports, ASR, recruitment data.	Clinical genetics – national redesign to seven regional genetics hubs away from clinical centres which will have detrimental effect on lab training experience. Dermatology – due to recommissioning three centres have closed with significant negative impact on training. Genitourinary medicine – negative impact of service commissioning on training, 37% (+12%); loss of consultant posts which impacts on clinical supervision; poor recruitment down 35% (2017–18). Haematology – issue with delivery of lab competencies due to centralisation of services with joint ventures / private labs. Nuclear medicine – PET/CT services commissioning by a private company (since 2015) is limiting access to training in some training centres. Palliative medicine – significant risk of funding of voluntary sector hospices which provide huge proportion of training; specialty take in hospices and 24/7 specialist palliative care services with risk of higher hospital admissions and length of stay. Rehabilitation medicine – outsourcing of services (eg prosthetics, specialist seating, community services) threatens exposure to some aspects of training programme; many trainees need to go out of deanery to gain competencies (spinal cord injury, trauma, musculoskeletal rehabilitation). Rheumatology, and sport and exercise medicine – commissioning of musculoskeletal services threat to training provision. Evidence: GMC NTS, SSQ, ARCP outcomes, PYA reports, monitoring visit reports, ASRs.	Sub themes Cardiology – cardiac MR, echocardiogram, pericardiocentesis training improving by embedding into simulation programmes but some funding issues. Immunology – issues with acquisition of core laboratory competencies due to service delivery; difficulty funding of national advanced clinical practice (ACP) training days with smaller specialty study leave funding. Neurology – impact of stroke services on neurology training, particularly thrombectomy, which is likely to be done in neurosciences centres. Sport and exercise medicine (SEM) – issues around delivery and prioritisation of musculoskeletal diagnostic ultrasound training, time and financial impact. Evidence – GMC NTS (generic and SSQ), PYA reports, ARCP outcomes, post-CCT survey, visit reports.				

Fig 2 (cont'd) Thematic analysis of quality assurance concerns I Recommendations

Global theme: quality assurance concerns

Recommendations

Working with SACs, colleges, medical workforce units, national societies, local education and training boards to raise profile of acute medical specialties.

Continue promotion of acute specialties at medical school, in Foundation and CMT. Local and national initiatives, eg AIM initiative to boost recruitment.

Greater use of multiprofessional workforce, eg physician associates and advanced clinical practitioners.

Planned appointments of non-training grade doctors; expanding medical training initiatives (MTIs) incentivising posts with additional training, eg PG certificate.

Flexibility in recruitment rules and training pathways.

Recommendations

Shape of Training should help to ensure equity across programmes towards contribution to GIM and on call.

Wider implementation of GIM and AIM registrar quality criteria should help drive improvements in quality of GIM training.

Joint collaborative working with HEE, NHS Employers, NHS Improvement and the BMA with the implementation of the GIM and AIM quality criteria will help its effectiveness and improve quality of training and experience.

Greater use of advanced nurse practitioners / physician associates for general medicine and specialty routine to increase exposure to subspecialty experience.

Recommendations

Need for collaborative approach to address impact of commissioning and service redesign to training. Need to evaluate the impact on training before redesigning services. Need for proactive discussion with service providers to ensure training can be provided.

Heads of schools working with TPDs to address clinical supervision issues in genitourinary medicine in line with HEE recommendations.

Discussion with pathology labs to optimise training in haematology; developing remote education system for all trainees to access lab training delivered centrally.

Palliative medicine SAC recommends urgent review of services nationally with specialty input with clearer guidance to localities to ensure appropriate training experience can be provided. This could help partly resolve issues created by hospice specialty take. Need to ensure appropriate backfill / medical staffing.

Rehabilitation medicine
– national review of
location of spinal injury
centres undertaken but
not published; this will help
planning and optimising
training opportunities.

Recommendations

SACs working on curriculum mapping and identifying opportunities for training to address gaps.

To embed some procedural competency training in simulation programmes (worked effectively for cardiology).

Immunology – options being explored to fund national ACP days with support from British Society of Immunology.

Neurology – any service redesign of thrombectomy services considers impact on training.

SEM – SACs working to ensure a consistent approach and an agreed delivery plan with the new curriculum.

Fig 3 Examples of areas of good practice mapped to the GMC's themes²

5

GMC theme 1

Learning environment and culture

- Initiatives to boost recruitment, reduce rota gaps and improve training environment: acute internal medicine — TakeAIM iniative improved recruitment 54–66% from 2017–8; Geriatrics 4 Juniors initiative; diabetes and endocrinology, renal, rehabilitation medicine — joint working with national societies, colleges and LETBs to raise profiles and aid recruitment; taster sessions in smaller specialties; CPT, launched Clinical Phamacology Month in 2018 coordinated by British Pharmacological Society (BPS) with SAC and trainees to promote specialty.
- > Improved regional teaching: allergy/immunology provision of high-quality coordinated national training days; GUM joint regional training days; exam focused with improved exam results; larger quarterley training events in rehabilitation medicine; multidisciplinary national endocrine symposia aimed to improve training opportunities; regular human factors training (diabetes and endocrinology Northern); stuctured training days with specialist certificate examination (SCE) revision days (respiratory medicine North West (NW), Yorkshire, London, Thames Vallev)).
- > Study leave following recent changes to study leave provision by HEE; many SACs reviewed and mandated courses mapped to curriculum which improved access / equity of provision for trainees, eg AIM specialist skills; cardiology, CPT.
- > Improved access to educational resources CPT developed website for specialist training on BPS website to signpost to courses / teaching events and highlight areas of good practice for portfolio and ARCP preparation; diabetes and endocrinology videoconferencing (Cambridge).
- > Greater use of multiprofessional staff to address service versus training balance renal triage nurse deals with all calls to renal registrars (Wessex).

05

GMC theme 2 Educational governance and leadership

- > CMT quality criteria improving quality of training (56% improvement in rota being distributed; 10% improvement in simulation training opportunities SSQ).
- > GIM and AIM quality criteria launched March 2018 in order to enhance educational experience and training quality.
- > Greater trainee involvement with new initiatives: leadership and management GUM involve trainees in management of tendering applications with commissioning of services; renal (NW and Scotland).
- > CMT portfolio audit annually to improve consistency of outcomes.
- > Supra-regional ARCP process in immunology considered best practice.
- > Joint working of colleges, SACs in core infection training joint process for recruitment, training and assessment with good feedback.
- > Introduction of an educational contract between trainee local education provider (LEP) and HEE aimed to improve quality of training and guaranteeing time to participate in key educational opportunities (neurology, Wales deanery).

03

GMC theme 3

Supporting learners

- National/regional networks set up to support training and increase educational opportunities CPT/BPS set up national specialist trainee advisory group; diabetes and endocrinology regional network meeting (SW Peninsula); respiratory medicine quality improvement project network (West Midlands); SEM regular question and answer sessions at national teaching days to improve communication.
- > Peer mentoring schemes for specialist trainees geriatrics (Severn, West region of Scotland); respiratory medicine (West Midllands).
- > Social media used to boost morale; improve communication and support between trainees; signpost training opportunities endocrinology gaggle group (South West); rehabilitation medicine set up Facebook group nationally.
- > Regular trainee-led forum (medical oncology, Scotland).
- > Trainee-led research initiative with collaboration of cancer centres medical oncology (NW, Humber/Yorkshire, North East); respiratory medicine (West Midlands) help develop research/academic skills and enhance publications.



