

Health Education England

Evaluation of the Internal Medicine Training Programme – Interim Report

25th June 2021

Glossary

Acronym	Description
ARCP	Annual review of competency progression
CiP	Capabilities in Practice
CMT	Core Medical Training
CMT2	Year 2 of specialty training
CREST	Certificate of Readiness to Enter Speciality Training
HEE	Health Education England
HST	Higher specialty training
ICU	Intensive Care Unit
IMT	Internal Medicine Training
IMS1	Stage 1 of the IMT programme
IMS2	Stage 2 of the IMT programme
IMY1	Year 1 of the IMT programme
IMY2	Year 2 of the IMT programme
IMY3	Year 3 of the IMT programme
MRCP	Membership of the Royal Colleges of Physicians
SASO	Specialty and Associate Specialist doctors
TIS	Trainee Information System
TPD	Training Programme Director
WTE	Whole time equivalent

CONTENTS

Glossary	2
Executive summary	4
1. Introduction.....	7
2. Desk review – IMT risk log	10
3. Interview findings.....	13
4. Quantitative analysis	23
5. Conclusions and recommendations	30
6. Next steps	33
Appendix 1: Detailed quantitative analysis	35

Executive Summary

Introduction

RSM UK Consulting LLP (RSM) were commissioned by Health Education England (HEE) to undertake a three-year longitudinal evaluation of the new Internal Medicine Training (IMT) programme. Stage 1 of the IMT programme (IMS1) has replaced the Core Medical Training (CMT) programme, and trainees will usually enter the training programme after having completed the Foundation Programme (or equivalent). IMS1 forms the first stage of specialty training for most doctors training in physician specialities, to prepare trainees for participating in the acute medical take. IMT training continues in Stage 2 (IMS2) for certain trainees, integrated with their higher specialty training (HST). The changes aim to enhance training in internal medicine and prepare doctors to manage patients with complex comorbidities, as well as providing trainees with wider exposure to medical specialties, including dedicated experience in the intensive care unit (ICU).

The purpose of this evaluation is to assess the impact of changes in IMT training, particularly on the perceptions and experiences of those involved, progression through physician training, service delivery and learning outcomes. Following on from our Preliminary Report submitted in December 2020, this Interim Report sets out the findings from our first round of interviews and updated quantitative analysis.

Findings

Our qualitative and quantitative analysis informing this report has comprised a desk review including analysis of the IMT Covid-19 Risk Log, a round of one-to-one semi-structured interviews with ten IMT trainees to build on the key findings of our Preliminary Report, and analysis of updated trainee and workforce datasets. Due to the limited availability of resources as a result of the Covid-19 pandemic it was agreed that updated quantitative data would not be collected directly from local offices in Year 1. Where possible, data has been collected for the final two years of CMT and the first year of the IMT programme.

Qualitative analysis

Our interviews with trainees have provided additional insight into a number of areas raised in our Preliminary Report. It is clear that the Covid-19 pandemic has had a significant impact on trainee experience and particularly on clinic attendance and exams, though in some areas trainees believe this has been an exacerbation of existing issues. Key insights across the areas raised in the Preliminary Report include:

Quality of teaching and level of service provision: though impacted by the pandemic, trainees spoke positively about the training that they had undertaken. Many trainees felt that the level of service provision compared to training was too high, though this was not unanimous and was noted to vary between Trusts and placements. *We recommend that HEE seek to understand the cause of the variation in the perceived level of service provision and, where this relates to Trust-level implementation of the curriculum, seek to address any issues. HEE should also work to change trainee perceptions and expectations around service provision, ensuring they understand the potential benefits of learning on the job.*

Supervisor interaction: the frequency of meetings with educational supervisors varies significantly amongst trainees, with many meeting much less than once a month. Despite this, trainees generally find their interactions with their educational supervisors to be useful. *We recommend that HEE encourage educational supervisors to meet monthly with their trainees. We also recommend additional research to understand what the barriers are to educational supervisors conducting formal meetings with their trainees. Extra guidance is needed on how educational supervisors based at different sites from their trainees can provide formal meetings (ie using online meetings).*

Curriculum requirements: trainees are finding it difficult to attend the required number of clinics for a number of reasons, including not being able to take time away from the ward, having difficulty arranging clinics or factors relating to the pandemic (such as social distancing or an increase in telephone clinics). Trainees believe that the pandemic has exacerbated the issues relating to clinics, but is not the sole cause. *We recommend that clinic time be protected, and that work should be undertaken to further understand and address the variation in access to clinics across Trusts and departments. Lessons should be learnt from areas where it is working well, with best practice shared.*

Educators understanding of the programme: some trainees believe that a lack of understanding of the requirements of the IMT programme within Trusts is having a negative impact on their training. Others who felt their College Tutors had a good understanding of the programme noted that they had positively benefited from this. *We recommend that guidance on the requirements of the IMT curriculum should be disseminated to Trusts and filtered down to those working in the hospital, to reduce variation in the experience of trainees.*

Variation between regions and specialties in roles and preparedness: there is significant variation in how prepared trainees feel for the next level of their training, though some noted they were unclear on how IMY3 would be delivered and so were unsure how prepared they were. Many trainees noted that their role does not feel different to that of a Foundation Trainee, with this contributing to a sense of unpreparedness for some. *We recommend that variation in trainee experience be reduced, particularly relating to the distinction in roles between IMT and Foundation trainees. HEE should explore the possibility of providing extra support to trainees who have lost learning opportunities or have been unable to take their exams due to the Covid-19 pandemic. HEE should also explore the possibility of providing management or leadership training to trainees progressing into IMY3, to prepare them to manage the acute take as registrars.*

Emerging themes: we have also identified a number of new issues from the interviews with trainees, including variation in the interpretation of the curriculum, particularly regarding the implementation of IMY3 and the additional mandatory placements; potential need to support to IMY1 trainees when they first access the e-Portfolio, particularly less defined areas to evidence such as research and quality improvement; and the potential need for clarification over self-development time, to ensure more uniform application across Trusts and departments. These areas will continue to be explored in the next stages of the evaluation.