GMC theme 4

Supporting educators

- > EA training CMT live webinar arranged to improve and standardise EA training
- > Research guidance for educational supervisors (ES) aimed to help non-academic trainees fulfil research components of curriculum rheumatology (North East).
- > Structured framework for ES feedback improved quality of ES reports and supervised learning events gastroenterology (North East), renal medicine and rheumatology (NW).¹¹



GMC theme 5 Developing and implementing curricula and assessments

- > Changes in curricula: allergy and immunology curricula to merge and align with Shape of Training principles; clinical genetics extended to include new genomic technologies; nuclear medicine inclusion of core radiology training.
- > Developing courses to better meet curricula requirements: courses badged by Britiish Association of Dermatology; diabetes and endocrinology free course for SCE; SEM combined with radiology trainees for introduction to ultrasound day and further combined teaching/courses with other specialties (Thames Valley).
- Newer assessments: allergy new knowledge-based assessment (KBA) as formative assessment and included in new curriculum; clinical genetics – postgraduate certificate in interpretation and clinical application of genomics was a local initiative for London clinical genetics trainees, and has now been made available to all UK trainees; MSc in Genomic Medicine offered by many universities with teaching involvement from clinical centres.
- $> Specialty\ training\ programme\ pilot\ in\ primary\ care\ in\ rheumatology\ to\ meet\ new\ curricula\ requirements\ (South\ London).$

4.2 GMC theme 1: Learning environment and culture

Theme 1: Learning environment and culture

S1.1: The learning environment is safe for patients and supportive for learners and educators. The culture is caring, compassionate and provides a good standard of care and experience for patients, carers and families.

S1.2: The learning environment and organisational culture value and support education and training so that learners are able to demonstrate what is expected in *Good medical practice* and to achieve the learning outcomes required by their curriculum.

This report provides data to support the position that there is an ongoing challenge of managing the increasing service pressures particularly in the acute medical specialties, while at the same time balancing the quality of training and the needs of the trainees. Many of the data sources evidence this adverse impact on the learning environment and this is summarised below and shown diagrammatically in Fig 4 and Table 4.

Fig 4 Service versus training





- > Increased number of GMC NTS red flags in acute medical specialties especially in workload, adequate experience, clinical supervision out of hours, attendance at teaching and access to study leave
- > Overall satsifaction scores lowest in acute medical specialties (GMC NTS)
- > Rota gaps affecting workload and compromising training (SSQ, HST census, monitoring visits, ASR)
- > 50% of dual accrediting trainees feel 90% of GIM is service-based (GIM NTS)
- > Only 15% agreement on trainees getting protected time for teaching and learning (GIM quality criteria)
- > Acute medicine trainees report disproportionate amount of service provision to acute take (39%) (SSQ)
- > Overall quality of training significantly poorer in GIM 74% HST reported quality of training as good or excellent whereas only only 21% for GIM (HST census)
- >47% dual accrediting trainees would not do GIM if had choice again (7% in specialty) (HST census)

Training quality decreasing

- > GIM exposure compromising specialty experience (SSQ, HST census, visits)
- > Cardiology trainees (63%) report none of their time spent in acute medicine delivers supervised curriculumbased training; GIM commitments affect specialty training (clinics and procedural skills) (SSQ, visits, PYA reports)
- > Diabetes and endocrinology trainees (58%, +4%) report GIM commitments impact on specialty experience; 47 (+3%) unable to attend specialty clinics (SSQ)
- > Gastroenterology trainees (68%, +22%) report specialty experience (endoscopy and clinics) limited by GIM commitments (SSQ)
- > Geriatric medicine trainees (28%, +3%) feel GIM compromising specialty experience
- > Renal medicine GIM and overall workload affecting specialty experience (attendance at haemodialysis MDT, specialist clinics) (SSQ)
- > Overall perceived quality of training worse in GIM 48% poorly trained in GIM compared with their specialty (33%) (post-CCT survey)
- Mean satisfactory ACRP outcomes lower in acute medical specialties compared with non-acute medical specialties (ARCP outcomes)

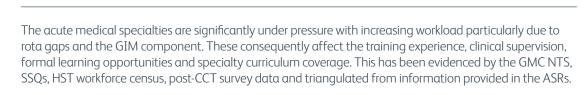






Table 4 GMC theme 1: Summary of findings linked to the evidence and data sources

GMC requirements	Specialties affected	Issues	Data source / evidence
Workload R1.7, 1.12	Acute medical specialties	A significant issue in acute medicine, cardiology, diabetes and endocrinology, gastroenterology, geriatric, respiratory and renal medicine. Specialties contributing to the acute take have increased numbers of red flags in the GMC NTS; lower overall satisfaction scores; and high mean hours worked per week in HST census data.	GMC NTS (Tables 1, 2, 5; App A, Tables 2, 12, 14); SSQ (App A, Table 5); HST census (App A, Fig 13); visits; ASRs.
	CMT	Lowest overall satisfaction scores for core training programmes; workload 2nd highest for percentage of trust red flags.	GMC NTS (Table 5; App A, Tables 3, 4).
Training experience R1.12, 1.15–1.20	Acute medical specialties	Compromised due to rota gaps and imbalance of service delivery of GIM affecting specialty experience. Noted in acute medicine, cardiology (procedural competencies / clinics), diabetes and endocrinology (unable to attend specialty clinics), gastroenterology (affecting endoscopy lists/clinics), geriatric medicine, haematology, infectious diseases, renal, respiratory, rheumatology and stroke medicine; overall quality of training lower in GIM compared with specialty.	GMC NTS (Tables 1, 2, 5); SSQ (App A, Table 5); HST census data (Fig 7, 8; App A Figs 26–29); visits data; ASRs; post- CCT App A, Figs 16, 17).
supervisionspecialtiesparticularly orR1.7–1.10,medicine, card		Highest number of repeated deanery red flags (31/44) particularly out of hours in acute medical specialties (acute medicine, cardiology, CMT, gastroenterology, geriatric medicine, GIM).	GMC NTS (Tables 1, 2, 5; App A, Tables 4, 14); SSQ (App A, Table 5); visits.
	Cardiology	Loss of consultant posts due to decommissioning affecting clinical supervision (Yorks and West of Scotland).	SSQ (App A, Table 5); ASRs.
Induction R1.6, 1.10,	Acute medical specialties	High proportion of NTS red flags compared with 2015. Issue for out of sync GIM trainees at Daisy Hill Hospital.	GMCNTS (Table 5); monitoring visits.
1.13, 1.19	Cardiology	Induction noted be a significant concern on targeted cardiology visits in Yorkshire/Humber and Northampton.	Visits; ASRs.
Handover R1.14	Acute medical specialties GIM Cardiology	High proportion of NTS red flags compared with 2015. Poor educational value in GIM. Handover noted as a concern during GIM visit at Daisy	GMC NTS (Table 5); GIM SSQ (Fig 5); monitoring visits.
		Hill Hospital and cardiology visits in Blackpool and Northampton.	
Assessments R1.18	Acute medical specialties	GIM and AIM quality criteria show low level of agreement of time being available for WPBA at handover. Mean satisfactory ARCP outcomes lower in acute medical specialties; impact of rota gaps on WPBA completion.	ARCP outcomes; PYA (App A, Fig 23); ASRs; monitoring visit reports.
	Smaller specialties	Satisfactory completion of WPBA at PYA lower in nuclear medicine, immunology, CPT and pharmaceutical medicine.	PYA (App A, Fig 30).
Formal learning R1.16	Acute medical specialties	Trainees unable to attend local and regional teaching due to workload pressures in acute medical specialties (acute medicine, cardiology, gastroenterology, geriatric, renal medicine); GIM/AIM quality criteria show only 15% agreement that trainees have protected teaching time.	GMC NTS (Table 1, 2, 5); SSQ (Fig 5, App A, Table 5), ASRs; monitoring visits.