Quantitative analysis

The quantitative analysis section of the report explores the data collected in Year 1 of the evaluation and the high-level analysis of the baseline (CMT programme), including emerging insights for Year 1 of the IMT programme. A comprehensive analysis has been included within Appendix 1. The emerging impacts evidenced within the quantitative analysis include:

- an upwards trend in relation to the number of training posts available and the number of trainees across both years of the programme (although a small dip was identified for Year 1 trainees in 2019/20);
- an increase in the proportion of CREST Year 1 trainees within the first cohort of the IMT programme;
- a reduction in the attrition of Year 1 trainees over the three academic years of data provided; and
- changes in the ARCP outcomes received (although this has been skewed due to the Covid-19 pandemic and the introduction of two new outcomes – Outcomes 10.1 and 10.2).

Next Steps

We will continue to explore emerging themes and insights to monitor and assess ongoing perceptions and experiences of those undertaking IMT training. Qualitative activities will include surveys and interviews including local offices, as well as both IMT trainees and educators during 2021 and 2022.

In ongoing quantitative analysis, we will seek to understand whether observed changes continue into Year 2 (and then Year 3) of the programme. The longitudinal nature of data will support analysis to evidence of whether impacts (e.g. attrition, outcomes) are as a result of changes to the programme or to other factors such as the Covid-19 pandemic.

We will produce a final report in February 2023, which will include our evidence-base, comparative evaluation of learning outcomes of the cohort, and key findings.

1. Introduction

RSM UK Consulting LLP (RSM) were commissioned by Health Education England (HEE) to undertake a three-year longitudinal evaluation of the new Internal Medicine Training (IMT) programme. Stage 1 of the IMT programme (IMS1) has replaced the Core Medical Training (CMT) programme, and trainees will usually enter the training programme after having completed the Foundation Programme (or equivalent). IMS1 forms the first stage of specialty training for most doctors training in physician specialities, to prepare trainees for participating in the acute medical take. IMT training continues in Stage 2 (IMS2) for certain trainees, integrated with their higher specialty training (HST).

The main differences between the IMT and CMT programmes are:

- **length of programme:** for most trainees, stage 1 of the IMT programme will last three years, as opposed to the two years of CMT;
- **content of the programme:** Stage 1 IMT training includes mandatory training in geriatric medicine, intensive care (ICU) and a focus on outpatients and ambulatory care. IMY3 is a supervised year where trainees take on the medical registrar role;
- **assessment:** IMS1 trainees will be assessed against 14 Capabilities in Practice (CiPs) (six core capabilities and eight clinical capabilities).

These changes aim to enhance the training in internal medicine and prepare doctors to manage patients with complex comorbidities, as well as providing trainees with wider exposure to medical specialties, including dedicated experience in ICU.

As agreed with HEE, the purpose of this evaluation is to:

- assess the impact of the change in IMT training in IMS1 and in Group 1 and Group 2 higher-specialty training (HST)¹;
- capture the perception and experiences of those involved;
- demonstrate the new features of the IMT (IMS1 and IMS2) curricula and any new modalities of training/assessment;
- assess the impact on service delivery;
- measure rates of trainee progression through the IMT programme and compare to progression rates through CMT and HST; and
- assess to what extent the outcomes/deliverables set out at the start of the programme have been met.

Following on from the Preliminary Report submitted in December 2020, this Interim Report sets out the findings from our first round of interviews and updated quantitative analysis. The approach that we have taken to these elements of the research is summarised in Chapter 1.2. Subsequently, we will produce a final report in February 2023 (accompanied by a presentation), which will cover: our evidence-base and methodology; key findings; and a

¹ HST specialities are separated into two groups, which have slightly different pathways (see chapter 3.2 for detail). Group 1 specialties continue with IMS2 training.

comparative evaluation of learning outcomes of the cohort (including progression rates and subjective feedback on content and delivery).

1.1 Previous report findings

This report follows a Preliminary Report produced in December 2020, which reported on the findings from our first desk review, as well as the first round of quantitative analysis and the results from the trainee and educator surveys. The key findings from this report were:

1. **Trainees are largely satisfied with the quality of teaching, but many feel their role is too focused on service provision.**
2. **Trainees are satisfied with the quality of supervisor interaction but are not meeting with their supervisors frequently enough.**
3. **Some trainees are struggling to meet curriculum requirements.**
4. **Most educators enjoy supervising IMT trainees and have good understanding of the programme but some lack understanding on the details of the curriculum.**
5. **Trainee experience in the IMT programme varies between regions and specialties.**

Our interview findings have been mapped to the key themes above followed by additional findings.

1.2 Methodology

1.2.1 Qualitative approach

Two key activities were undertaken to inform the development of the report: a desk review of the IMT Covid-19 Risk Log and a round of one-to-one semi-structured interviews with IMT trainees.

Desk review

We analysed the submissions to a risk reporting tool that was open to IMT trainees between November 2020 and April 2021 to highlight any training concerns relating to the impact of the Covid-19 pandemic. To undertake this analysis, we coded the concerns raised into key themes and extracted quotations where relevant. The findings are presented in Chapter 2 of this report.

Interviews

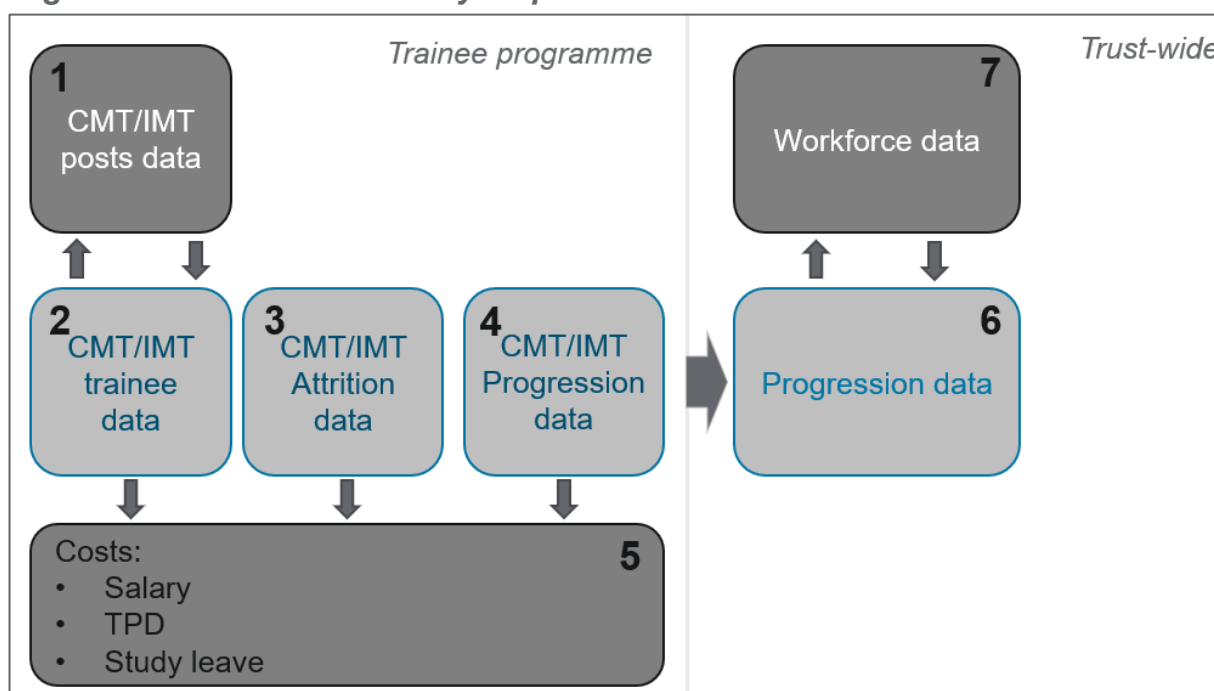
We undertook **10 interviews with IMT trainees** who had opted-in to take part when surveyed in November/December 2020. Interviewees were sampled to ensure representation across regions, year group and gender. The interviews followed a discussion guide developed in conjunction with HEE, intended to provide greater detail on the key findings from our Preliminary Report. The interviews were transcribed and analysed to identify common themes and extract key insights. The analysis is presented below in Chapter 3, structured by key findings from the Preliminary Report, along with other new insights.

1.2.2 Quantitative approach

Chapter 4 provides the CMT baseline data (from 2017/18 onwards) and the first year of data from the IMT programme (2019/20). The quantitative analysis has been undertaken in line with the quantitative analysis plan (see below) and explores each dataset and the associations between them.

This data will be tracked throughout Year 2 (2020/21 academic year) and Year 3 (2021/22 academic year) of the evaluation to establish what the quantitative impacts of the IMT programme have been. Within each report, the IMT programme will be compared to the previous CMT programme data as a pre-intervention counterfactual to provide insights into the success of the programme changes and to estimate the economic, workforce and service delivery impacts.

Figure 1.1 – Quantitative analysis plan



The quantitative analysis plan links back to the logic model and the evaluation specification, and the following outcomes will be addressed:

- greater numbers of a skilled future generalist consultant medical workforce who can be employed to manage the acute unselected take plus provide specialist skills;
- an increase in junior medical staff on rotas, converting trust grade posts into training posts, reducing rota gaps and the reliance (and cost) of locums;
- a skilled generalist workforce at registrar 'decision making' level within 5 years of qualification; and
- measure rates of trainee progression through the IMT programme and compare to progression rates through CMT.

The outputs and impacts of the IMT programme can only be monitored in the short-term (one to three years) in the lifespan of this evaluation. However, this analysis will provide evidence as to whether the IMT programme is likely to meet these outcomes going forward, based on

a range of assumptions and the emerging data. This will also be triangulated with the qualitative findings from surveys and interviews to form an evidence base for the success of the IMT programme and inform recommendations for ongoing development.