Table 4 (cont'd) GMC theme 1: Summary of findings linked to the evidence and data sources

GMC requirements	Specialties affected	Issues	Data source / evidence	
Study leave R1.16	Acute medical specialties	Many trainees unable to access study leave due to workload and pressures of fulfilling service requirements (cardiology, CMT, diabetes and endocrinology, gastroenterology, geriatric medicine, infectious diseases).	GMC NTS (Tables 1, 5), SSQ (App A, Table 5), ASRs.	
	Immunology Nuclear medicine	Smaller specialty study leave funding – making it difficult to fulfil curricular requirements (regional).	Fig 2; SSQ (App A, Table 5); ASRs.	
Working hours, rotas	Acute medical specialties	Rota gaps; high-intensity rotas, working hours reported as frequent mainly in acute medical specialties and CMT.	GMC NTS (App A, Tables 4, 16);	
R1.7, 1.12	Cardiology/ GIM	Targeted visits – concerns around poorly staffed rotas particularly in GIM impacting on specialty.	HST census (Figs 7, 8; App A, Figs 13, 26–29); visits.	
Access to educational resources R1.19, 1.20	safe and relevant learning opportunities particularly for procedural competencies, eg ECHO training (regional).			
Access to technology- enhanced learning (TEL) / simulation R1.21	GIM	Low level of agreement (32%) in GIM and AIM quality criteria for training for all essential procedures including simulation. Poor simulation facilities in some centres.	SSQ (Fig 5); monitoring visits; ASRs.	
QI and audit R1.3, 1.5, 1.22	Acute medical specialties	8/10 specialties with lowest % of PYA trainees active in audit or QI projects were from acute medical specialties.	PYA reports (App A, Fig 31); visits.	
Patient safety R1.1–1-1.6	Acute medical specialties Cardiology	Rota gaps and overall workload compromising patient safety; particularly CMT rota gaps. Targeted visits raised patient safety concerns around workload and clinical supervision.	HST census data (Figs 7, 10); monitoring visits.	
		•		

The generic GMC NTS data show that there is a higher percentage and number of trusts with red flags by indicators for the acute medical specialties (Tables 1, 2, 5; and Appendix A, Tables 12, 14). Gastroenterology has the highest number of red flags (34 more red flags from 2015 to 2018) and many of the acute specialties have many repeated red flags for workload, adequate experience, clinical supervision and teaching. Eight out of twelve of the acute medical specialties have repeated red flags for overall satisfaction (Table 5).

Table 5 Red flags by indicators for acute medical specialties showing highest percentage of trusts with red flags in 2018 compared with 2015

Specialty (including all trusts with trainees in the specialty)	Overall satisfaction	Workload	Adequate experience	Clinical supervision (in hours)	Clinical supervision (out of hours)	Local teaching	Regional teaching	Study leave	Handover	Service environment	Induction	Educational supervision	Feedback
Acute internal medicine	4	2	4	2	6	1	6	3	2	2	2	1	0
	(-1)	(-1)	(-2)	(-1)	(+3)	(-6)	(+2)	(+2)	(0)	(-2)	(0)	(0)	(-1)
Cardiology	6	7	6	1	1	7	3	3	6	8	5	1	1
	(+1)	(+1)	(+1)	(0)	(0)	(+2)	(-2)	(-1)	(+1)	(+5)	(+4)	(0)	(+1)
Core medical training	6	8	4	8	7	5	2	5	5	6	5	4	4
	(+3)	(+1)	(+2)	(+5)	(+2)	(0)	(-3)	(+1)	(+3)	(+4)	(+2)	(+4)	(+2)
Clinical pharmacology and therapeutics	0 (-7)	0 (-7)	0 (-13)	0 (-7)	0 (-7)	0 (-13)	0 (-11)	0 (0)	0 (0)	0 (-7)	0 (0)	0 (-7)	0 (0)
Diabetes and endocrinology	1	4	1	1	2	2	4	4	1	0	1	0	0
	(-3)	(0)	(-2)	(-3)	(-1)	(+1)	(+2)	(+1)	(+1)	(-4)	(0)	(-1)	(-2)
Gastroenterology	6	7	5	1	3	7	7	6	5	3	5	3	1
	(+1)	(0)	(-1)	(0)	(-4)	(0)	(-1)	(+1)	(+3)	(-2)	(+1)	(+1)	(0)
Geriatric medicine	9	3	7	4	13	3	6	5	11	7	5	0	1
	(+2)	(+2)	(-2)	(-2)	(+3)	(-6)	(-1)	(0)	(+10)	(+1)	(+3)	(0)	(-1)
Haematology	4	2	1	4	0	8	13	0	5	3	2	5	5
	(+3)	(-5)	(+1)	(+3)	(0)	(+6)	(0)	(-1)	(-3)	(-2)	(+2)	(+4)	(+4)
Infectious diseases	6	3	6	0	0	0	9	3	3	6	0	3	4
	(+3)	(0)	(0)	(0)	(0)	(0)	(-9)	(+3)	(0)	(+1)	(0)	(+3)	(+4)
Renal medicine	5	8	1	0	0	16	7	3	1	7	1	3	0
	(+4)	(0)	(0)	(-1)	(-1)	(+6)	(+2)	(-1)	(-3)	(+3)	(-3)	(0)	(-3)
Respiratory	7	7	3	1	5	7	4	6	5	3	4	2	0
medicine	(+2)	(-4)	(-4)	(0)	(0)	(-6)	(-3)	(+1)	(+3)	(-2)	(+3)	(0)	(-2)
Rheumatology	0	1	0	0	2	1	2	2	0	1	0	0	0
	(-2)	(0)	(-1)	(-3)	(+1)	(0)	(-2)	(0)	(-1)	(-1)	(0)	(0)	(0)

A summary of some of the issues raised by the SSQs is shown in Appendix A, Table 5. These questions, by their very nature, vary between specialties making direct comparisons difficult. However, one of the major themes emerging from the SSQs, once again, is the imbalance between service and training and the impact of the GIM commitments in compromising the specialty experience.

The GIM and AIM quality criteria were developed by JRCPTB with the aim of improving the educational experience of doctors who undertake the demanding role of the medical registrar. These criteria have been grouped into three domains:

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

These criteria are specific and measurable through specific questions included in the GMC NTS. These were launched in March 2018 and the baseline data are shown in Fig 5.

Fig 5 Summary of GIM and AIM quality criteria

High levels 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 diabetes and endocrinology 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, diabetes and endocrinology, respiratory medicine and rheumatology (>82%).
- > Consultants on call generally provide appropriate on-site supervision. (77% in overall agreement) with CPT, diabetes and endocrinology and respiratory medicine (>79%).
- > Educational supervisor's knowledge of the GIM curriculum and decision aid as very good or good. (77% in overall agreement) with CPT, diabetes and endocrinology, AIM, rheumatology and geriatric medicine (>80%).

Low levels of agreement (<45%)

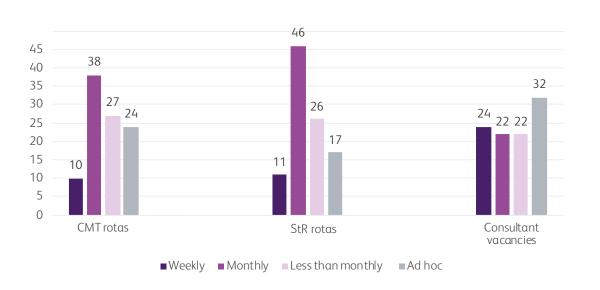
- > Allocated and are able to spend, at least half a day per week of protected / bleep-free time to pursue learning opportunities specific to your GIM training (15% in overall agreement).
- > Trainee representatives involved in (at least monthly) meetings to review service and/or rota difficulties (19% 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 consultantsupervised patient reviews and WPBAs 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).

These first baseline results show that, overall, consultant physicians are easily accessible and provide good on-site supervision. The acute take is generally managed well with effective support from the multidisciplinary team (MDT) including the hospital at night team. However, the protected teaching time for trainees was limited; trainee representation for rota design and management was poor and there was lack of responsibility and ownership in managing rota gaps. Training in, practice of and assessment of ability in, all essential procedures, including through simulation, could be improved. Opportunities to participate in consultant-supervised reviews and WPBA could also be improved. A wide degree of regional variation was noted.

The HST workforce census data also reported on the perceived quality of training. 5 This was poorer in GIM with 74% of HSTs reporting that the quality of specialty training was excellent or good compared with only 21% for GIM training. The post-CCT survey asked that if they could turn back time, would they train again in their main specialty or GIM. Most (93% of CCT holders) responded that they would train again in their parent specialty, but only 53% of respondents said that they would choose to do GIM again (Appendix A, Fig 15). The most common suggestion (87%) for improving GIM training was to have no rota gaps. 12

Overall, the reporting of rota gaps by consultants and HSTs has steadily increased over the last few years. In 2018, 78% HSTs were asked to cover a gap, 44% covered it regularly or occasionally and 26% covered it as a one-off (Appendix A, Figs 26, 27). HSTs are having to cover not only gaps in the HST rota but frequently act down to cover the gaps in the CMT rota as well as step up to cover consultant vacancies (Fig 6).





The frequency of HSTs being asked to cover a gap and actually covering gaps is significantly higher in many of the acute medical specialties (Fig 7; Appendix A, Figs 28, 29). Nearly 50% of HSTs are covering gaps in the GIM rota on a regular or occasional basis to participate in the acute unselected general medical take or look after non-specialty medical patients (Fig 8). This inevitably has a negative impact on the quality of their specialty training.

Fig 7 Frequency of rota gaps by specialty

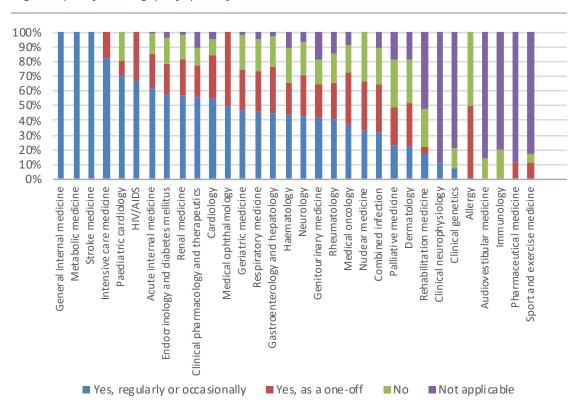
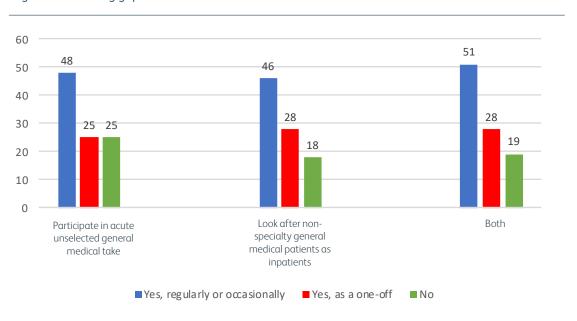


Fig 8 HSTs covering gaps in GIM rota



The highest impact of rota gaps on trainees is on their work–life balance (80%). Rota gaps also limit training opportunities to do audit, quality improvement (QI) projects, research as well as attend teaching, and other meetings (Fig 9). 21% of HSTs in 2018 reported that rota gaps can cause significant problems to the extent of potentially compromising patient safety. 74% of HSTs reported that a work-around solution often has to be put into place to avoid patient safety issues caused by rota gaps and that this has been steadily increasing over the last 4 years. Only 2% reported no impact on patient safety (Fig 10).

Fig 9 Impact of rota gaps on work not being undertaken

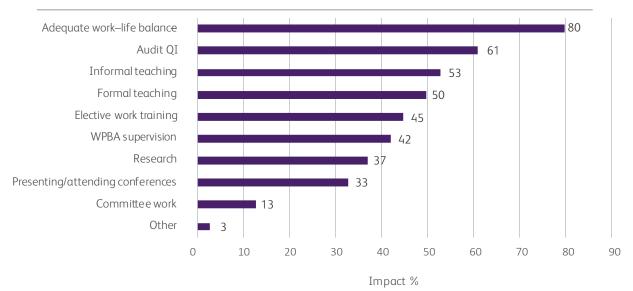
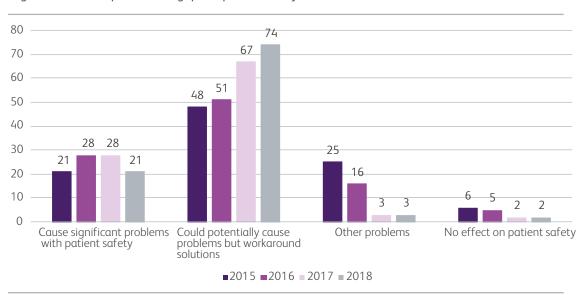


Fig 10 Potential impact of rota gaps on patient safety



The monitoring visits data provided rich qualitative data around the quality of training. During the period 2017–18, there have been three targeted visits for cardiology, one cyclical visit for GIM and a GMC small specialty review for pharmaceutical medicine which had JRCPTB representation. A summary of the reports is shown in Appendix A, section 2.6. The method of reporting used for each of the visits was variable. Some were mapped to the GMC standards of postgraduate medical education and training and others to the HEE quality framework. Given the lack of standardisation, comparing data from the monitoring visits was difficult. However, data from the visits of the acute medical specialties reflected and further substantiated the issues around rota gaps affecting workload and the imbalance between service provision of GIM affecting specialty training.

4.3 GMC theme 2: Educational governance and leadership

Theme 1: Educational governance and leadership

- **S2.1:** The educational governance system continuously improves the quality and outcomes of education and training by measuring performance against our standards, demonstrating accountability, and responding when standards are not being met.
- **\$2.2:** The educational and clinical governance systems are integrated, allowing organisations to address concerns about patient safety.
- **S2.3:** The educational governance system makes sure that education and training is fair and is based on principles of equality and diversity.

The main findings from this theme are summarised in Table 6.

Table 6 GMC theme 2: summary of findings

GMC requirements	Specialties affected	Issues	Data source / evidence		
Educational governance, leadership and quality control R2.1–2.4, 2.8	overnance, programmes, lack of coordinated teaching/training; poorly supervised clinics, non-interventional cardiology service, high-intensity rotas, workload and lack of support.				
, , ,	GIM	Concerns around clinical supervision due to rota gaps.	Monitoring visits.		
	CMT	CMT quality criteria (QC) implementation has shown positive changes in rotas over 4 months being distributed (56%, +8%); greater simulation training (86%), 69% shifts allow post-take ward round attendance (+5%).	SSQ – CMT Quality criteria (Fig 11).		
	Pharmaceutical medicine	GMC's review in 2018 identified that quality management (QM) processes could be improved and to ensure evidence is collected regularly to inform QM process.	Monitoring visits.		
Performance, progression and outcomes	CMT/HST	Regional variation in ARCP outcomes in part explained by high proportion of outcome 5s due to unsatisfactory record keeping / evidence on trainee electronic portfolios.	ARCP outcomes (App A, Figs 1, 2, 33–36).		
R2.45 2.16	CMT	Overall MRCP pass rates consistent in last 5 years. More CT1s entering training with part 1. Regional variation in outcomes.	MRCP outcomes (App A, Figs 5, 9–11).		
Equality and diversity	CMT	Evidence of differential attainment of MRCP, SCE exams, ARCP outcomes by gender and ethnicity.	MRCP (App A, Figs 37–39,		
R2.5	All specialties	Gender and ethnic differences in specialty applications and consultant posts; LTFT applications / consultant posts vary with specialty and gender; <1% applicants with disability.	Tables 18–20); ARCP (Fig 13, App A, Figs 52– 54); Recruitment (Fig 12, App A, 42–51).		
Incident reporting/	All specialties	Reporting systems – second highest number of red flags in 2016; now improved with more repeated green flags.	GMC NTS (App A, Table 15) and		
feedback R2.7	Cardiology	Poor mechanism of reporting and quality of feedback after incident reports.	monitoring visits.		

Table 6 (cont'd) GMC theme 2: summary of findings

	GMC requirements	Specialties affected	Issues	Data source / evidence
	Educational	CMT	93% trainees have single named ES over the training year.	CMT QC Fig 11.
	supervision R2.11, 2.14, 2.15	GIM	High level of agreement on accessibility and consultant supervision, ES knowledge of curriculum.	GIM QC Fig 5.
		Acute medicine	83% trainees have acute physician as their ES (+8%).	SSQ (App A, Table 5), ASRs.
	Management experience R2.3	All specialties	Greater trainee involvement in leadership and management; 52.6% attended management course at the time of their PYA. Significant variability between specialties (89% paediatric cardiology, 56% acute medicine; 21% haematology).	SSQ (App A; Table 5); ASRs; PYA reports (App A, Fig 41).
	Service redesign R 2.3	Genitourinary medicine	Negative impact of service commissioning on training – 37% (+12%); loss of consultant posts which impacts on clinical supervision; ST3 recruitment down 35% (2017–18).	ASRs; SSQ (App A, Table 5); HST census data; recruitment data.
		Haematology	Difficult delivery of lab competencies due to centralisation of services with joint ventures / private labs.	recraitment data.
		Clinical genetics	National redesign to seven regional genetics hubs away from clinical centres has potential detrimental effect on training.	
		Dermatology	Recommissioning led to three centres closing with significant negative impact on training.	
		Nuclear medicine	PET/CT services commissioning is limiting access to training in some regional centres.	
		Palliative medicine	Significant risk of funding / closure of voluntary sector hospices which provide huge proportion of training.	
		Rehabilitation medicine	Outsourcing of services (prosthetics, community services) with trainees having to go out of deanery to get experience.	
		Rheumatology /sport and exercise medicine	Commissioning of musculoskeletal services threaten training provision.	