2. Desk Review – IMT risk log

This section presents findings from a risk log for IMT trainees during the Covid-19 pandemic. The reporting tool was open to all trainees between November 2020 and April 2021 to raise concerns regarding their training progression concerns. 531 responses were received. These findings provide context about the impact of the pandemic on the trainee experiences highlighted below, as well as in our Preliminary Report.

Trainees were asked: **What is the perceived risk to your training experience?** 90% of the respondents (477) provided a free-text response to this question. Most trainees primarily expressed concerns of failing to meet the curriculum requirements due to limited or cancelled learning opportunities. Only 14 trainees explicitly stated that they are worried they would be unable progress to the next stage of training. However, other trainees stressed that while they are not concerned about being able to progress, they are worried about having the necessary skills and experience needed for the next level of their training as the bar for progression was lowered. The common areas of concern included the following:

- clinics;
- teaching;
- procedures and simulations;
- exams; and
- specialty exposure.

These will be explored in more detail in the following sub-sections.

2.1 Reduced clinics

The most common concern (reported by 290 trainees) was clinic attendance. Trainees indicated that almost all clinics were cancelled, meaning that they had gained very limited outpatient clinical exposure during their training. One trainee wrote, “I believe this will impact our experience as getting experience in clinics and outpatient settings is a valuable and important part of training”. Some trainees also explained that progressing onto the next level of their training having only attended the minimum acceptable number of clinics would put more pressure on their next year of training as they would need to achieve the target number of clinics attended normally required for two years in one year.

Trainees also noted that while most clinics were cancelled, some of them were moved online which they felt worsened their training experience. Some 28 respondents shared that they do not believe online clinics provide any learning opportunities. Trainees disclosed that consultants would hold consultations at home or would not invite them to the office as there is no space. One of the respondents described their experience, writing “face to face clinics has reduced - namely because these are small rooms where social distancing is difficult and it is very difficult to have a clear telephone conversation in a mask (meaning most seniors will just

take them off if they are alone) and if the junior doctor is sitting in a clinic, the use of the telephone often means the junior cannot hear what the patient is saying so misses out on learning opportunities.”

2.2 Teaching

Lack of teaching available during rotations was reported by 91 trainees. Trainees shared that most of their teaching was cancelled or that it was not possible to get teaching on the ward. A few trainees highlighted that while some teaching sessions were still happening, they were unable to attend these due to pressure of being on the ward. While trainees appreciated that spending more time on wards was inevitable due to the pandemic, some trainees highlighted that this was the second wave of Covid-19 and more preparation could have been done.

2.3 Procedures and simulations

77 trainees expressed their concern regarding having fewer opportunities to gain procedural skills. This is due to the fact that most learning opportunities were cancelled or impossible due to the pandemic. One trainee wrote that it was “extremely difficult to ... learn practical procedures in order to become a competent medical registrar”. This issue was reported across both IMT1 and IMT2 cohorts, however, IMT2 emphasised their concerns more due to procedural skills being “required to safely and competently be a medical registrar”. Some trainees explained that they “cannot get time away from the ward to complete all procedural competencies”. One trainee also indicated that service pressures meant they had fewer opportunities to observe procedures.

16 trainees stated that all simulation training and courses were cancelled. One respondent highlighted that their simulation sessions were rescheduled after ARCP. Another respondent indicated that the development of their clinical skills would still be affected even if simulations were still happening due to social distance hindering the close contact.

2.4 Difficulties with exams

Difficulties with exams were mentioned by 66 respondents. The majority of these trainees expressed the overall concern about their exams being postponed or cancelled. In particular, 22 trainees said their completion of the Membership of the Royal Colleges of Physicians (MRCP) exam has been delayed due to several exam cancellations and limited sitting availability due to Covid-19. Similarly, another 22 trainees shared their concerns about completing the PACES exam, with 12 respondents highlighting cancelled teaching for PACES.

Some trainees also said that they have not had enough time to prepare for their exams, with 11 respondents noting difficulty obtaining study leave. One trainee wrote, “Difficulty to prepare for membership examinations as the trainees are not supported well enough with required study leaves.” Trainees shared that their study leave was usually cancelled last minute or not approved at all.

2.5 Reduced specialty exposure

31 trainees stated they have missed at least one rotation during their training programme, with some trainees highlighting they would never get another chance of doing that missed specialty. Other trainees added that missing their rotation had a negative impact on their

programme experience as they chose to do IMT to be able to do those rotations. A number of respondents said that missed rotations meant reduced exposure in acute medical take. 42 trainees indicated that they had been redeployed from their rotation due to Covid-19, which negatively impacted their exposure to certain specialties. For example, one trainee shared that: “re-deployment/paused rotations has resulted in reduced exposure to undifferentiated acute medical patients, due to the necessity of COVID-19 care and service provision”. Another trainee shared they have missed their cardiology rotation which they believe is vital for becoming a medical registrar.

2.6 Other risks

Other concerns that were mentioned by fewer respondents include:

- 26 trainees indicated they had issues with getting signoffs such as their annual review of competency progression (ARCP) and Case-based Discussions (CbDs);
- 20 trainees said that consultants didn't devote time to IMT and there were fewer opportunities to be supervised;
- 15 trainees said they experienced difficulties with completing quality improvement /audit projects;
- 15 trainees said they had issued Acute Care Assessment Tool (ACAT) tickets; and
- 14 trainees mentioned the negative impact on mental health and physical wellbeing by saying they felt “overworked”, “stressed”, “exhausted”, and “burnt out”.