The negative impact of commissioning and service redesign on training is a significant concern for a growing number of specialties in this report. Previously, we reported on these issues in GUM and in haematology. However, these issues have become a cause for concern in clinical genetics, dermatology, nuclear medicine, palliative medicine, rehabilitation medicine, rheumatology and sport and exercise medicine (SEM).

In GUM, the commissioning of services has already had a significant impact on the quality of training with issues around clinical supervision (due to loss of consultant posts) and some difficulty meeting curriculum competencies. This has also had a negative impact on recruitment (down 35% in the last 12 months). There is also a similar significant risk for the other specialties undergoing service redesign and changes in commissioning. There is a need to ensure organisations consider the impact of this on training and take the necessary precautions.

The CMT quality criteria were launched in 2015 in order to drive quality and enhance the educational experience in CMT.14 These have demonstrated improvements in quality of training through organisational changes and this has been measurable against set standards and evidenced through the GMC NTS SSQs (Fig 11; Appendix A, Fig 32).

The ARCP outcomes data showed satisfactory outcomes in 70% of HSTs and 53% of CMT trainees' ARCPs (excluding exam failure). However, significant regional variation in outcomes were noted (52–83% satisfactory outcomes in HST; 38–82% in CMT) (Appendix A, Figs 1, 2). The ARCP outcomes also varied significantly by specialty (Appendix A, Figs 3, 4). The mean satisfactory ARCP outcomes were lower in acute medical specialties (68%) when compared with non-acute medical specialties (82%) (Appendix A, Figs 20, 21). Of all the unsatisfactory outcomes, there was a high proportion of outcome 5s (incomplete evidence presented) with 31% in CMT and 13% in HSTs (Appendix A, Tables 6,7; Figs 2, 33, 35). The main reason for outcome 5s was unsatisfactory record keeping / evidence in trainee portfolios (Appendix A, Figs 34, 36).

Fig 11 CMT quality criteria trainee survey results 2018 (compared with 2017)

High levels of agreement 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 criteria 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 criteria 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%).

MRCP(UK) outcome data showed that the overall pass rates for the three parts of the MRCP diploma have been consistent for the last 5 years (2014–18) with good reliability across examinations (Appendix A, Fig 5). Trainee progression is consistent in Part 1 and Part 2 written and slightly down in PACES. 72% of CT2 trainees acquire full MRCP (Part 1, 2 and PACES) before the end of core medical training. This is down 6% over the time period 2015–18 (Appendix A; Fig 9). Regional variation in pass rates by deanery are shown in Appendix A, Figs 10, 11. MRCP and specialty certificate examinations (SCE) outcomes by gender and ethnicity are shown in Appendix A, Figs 37, 38 and Tables 18–20. There is evidence of differential attainment with significantly lower pass rates for MRCP (most notable in the PACES exams) and the SCEs in ethnic minority groups (Fig 37, Table 18). The British Asian and minority ethnic groups had lower pass rates than the white British. International medical graduates (IMGs) had the lowest pass rates. Female IMGs performance was lower for Paces (Table 19).

Data from the PYA reports showed that 91% of trainees had a satisfactory educational supervisor report (ESR) at the time of their PYAs (Appendix A, Fig 40) though there is only very limited evidence on the quality of reports. Some areas of good practice have been reported, including the use of standardised frameworks for assessing ESRs and tailoring feedback to ES on their ESRs (Fig 3). This approach has been shown to improve outcomes and should be adopted more widely.¹³

The average percentage of trainees who had evidence of attending a management course at the time of their PYAs was 53% and this varied between specialties (Appendix A, Fig 41). There was little evidence of specific management experience or training in individual programmes other than from some of the GMC NTS SSQs (Table 5).

E&D data was obtained from the specialty recruitment office, now a part of HEE. Data from 2,694 applications for CMT and HST programmes in 2018 were analysed. 51% of applicants were female and 45% were male (Appendix A, Fig 42). There were significant gender differences between specialties, with palliative medicine, clinical genetics, dermatology and GUM more female dominated whereas cardiology, SEM, CPT and gastroenterology were more male dominated (Fig 12).

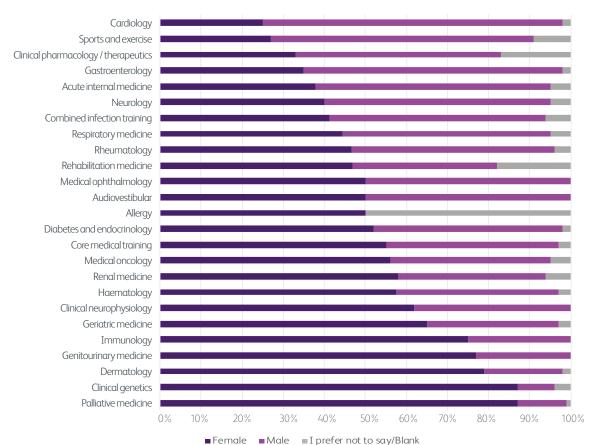


Fig 12 Ratio of female/male applicants by specialty in 2018

The average age of all applicants (both CMT and HST) was 30 in 2018 having been 29 in the preceding 3 years. Of all the applicants in 2018, 45.9% were white, 25.2% Indo-Asian, 6.5% Chinese, 3.9% mixed race and the rest were classified as other or non-stated. There were some ethnic differences noted between specialties. There were high proportions of applicants who were Indo-Asian for AIM, cardiology and SEM (Appendix A, Figs 44, 45).

Of all the applicants, 4% applied for a less than full time (LTFT) position (Appendix A, Fig 46). Overall, there is an increasing trend of HSTs working LTFT (15% in 2018) of which 91% are female. 25% of all female trainees and 3% of all male trainees work LTFT. The variations in LTFT working by specialty depends in part on the relative gender split (Appendix A, Fig 47).

Only 1% of applicants considered themselves to have a disability (Fig 48). Data for the other protected characteristics is presented in Appendix A (Figs 49–51).

The ARCP data showed that there was a difference in unsatisfactory outcomes by gender (13% in males compared with 9% females), age (highest percentage (20%) of unsatisfactory outcomes in the 40-44 age group) and ethnicity (highest proportion of unsatisfactory outcomes in black trainees (Figs 13; Appendix A, Figs 52–54)).

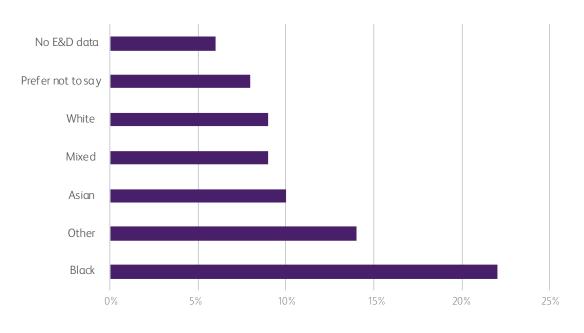


Fig 13 Percentage of trainees with unsatisfactory outcomes by ethnicity

Data from the new consultants / post-CCT survey showed that women were more likely to apply for consultant posts than men (1.54 versus 1.43) and get shortlisted (1.48 versus 1.38). There is similar though not as pronounced trend for LTFT probably as a result of the higher proportion of women in this cohort. CCT holders who are white British (50% respondents) applied for fewer posts (mean 1.29 versus 1.66 for all other ethnic groups) but were more likely to be shortlisted (80% versus 66%) and successful at being offered a post (77% versus 57%) compared with respondents from other ethnic minority groups. Given the consistent trend from some years, this is currently being investigated further.