2.7 Adjustments

Trainees were also asked: **Have any adjustments been made to your training so far to compensate for reduced learning opportunities?** This question was optional and received 318 responses.

74% of respondents (235 trainees) indicated that no adjustments were made, with one trainee suggesting that their “hospital trust [is] not taking the adjustment set by the TPD [Training Programme Director] when amending work schedule”. For those whom adjustments had been made, the most common included a reduction in ARCP requirements (29 trainees) and virtual teaching (15 trainees). Regarding ARCP adjustments however, one trainee noted that they “are often informed of adjustments near to ARCP, resulting in us spending most of the year worried about fulfilling unrealistic requirements given the current situation”.

3. Interview Findings

This section presents the findings from the 10 interviews we conducted with trainees in April/May 2021. The findings are structured by key themes from our Preliminary Report findings, with new findings in the final subsection.

3.1 Quality of teaching and level of service provision

A key finding of our Preliminary Report was that trainees are largely satisfied with the quality of teaching, but many feel their role is too focused on service provision. In the survey, many trainees noted that the quality of teaching was high but that they would like more of it, with less of an emphasis on service provision. These views were echoed in the interviews undertaken for this stage of the evaluation.

When asked “what has worked well for you in the IMT programme so far?” four of the ten trainees explicitly referenced the quality of teaching. One trainee highlighted the regional training specifically and noted that as “it’s been on Teams...more people can get on there”. Another trainee noted that they appreciated having “specific IMT teaching rather than generic medical SHO teaching, so [it] is more targeted and focused.” Trainees noted however, that training had been significantly impacted by the Covid-19 pandemic. Several trainees stated that they thought this was not well managed and that it was used as “an excuse for a really long time” whilst “other specialties, like anaesthetics are much better at protecting their trainees and prioritising their teaching.”

Some trainees referenced specific factors that contributed to the level of service provision. For example, one noted that in their Trust, every other rotation was an acute medicine rotation which they felt was purely service provision. They said, “you are not learning, and this takes away from you being able to attend courses or teaching.”

Trainees were also explicitly asked to share their thoughts on the level of service provision they had undertaken in their role compared to the level of training, and whether they thought the ratio needs to be changed. Many of the trainees referenced a high level of service provision as a negative experience, whilst several also stated that they thought it needed to be reduced. This view was not universal, however, with one trainee saying “no one can define what part of your job is service provision and what part is training... everything I do can be training because at the end of the day, theoretically, you learn from every patient you see, or you should be learning from every patient that you see.” Another trainee also believed the ratio to be appropriate, saying “We have space where we can try and do things independently but at the same time if you want supervision it's always there.” Amongst those who believed the level of service to be too high, variation in experience was highlighted. One trainee believed the issue to be due to the fact that “so much of the rota is out of hours and night shifts where you are ultimately working by yourself with not much oversight”, but that “this is a local issue more than a training programme [issue].” Other trainees referenced that the ratio changed depending on the placement or Trust, with several highlighting the geriatrics/care of the elderly placement as one where it worked well, as they were supernumerary. One trainee believes the issue stems from the execution of the curriculum, noting that “the contract itself mandates that [protected time for your educational needs] should be included in your work schedule and some Trusts just choose not to include it”.

HEE should seek to understand the cause of the variation in the perceived level of service provision and, where this relates to Trust-level implementation of the curriculum, seek to address any issues.

HEE should also seek to influence trainee perceptions and expectations around service provision, ensuring potential benefits of learning on the job are understood.

3.2 Supervisor interaction

In our Preliminary Report, we found that trainees are satisfied with the quality of supervisor interaction but are not meeting with their supervisors frequently enough. The most positively rated aspect of IMT training was the quality of meetings with educational supervisors, however most trainees indicated that they are meeting with their educational supervisor for less than the recommended one hour a month. Overall, a third of educator respondents stated that there is not enough time for this allocated in their workplans as they supervise more trainees than they have time allocated for, or due to workload. The findings were again echoed by our interviewees.

There was variation in the frequency of educational supervisor meetings amongst trainees interviewed. Only one trainee reported meeting with their educational supervisor once a month. This trainee said “Meeting my tutor once a month has been good. People’s experiences are variable dependant on the educational supervisor, but mine is quite good and she’s happy to meet with me. Having that contact throughout the year is a good thing. I don’t think only once a month is excessive, I think it’s just the right amount. Some tutors are complaining about once a month, I am a rep[resentative] and in one of the meetings a few tutors have been complaining.” The reluctance to meet once a month was referenced by another trainee who said “If a trainee is meeting with their supervisor on a monthly basis, [educational supervisors] see it as if something is wrong with a trainee, like struggling with some part of the curriculum.” The majority of trainees said they formally meet with their supervisor once or twice per rotation, although several noted that they are able to contact their supervisor informally via phone or email as and when they need to.

Trainees were asked if they found the meetings useful and if so, what they found useful about them. Several trainees highlighted that they found it useful to check on their progress and portfolio requirements. Other useful aspects of the meetings include getting feedback, career planning, exam advice and pastoral support. Many of the trainees noted that they found it useful to discuss any problems or issues with their supervisor, though they often found that the issues were systemic, and their supervisors were therefore unable to help.