4.4 GMC theme 3: Supporting learners

Theme 1: Learning environment and culture

S3.1: Learners receive educational and pastoral support to be able to demonstrate what is expected in *Good medical practice* and to achieve the learning outcomes required by the curriculum.

Many of the challenges of the learning environment and their impact on the learners and their training experiences have been described in theme 1. Some additional issues specific to this theme are summarised in Table 7.

Table 7 GMC theme 3: summary of findings

Table 7 GMC theme 3: summary of findings						
GMC requirements	Specialties affected	Issues	Data source / evidence			
Trainee support R3.1–3.2	Acute medical specialties CMT	Proportionately higher number of red flags for overall satisfaction, supportive environment and lowest overall satisfaction scores in acute medical specialties.	GMC NTS (Table 5; App A, Tables 2, 3, 14).			
	Cardiology	Highest number of trust red flags in 2018 GMC (+11); repeated red flags in consecutive years for supportive environment and overall satisfaction in Northampton, Cambridge, Imperial College and Newcastle. Monitoring visits – raised concerns around trainee support and supervision.	GMC NTS, ASRs; monitoring visits.			
Undermining R3.3	Cardiology	Monitoring visits noted concerns around undermining and poor supervision – addressed locally.	Monitoring visits.			
Feedback on performance,	All medical specialties	13 red flags for feedback on GMC NTS in 2018 (+2) and 19% of repeated red flags (+3% from 2015).	GMC NTS (App A, Tables 14, 16).			
development and progress R3.13	GIM	58% trainees had opportunity to lead post-take ward round and receive some feedback.	GIM quality criteria (Fig 5).			
	CMT	Agreeing a plan for MRCP between trainee and ES (71% in 2018) – largest improvement in supervision and ongoing support in quality criteria since 2015.	CMT quality criteria (Fig 11).			
Timely, accurate information on placements R3.7	CMT	Improvement of details of placements / on-call rotas covering over 4 months being distributed (88%).	CMT quality criteria (Fig 11).			
Academic/ other opportunities R3.8	Medical oncology	Opportunity to be involved in clinical trials/research in 81% trainees. Trainee-led initiative to increase collaborative research between cancer centres.	SSQs (App A Table 5), ASRs.			
	CPT, allergy, metabolic medicine, clinical genetics neurology, combined infection training, cardiology and renal medicine.	Highest proportion of HSTs going out of programme (OOP) and doing research/academia in CPT, allergy, metabolic medicine, clinical genetics, neurology, combined infection training, cardiology and renal medicine. Proportion of trainees going OOP and doing research is lowest in AIM and geriatric medicine.	ARCP outcomes (Fig 55); HST census data (Fig 56); PYA reports (Fig 59).			

Table 7 (cont'd) GMC theme 3: summary of findings

GMC require	ments	Specialties affected	Issues	Data source / evidence
Support R3.10	LTFT	All specialties	Generally increasing trend of trainees (15%) and consultants (23%) who are LTFT; variations in LTFT working by specialty depend on relative gender split.	HST census data (App A, Figs 46, 47).
Study le	ave	Acute medicine	90% HSTs able to attend specialist meetings (+32%).	SSQ (App A, table 5); monitoring
(see R1.	ee R1.16)	Cardiology	Concerns raised around access to study leave and teaching in some regions.	visits.
		All specialties	Recent changes to study leave provision by HEE has improved access/equity of courses/teaching for HSTs (AIM specialist skills; cardiology, CPT).	SSQs (App A, table 5); ASRs

The GMC NTS showed an increased number of red flags particularly in the acute medical specialties for overall satisfaction, training experience, clinical supervision, formal teaching and study leave (Tables 4, 5). In CMT, rota design and heavy workload contributed to the highest percentage of trusts with red flags in 2018 (+8 from 2017) (Appendix A, Table 4). Supportive environment had 11 red flags in 2018 by indicator (-1 from 2015) for all medical specialties and contributed to 27% of the repeated red flags in 2017/18 (+6% from 2015/16). The overall feedback reported by trainees was poor with 13 red flags in 2018 (+2 from 2015) and 19% or repeated red flags in 2018 (+3% from 2015/16) (Appendix A, Tables 14, 16).

The GMC NTS SSQs highlighted the service pressures impacting on training and that GIM commitments adversely affected specialty experience (Appendix A, Table 5). The GIM and AIM quality criteria provided very useful information on the quality of the educational environment and training experience (Fig 6). It was reassuring to see that trainees felt well supported by on-call consultant physicians and they felt they were easily accessible for advice for both in- and out-of-hours work (87% overall agreement). The management of the acute take was effectively supported by a MDT (80% overall agreement). The trainees felt their overall clinical and educational supervision was good (77% agreement). However, the protected time for teaching and learning were poor (only 15% agreement) and trainee involvement in rota design, review and management of gaps was poor.

The GMC NTS SSQs also provided evidence on attendance at teaching, conferences and other opportunities for laboratory or clinical experience elsewhere as well as attendance at MDT meetings (Appendix A, Table 5).

The ARCP outcomes data gave some indication of trainees who were currently out of programme (OOP) and this showed some variability between specialties (Appendix A, Fig 55). The top three specialties with high OOP ARCP outcomes were CPT (26.4%), medical oncology (26.1%) and infectious diseases (22.4%). The bottom three specialties were AIM (3.1%), geriatric medicine (4.5%) and paediatric cardiology (6%).

The HST census data provided evidence of research/academic training posts (Fig 14). Specialties with the highest percentage of trainees OOP doing research (OOPR) or in an academic post included CPT (61%), allergy (50%) and metabolic medicine (50%). GIM and AIM were among the lowest.

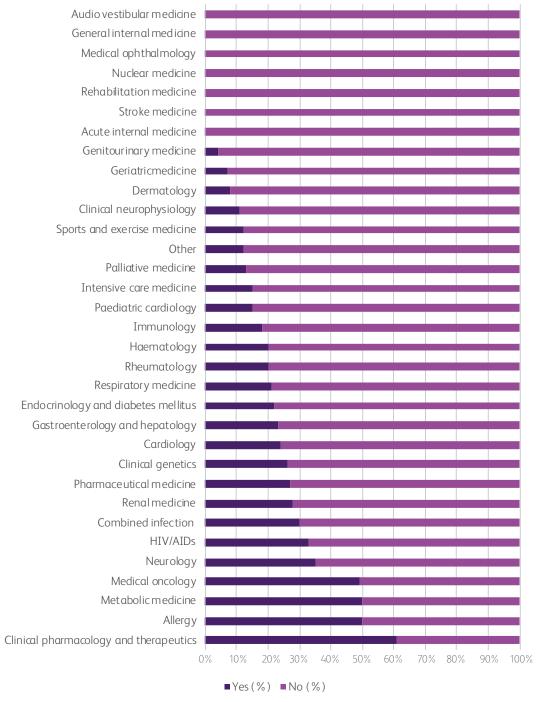


Fig 14 HSTs who are in academia by specialty

The PYA reports showed that on average 91% of trainees present to their PYAs with adequate research skills. Data for AIM were not available but in GIM, 92% of trainees had adequate research skills in 2018 (Appendix A, Fig 59).

The HST census data reported on overall satisfaction with training. The HSTs' satisfaction with their specialty was 86% whereas their satisfaction with GIM was only 24%. This reflects work pressures as well as the overall quality of training in GIM (Appendix A, Figs 57, 58).

4.5 GMC theme 4: Supporting educators

Theme 4: Supporting educators

S4.1: Educators are selected, inducted, trained and appraised to reflect their education and training responsibilities.

S4.2: Educators receive the support, resources and time to meet their education and training responsibilities.

This theme provides evidence for some of the challenges faced by educators in trying to deliver a high-quality educational experience for their trainees and to meet the GMC standards for education and training. Data from this theme are summarised in Table 8.