Trainees were also asked what could be improved about their meetings with their educational supervisors. Several trainees had educational supervisors who were based on different sites from them. Though not all mentioned this as an issue, one trainee noted that “[my educational supervisor is] only on site once a month, which is not enough... people need to be accessible.” Another trainee had a more positive experience of their supervisor being on a different site as they have meetings either on the phone or online. One trainee suggested that it would be useful if the educational supervisors were able to allocate specific supporting

professional activity (SPA) time for meetings in their work schedule as it would enable them to ensure they were free to meet.

HEE should encourage educational supervisors to meet monthly with their trainees and, supported by this evaluation, seek to understand where their perceived reluctance to do so comes from, specifically regarding the time they are allocated for this work. Extra guidance as to how educational supervisors based on different sites from their trainees can provide one to one review time should be explored (ie using online).

3.3 Curriculum requirements

Another key finding from our Preliminary Report was that some trainees were struggling to meet curriculum requirements. In our surveys, a significant number of trainees and supervisors noted that trainees were finding it difficult to meet requirements, specifically attending the required number of clinics, as they lack protected time for this. Responses varied by region and placement however, with those who had protected clinic time reporting finding it very useful. This was confirmed in our discussions with trainees.

Problems attending enough clinics were referenced by all trainees interviewed, though several noted that “whilst [they had] limited experience, it was good experience”. The main issue with clinics was that trainees found it difficult to get off the ward in the afternoon to attend clinics as the wards were on minimum staffing. One trainee noted that they found it difficult to arrange clinics as they did not have enough information “in terms of how to access local services and what services are on site”, whilst another referenced being given specific time to attend clinics at a time when there were no clinics running.

Several trainees referenced issues with clinic attendance, even when they were able to get time off the ward. One trainee recalled being asked to leave a clinic they were attending as there was limited space and speciality trainees were given priority. Another trainee noted that although they had not had the experience themselves, they were aware of peers who had been told to leave clinics by a consultant. Another noted that at their hospital their clinic time was put towards ambulatory care which, although acceptable for their portfolio was “not really outpatient training experience”.

Several trainees referenced having to use their days off to reach the clinic requirement. One said, “Coming on days off to manage the mandatory training is not normal, we shouldn’t be coming in our time off to do something that is a basic requirement of our job.” When asked “do you feel prepared for the next level of your training?”, one trainee explicitly referenced their limited outpatient experience as a reason they felt unprepared. They said “I think managing outpatients is quite different to managing inpatients. I would find it difficult as [I’ve] had little exposure in it.” It is worth noting that despite the issues some trainees highlighted in arranging clinics, it was not a uniform experience. This differed greatly across placements and hospitals, with some offering protected time and better facilitating access to clinics. Several trainees also highlighted that the clinics they had attended had been a good experience, with one trainee referencing this when asked “what has worked well for you on the IMT programme so far?”

The impact of the Covid-19 pandemic on clinic attendance was recognised by trainees, though some highlighted that they believed the problems would be there without the pandemic. One IMT2 noted that “in two of my rotations before Covid, there was never allocated time... [it] was very much dependant who was on the ward”. The key issue cited by trainees relating to the pandemic was that clinics were either not running, were being done by consultants alone, or were being done over the phone, so consultants did not take them into the clinic room. One trainee suggested that this had “really affected [their] confidence in seeing patients”. Another trainee noted that the pandemic had also exacerbated the staffing issues, which then made it difficult for them to get time off the ward for clinic attendance.

Trainees were asked what could improve their experience relating to clinic attendance. Most trainees suggested that timetabling clinics would help resolve the issues they were facing. One trainee noted that this was especially important as some clinics are moving off site and more planning will be required to attend them. One trainee highlighted the importance of this protected time in enabling them to attend clinics in outpatient specialities they do not have placements in. Another trainee suggested that the issues could be improved if others on the wards had a better understanding of what was required of IMT as this could make it easier to protect their time. A number of trainees suggested that it would be easier to have clinic time in a week or two-week block. Others suggested that having a regular clinic to attend would be of more use. One trainee who had experience of a regular clinic on one of their placements highlighted that it enabled their consultant to build confidence in them and give them more responsibility. They also noted that it enabled them to hone their skills, such as writing clinic letters.

Clinic time should be protected, and work should be undertaken to further understand and address the variation in access to clinics across Trusts and departments.

Lessons should be learnt from areas where it is working well, with best practice shared.

3.4 Educator understanding of the programme

In our Preliminary Report, we found that most educators enjoy supervising IMT trainees and have a good understanding of the programme, but some lack understanding on the details of the curriculum. Just over 80% of respondents to the educators' survey agreed or strongly agreed that they find training/supervising IMT trainees a satisfying part of their role. Almost a fifth of educator respondents stated that they did not understand the purpose of the programme introduced, with difficulties understanding the details. This finding was not expressly interrogated in our trainee interviews, though some insights can be extracted from the discussions.

As noted above, trainees generally found their interactions with their supervisors to be useful. Trainees found their supervisors to be helpful in addressing any issues with the programme, suggesting that they have a good understanding of the programme. Others have explicitly referenced that they have benefited from their College Tutors having a good understanding of the programme. One trainee said “I think another thing I've been very fortunate with is the college tutors at the both hospitals I worked in. They've been so great, they are the ones who actually know what is expected of us and how [the programme should] function.”