Table 8 GMC theme 4: Summary of findings

GMC requirements	Specialties affected	Issues	Data source / evidence
Trainee support R3.1-3.2	All medical specialties	45% consultant posts advertised not filled especially in geriatric medicine, gastroenterology and AIM. Mean PAs worked 10% higher in full time (12.4 PAs) and proportionately higher in LTFT consultants (8.2 PAs)	Consultant census data (App A, Figs 60, 61). Consultant census (App A, Figs 62, 63).
	Acute medical specialties	Mean PAs worked higher in acute medical specialties; overall satisfaction lower in acute medical specialties and worse in GIM compared with specialty; increased number of red flags in GMC trainer survey in acute medical specialties; highest number of trust red flags for rota design, time for training and support for trainers.	Consultant census data (App A, Figs 66, 67). GMC Trainer Survey (Table 9, Figs 16, 17; App A Figs 72–74).
	Cardiology	Not enough time allocated in consultant job plans to provide effective training.	Monitoring visits.
Recognition and approval of trainers R4.6	Geriatric, respiratory, diabetes, palliative medicine and dermatology	Highest number of green flags on GMC NTS trainer survey and high proportion of flags in supportive environment, resources for trainers and trainer development.	GMC trainer survey (App A; Figs 78–81).

The annual RCP census data from 2017/18 shows that there are currently 15,727 consultant physicians in the UK, of which 84% are working in England, 8% in Scotland, 4% in Wales and 3% in Northern Ireland. The largest medical specialties remain geriatric medicine and cardiology, each with 10% of the total consultant physician workforce.⁵

There has been a gradual trend of increasing numbers of female consultants over recent years and the gender split in 2016/17 was 64% male and 36% female. However, there remain significant gender differences between specialties. Cardiology and gastroenterology/hepatology remain predominantly male dominated (86% and 79% respectively) whereas other specialties are more female dominated including palliative medicine (76%), GUM (59%) and dermatology (59%). Up to 70% of the consultant workforce are of white ethnic origin, 13% are Indian, 2% are Pakistani and 2% are Chinese. 77% of consultants are UK graduates; 6% are from Europe and 17% from outside Europe.

Of the specialties, geriatric medicine, gastroenterology and AIM advertised the highest number of posts (191, 158, 155 posts respectively) in 2018 and this has been a consistent trend for the last 5 years. The highest fill rate was in cardiology (57%) and the lowest was in geriatric medicine (44%) (Appendix A, Figs 61, 62).

Overall, 45% of advertised consultant physician posts were not filled. There were significant regional differences with the Midlands and east of England having the highest number of unsuccessful appointments (57%) following by the south (50%) and the north (49%). London had the lowest rate of unsuccessful appointments at 27%.

The mean number of contracted sessions or programmed activities (PAs) that consultant physicians estimated they worked was 11.5 per week. Full time consultants based on a 10 PA contract actually worked on average 12.4 PAs per week and consultants on LTFT contracts worked an average of 8.2 PAs per week. This is consistent with returns from previous years in which full-time consultants on average worked 10% more than their contracted hours and LTFT consultants worked proportionately even more above their contracted hours (Appendix A, Fig 63). This varies by specialty with higher mean PAs contracted in the more acute medical specialties and actual hours worked being even higher (Appendix A, Fig 63).

Consultants also reported on the frequency and impact of rota gaps with 53% reporting that HST rota gaps occurred frequently or often. 19% reported a significant impact of rota gaps on patient safety and 77% reported that they cause problems requiring work-around solutions. Only 2% reported that there was no impact on patient safety (Appendix A, Figs 64, 65).

Job satisfaction for consultants in acute medical specialties was lower than in non-acute specialties and overall job satisfaction in GIM was lower than in the specialties (Appendix A, Figs 67, 68). There were significant regional variations with consultants in Wales reporting a higher degree of enjoyment and satisfaction in both their specialty and GIM compared with consultants in Scotland and Northern Ireland.⁵

The GMC national trainer survey was introduced in 2016 and this evaluated the trainers' perception of the training provided against GMC standards. Trainers from 29 higher medical training (HMT) specialties participated and the average response rate across all specialties was 72%.

Specialties contributing substantially to the acute medical take showed the largest number of red flags in 2016 with a mixture of specialties being reflected in these results. Those not contributing to the acute take and those with little or no contribution to the acute take recorded the greatest number of green flags. The top five specialties showing the highest number of trust red or green flags by specialty are shown in Table 9.

Table 9 Top five specialties showing the highest number of red or green flags

Specialty (red flags)	2017 No.	2018 No.	Specialty (green flags)	2017 No.	2018 No.
Respiratory medicine	102	90	Geriatric medicine	104	92
Geriatric medicine	67	69	Respiratory medicine	44	56
Cardiology	94	68	Endocrinology / diabetes	56	46
Gastroenterology	81	68	Palliative medicine	44	44
Acute internal medicine	53	28	Dermatology	45	43

Respiratory medicine had the highest number of red flags and the distribution of red flags was highest in the domains for time for training and rota design (Table 9, Fig 15). Geriatric medicine had the highest number of green flags followed by respiratory medicine, endocrinology and palliative medicine and these were proportionately higher in the resources for trainers and supportive environment domains (Appendix A, Fig 70).

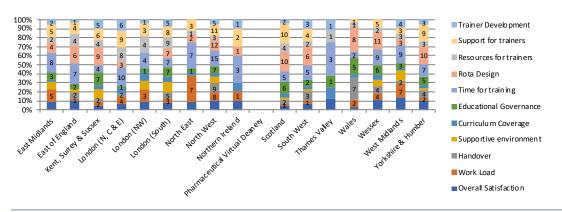


Fig 15 Distribution of red flags by domain in the top five specialties

639 trust red flags were recorded across the 29 HMT specialties in 2017. Seven out of ten specialties with the highest number of red flags were specialties contributing to the acute take. Overall, the number of red flags decreased by 180 to 461 (-28%) in 2018 for all specialties (except geriatric medicine, GIM and dermatology) (Appendix A, Fig 71) and in all domains (Fig 16). Support for trainers saw the greatest reduction by percentage (-48%) followed by resources for trainers (-41%) and trainer development (-38%) (Fig 16).

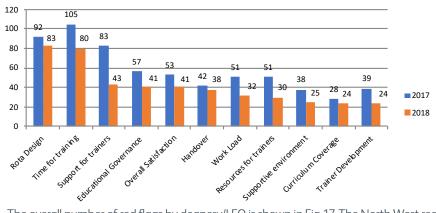


Fig 16 Overall number of red flags by domain (2017–18)

The overall number of red flags by deanery/LEO is shown in Fig 17. The North West region had the highest number of red flags (81, 2018) with high proportion of flags in the time for training and rota design domains (Appendix A, Fig 77).

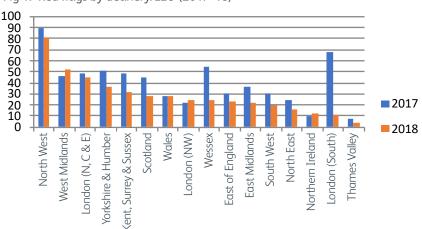


Fig 17 Red flags by deanery/LEO (2017–18)

There were 507 trust green flags recorded and these were highest in the supportive environment and resources for trainers domains (Appendix A, Figs 79, 80). The North West region had the highest number of green flags (104) with a high proportion in the supportive environment and handover domains (Appendix A, Figs 83, 84).

4.6 GMC theme 5: Developing and implementing curricula and assessments

Theme 5: Developing and implementing curricula and assessments

S5.1: Postgraduate curricula and assessments are implemented so that doctors in training are able to demonstrate what is expected in *Good medical practice* and to achieve the learning outcomes required by their curriculum.

Data from multiple sources have evidenced the challenges for curriculum delivery in many of the acute and smaller specialties and these are summarised in Table 10.

Table 10 GMC theme 5: Summary of findings

Table 10 GMC theme 5: Summary of findings						
GMC requirements	Specialties affected	Issues	Data source / evidence			
Curriculum coverage	Diabetes and endocrinology	Experience of diabetes in the community (only 32% from SSQs).	SSQ (Appendix A, Table 5), ASRs.			
R5.9	Gastroenterology	Issues with nutrition training – 41% competencies achieved (-9% since 2017); worse in East of England, Kent Surrey Sussex and West Midlands.	SSQ (App A, Table 5), PYA reports, ASRs.			
	Genitourinary medicine	92% (+10%) of trainees go outside of deanery to gain HIV inpatient competencies; negative impact of local sexual health care tendering process on training - 37% (+12%).	SSQ (App A, Table 5), PYA reports, ASRs.			
	Geriatric medicine	Significant variability across the UK in achieving curriculum competencies; trainees least confident in palliative care, rehabilitation, orthogeriatrics, falls, poor mobility, tissue viability, continence, community geriatrics and old age psychiatry.	SSQs (App A, Table 5), PYA reports, ASRs.			
	Haematology	Ongoing issues with delivery of lab competencies due to centralisation of services with joint ventures / private labs.	SSQs (App A, Table 5), ASRs.			
	Immunology	Issues with acquisition of core laboratory competencies due to service delivery; difficulty funding of national ACP training days with smaller specialty study leave funding. High proportion of ARCP unsatisfactory outcomes.	SSQs (App A, Table 5); ASRs, ARCP outcomes (Fig 18).			
	Paediatric cardiology	31% (-19%) trainees felt difficult to achieve curriculum competencies; many relocate to another deanery to meet curricular requirements.	SSQ (App A Table 5).			
	Rehabilitation medicine	Outsourcing of services (eg prosthetics, specialist seating, community services) threatens exposure to some aspects of training programme; many trainees need to go out of deanery to gain competencies (spinal cord injury, trauma, musculoskeletal rehabilitation).	SSQs (App A, Table 5), ASRs.			
	Renal medicine	Poor opportunity to attend haemodialysis MDT (34% none); live donor assessment (50% none); adolescent care (40% none).	SSQs (App A, Table 5), PYA reports and ASRs.			
Sufficient practical experience R5.9b	Cardiology	Specific issues for cardiac MR, echocardiogram, pericardiocentesis training now improving by embedding into simulation programmes but some funding issues.	SSQ (App A, Table 5), PYA reports, ASRs.			

Table 10 (cont'd) GMC theme 5: Summary of findings

GMC requirements	Specialties affected	Issues	Data source / evidence
Balancing service vs training R5.9h	Acute medical specialties	Significant impact in acute medicine, cardiology, diabetes and endocrine, gastroenterology, GIM, haematology, renal, respiratory medicine.	GMC NTS (Tables 1, 2, 5) Fig 4; SSQ (App A, Table 5).
	GIM	Many GIM posts 90% service and 10% training; GIM impacting on specialty training experience.	HST census data, (App A, Figs 16, 17).
Assessment R5.10–5.11	Acute medical specialties	Overall, mean ARCP satisfactory outcomes were lower in acute medical specialties (67.8%) compared with non-acute medical specialties (81.9%); WPBA and portfolio completion less satisfactory in acute specialties.	ARCP outcomes (App A, Figs 20, 21);PYA reports (App A, Figs 30, 102).
	Sport and exercise medicine	Systems used to assess skills and knowledge adequate in 58% (-19%); poor portfolio completion rate and WPBAs.	SSQ (App A, Table 5), PYA report (Figs 30, 102).
	All specialties	Variable changes in SCE pass rates for each specialty; pass rates stable for three SCEs (acute medicine, diabetes and endocrinology, neurology), decreased for three SCEs (geriatric, palliative and respiratory medicine) and increased for five SCEs (dermatology, gastroenterology, medical oncology, nephrology and rheumatology); range from 48.3% to 76.2%.	MRCP outcomes (App A, Table 20, 21, Figs 38, 39, 90–101).

Single specialty issues affecting deliverability of curricula are detailed in Table 10. In the acute specialties many of the issues are related to the impact of the service delivery of GIM affecting the specialty experience. In other specialties, some of the issues are due to commissioning and service redesign impacting negatively on training.

The ARCP outcomes data from 2016–17 showed, on average, that 70% of higher specialty trainees achieved satisfactory outcomes. Among CMT trainees, satisfactory outcomes were lower at 53% (Appendix A, Tables 6, 7). There was a significant variation between specialties with satisfactory outcomes ranging from 57-100% (Fig 18).

Fig 18 Proportion of satisfactory / unsatisfactory / OOP ARCP outcomes by specialty 100% 90% 80% 70% 60% 50% 40% 30% **■** 00 P 20% Unsatisfactory 10% ■ Satisfactory Clinical genetics AIM GIM Medical oncology Audiovestibular Metabolic medicine Nuclear medicine Clinical neurophysiology Rehabilitation Palliative medicine Genito-urinary medicine Dermatology **ACCS AM** Pharmaceutical medicine Geriatrics Endo/Diabetes Paediatric cardiology Medical ophthalmology Rheumatology Neurology Sport / Exercise Immunology Haematology Renal medicine Cardiology Core medical training Infectious diseases Gastroenterology Clinical pharm & therapeutics Respiratory

Satisfactory outcomes were high in allergy, audiovestibular medicine, hepatology, metabolic and nuclear medicine. Unsatisfactory outcomes ranged from 0–35% and these were high in immunology, medical ophthalmology, AIM, gastroenterology, haematology, respiratory medicine, GIM, cardiology and sport and exercise medicine (Fig18; Appendix A, Figs 3, 4). Of the unsatisfactory outcomes, there was a high proportion of outcome 5s (Appendix A, Fig 4). This was highest in CMT, medical ophthalmology, haematology, AIM and CPT (Appendix A, Fig 86).

Overall the proportion of satisfactory outcomes in the acute medical specialties was lower (67.8%) compared with non-acute medical specialties (81.9%) (Appendix A, Figs 20, 21).

The overall pass rates for MRCP(UK) have been consistent for over 5 years (Appendix A, Fig 5). Core trainee progression has been consistent in Part 1 and 2 over the last 4 years but slightly down in PACES (75 to 72% 2017–18). 72% of CT2 acquire full MRCP (Part 1, 2 and PACES) before the end of training. This is down 6% from 2015–18 (Appendix A, Fig 9). There are regional variations for core trainee progression. CT1 pass rates are better in HEE North East (NE), London and Scotland South East (SE). CT2 pass rates are better in Scotland SE, HEE NE and Thames Valley (Appendix A, Figs 10, 11).

SCE data from 11 specialties were available and the trend analysis of pass rates (2016–18) and pass marks (2014–18) are shown in Appendix A, 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% (Table 10). Differential attainment was noted as discussed in Theme 2 (Table 6).

The single specialty issues affecting deliverability of curricula are detailed in Table 10. In the acute specialties many of the issues are related to the impact of the service delivery of GIM affecting the specialty experience. In other specialties, some of the issues are due to commissioning and service redesign impacting negatively on training.

5. Conclusion

This second report on the state of physicianly training in the UK has continued to highlight concerns around the increasing pressures on the acute medical specialties due to rota gaps and the imbalance of the service delivery of GIM affecting the specialty training experience. This negatively impacts on many of the GMC themes and standards for postgraduate medical education and training and has the potential to impact on patient safety. There are growing concerns about the impact of changes in commissioning and service design on training in many specialties. Some specialty-specific issues have improved and others have persisted or are new, and these particularly affect curriculum delivery. These issues are evidenced by multiple key quality data sources.

The state of physicianly training report has provided an evidence-based benchmark allowing useful comparisons of the quality of postgraduate medical training over time. This report provides accurate comparative physicianly training outcome data to stakeholders, which allows specialties, schools and LEOs to examine their own areas and work on specific action plans to address the concerns raised within this report.

The JRCPTB will continue to support programmes of work to enhance the quality of training. The new internal medicine programme commences in August 2019 and delivery of the shape of training recommendations will help towards addressing the imbalance between service delivery in GIM and provision of specialty training. We will continue working on the widespread implementation of the GIM and AIM quality criteria and will work with various stakeholders including NHS Employers to ensure and maximise their effectiveness in improving the quality of training. The JRCPTB will continue actively using and evaluating the E&D data and work towards narrowing the differential attainment gap. The JRCPTB is currently leading on a national E&D study looking at the CMT quality criteria as a marker of educational environment and its impact on trainee progression and educational outcomes (ARCP, MRCP and GMC outcomes). This is a collaborative study with MRCP(UK) and the GMC. We will support interventions which are shown to be of benefit to improve the experience for all our trainees.

We hope this report provides a useful quality assurance framework to continue driving up the quality of postgraduate medical training.

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