However, four trainees did explicitly reference the lack of understanding of the programme by tutors as a cause of problems in their training, with three highlighting this explicitly when asked “what hasn’t worked well for you in the IMT programme so far?”. One trainee said “some College Tutors or Trusts don’t know what is required and, therefore, they are unable to cater to [our] needs”, particularly with regards to the jump in clinic requirements. It was noted that some staff higher up in the hospital view the change from CMT to IMT as “more of a name change than a curriculum change.” It was suggested that to ensure that Trusts are able to allocate enough time for trainees to reach their targets, HEE should share a clear outline of what is needed to fulfil the curriculum requirements with Trusts.

Guidance on the requirements of the IMT curriculum should be disseminated to Trusts and filtered down to those working in the hospital, to reduce variation in the experience of trainees.

3.5 Variation between regions and specialties in roles and preparedness

The final key finding of our Preliminary Report was that trainee experience in the IMT programme varies between regions and specialties. Almost half of the respondents to our survey reported that the training does not feel different to previous training in terms of job/role and tasks undertaken, and a significant proportion (a quarter) did not believe the programme helps them gain the skills needed to be a medical registrar.

When asked “what hasn’t worked well for you in the IMT programme so far?”, six of the ten trainees referenced the level of service provision in their roles, with many highlighting the lack of differentiation between their role and that of a Foundation Trainee. One trainee summarised it, saying “there is this SHO bag that the seniors just put you in, whereas the experience and what you can offer and the level of training that is required for you and your curriculum are very different for an F1/2 and IMT2. Another trainee estimated that they “probably spent at least 50%, if not 80% [of their time] doing jobs that [they were] doing as an F1”. One trainee highlighted that this was contributing to a feeling of unpreparedness for the IMY3 as “the jump can be a bit too much if [Trusts are] not actually delivering the training [they] are supposed to deliver.” One trainee recognised that this was something that the change from CMT to IMT was trying to achieve, “but because of staffing and chronic problems with wards, things are absolutely endemic and not going to change overnight.” One trainee did however note that one of the things that they felt had worked well for them on the IMT programme was “the fact that [they] get to do lots of different medical jobs [and] the slight difference in people’s response to you versus when you’re an F2 in medicine”, suggesting that the experience varies.

There was significant variation in trainee response, when asked “do you feel prepared for the next level of your training?” Three trainees indicated that they were prepared for the next level of the training, with one explicitly referencing that “IMT provides a bit of protection that you are going to have supervised practice... and during supported learning, you learn much more.” Another trainee noted that the key reason for their feeling of preparedness was that they “entered into IMT already having PACES and have already been acting up because of rota shortages”, as opposed to the training programme specifically. Four trainees noted that they did not feel prepared for their next level of training, though one specified that they were hoping to progress into dermatology after IMY2 and they weren’t expected to be fully

prepared. Two trainees indicated that they did not feel prepared for the managerial side of being a medical registrar and that there had “been no preparation for managing your time.” Another trainee explicitly referenced the impact of the Covid-19 pandemic on their preparedness. They suggested that the experiential learning that would have prepared them for the next stage has been inadequate due to the pandemic and that they have not been able to take the necessary exams. Several trainees noted that they were not sure whether they were prepared for IMY3 as they were unclear on how the year will be delivered and what will be expected of them.

Variation in trainee experience should be reduced, particularly relating to the distinction in roles between IMT and Foundation trainees.

HEE should explore the possibility of providing extra support to trainees who have lost learning opportunities or have been unable to take their exams due to the Covid-19 pandemic.

HEE should explore the possibility of providing management or leadership training to trainees progressing into IMY3, to prepare them to manage the acute take as registrars.

3.6 Additional findings

The below themes relate to emerging findings from our interviews with trainees in April/May 2021. These will continue to be explored in the next stages of the evaluation.

3.6.1 The addition of mandatory geriatrics and critical care placements

The majority of trainees interviewed were positive about the introduction of both geriatrics and critical care placements in the IMT curriculum. Two trainees explicitly referenced the introduction of these mandatory placements when asked “what has worked well for you on the IMT programme?”

All trainees spoke positively about the introduction of the mandatory critical care placement. One trainee summarised what they see as the benefits of the critical care placement, saying “it’s very different kind of medicine, it’s not something you see day to day on the ward and otherwise won’t necessarily go into ITU. I think it makes you understand what kind of thing you would refer to ITU, what they can do, the expectation of what they would want from a referral which is really helpful.” Another trainee highlighted that they believed the introduction of this placement on IMT would lead to “better quality care” as they will be able to better communicate decisions to patients and set expectations. One trainee noted that although they believe the ITU placement is a good addition to the curriculum, in their experience it has been treated as a “tick-box exercise”. They highlighted that they are “not doing night shifts or evenings in ITU” and are often sent home in the afternoons or used to fill medical on call rotas.

Trainees were also broadly positive about the introduction of the mandatory geriatrics placement. Several trainees highlighted that this was important as “whatever specialty you’re going to go to, there is an aging population and you will be dealing with older people.” One trainee noted that it was particularly useful as it involves “a lot of talking to families, which is always [a] useful experience”. Certain trainees, although seeing the value of understanding how to treat the elderly population, noted that they see many geriatric patients day-to-day

during their training anyway. One trainee suggested that it could be a three- or four-week placement instead of a full rotation. Another trainee highlighted that in some Trusts students are undertaking stroke placements as their mandatory geriatric placement, whereas in others some trainees are undertaking both placements separately, which can feel as though they are doing two geriatric placements. One trainee noted that they would have liked more information about they were expected to evidence from their geriatrics placement within the e-Portfolio.

3.6.2 The addition of IMY3

When trainees were asked “what do you think about the addition of IMY3?”, they were broadly positive about an additional year, though many highlighted that they were not certain exactly how it would work in practice.

Several trainees suggested that they think the additional year will be useful to provide more time for trainees to complete their exams or achieve all of the necessary competencies. A number of trainees also highlighted that they thought that having a step between IMY2 and becoming a medical registrar would be useful. One trainee said, “the idea of having a year where you're a junior registrar and you've got a more senior registrar around to help you, but there's a definite step up would be really useful”. Another trainee noted that some of their peers who had been on the CMT programme found the step up to registrar challenging as on some wards “they don't treat you in anyway different to an F1 when you're a CT2.” Only one trainee raised concerns over the theoretical value of the additional year, saying that after the IMY3 year they would be taking on an ST4 post whilst having the specialty-specific experience of an ST3, which they believed would lead to a loss in acumen.

Trainees differed in opinion as to what would be most useful in terms of placement structure for IMY3. One trainee noted that they thought one of the specific benefits of the additional year would be getting “as much exposure to different specialties as possible because it will greatly help when you step up to registrar” and that this would “be much better than working in acute medicine because you learn much more working in a specialty because in IMT when you are a higher grade, the responsibility and the learning expected of us would be higher in a specialty”. Another trainee, however, noted that they had been allocated to a speciality they had already undertaken in the IMT programme, and they felt that “doing the same job within the three-year period is a bit demoralising.”

However, this is not how all Trusts are implementing the IMY3. One trainee noted that their hospital is incorporating a six-month placement in acute medicine into IMY3 and that they believed the reason behind this is the need for service provision. A different trainee worked in a hospital where a “CT3” year was being trialled in advance of the introduction of IMY3, and believed that the two-placement structure, with one being in acute medicine, to be “quite a good model”. This trainee did however raise concerns over the allocation of specialties in IMY3 and the impact this would have on ST4 post allocation. They suggested that there should be a way to ensure that, unless there is an element of active competition of IMY3 speciality posts, specialty experience should not be taken into consideration in ST4 applications. They noted that this would be difficult to achieve completely however, as “inherently if you get to do the specialty you want and then you might get an audit or make a relationship with someone that then gives you that box for commitment to speciality”.

The biggest concern amongst trainees was how the additional year will be delivered and that “there’s going to be a great variation what each trust in each region is going to be able to deliver”. Several trainees highlighted concern that they may not, in practice, be given the step up that the year was designed to provide. One trainee said, “my concern is that it might not be as much of a step up as you want it to be, and you end up being treated more like an SHO than a registrar”. Another trainee raised the same concern, noting that they think “there will be a massive variation in specialty to specialty, trust to trust and region to region, but I feel like they have to be forced to use us like a junior registrars rather than allowing them to use us how they want to”. Another highlighted that such variation was already apparent and that in their current hospital “they are not going to put IMT3 on night shifts because of lack of the resources to provide a senior medical reg for supervision”, even though they think “that [this is] what IMT3 was about.” Other trainees noted that “what everyone seems to be experiencing seems to be random” and that they thought the implementation of IMY3 is currently “just based on the interpretation of people, so it needs to be more institutionalised [with] one group or person committed to oversee the switch.”

3.6.3 Clarity on evidencing CiPs

Trainees varied in their response to the question “do you understand how to evidence all necessary CiPs?” Several trainees believed that it was a relatively straightforward process, and had improved on the previous CMT curriculum. One trainee said “Yes. I think it seems quite straightforward; the portfolio has changed to less items to evidence now which is a good thing I think. It was ridiculous linking lots of items, a bit stressful.” Other trainees, however thought that more clarity would be useful. One trainee noted that when they started using the portfolio, “it really was not clear” and they believed that as the trainees are being charged to use the systems, there should be more support provided. Another trainee referenced a specific problem with the layout of the system, noting that they were unclear whether the evidence they provided for their IMY1 could still be used as it still appeared on the system.

One trainee noted that the CiPs felt like a “little bit of [a] tick box exercise” and that it was possible to skew your portfolio, making them “not sure it’s the most robust way to ensure that you [have] covered all the points in the curriculum.” Another trainee noted that they felt “a lot of [the curriculum] rests on your educational supervisor report, which might depend on your educational supervisor and what relationship you have, and how involved your educational supervisor is in your training.”

Other trainees referenced specific CiPs that they felt were unclear. One trainee highlighted the research element as an area they would like more clarity on as “not everyone is doing research”. Another trainee referenced teaching and quality improvement work as the requirement is “more abstract” and it’s “a bit more theoretical rather than practical.”

3.6.4 Understanding of change from CMT to IMT

Trainees were asked “do you understand why the change from CMT to IMT was made?” Most trainees referenced some understanding of why the change was made, with several highlighting what they perceived to be the benefits of the new programme. The reason cited by the largest number of trainees was to increase trainee preparedness for the registrar role, with some specifically referencing the addition of the IMY3 and the ability to complete all

exams before becoming a registrar. Trainees also understood that the change was made to ensure trainees had a good base of less-specialised experience. One trainee believed that these changes mean that trainees coming out of the IMT programme will be “much more efficient [and] safer.”

Despite this, several of the trainees noted that they thought the reasons behind the change were not clear and one suggested that to them the programme “seems like CMT under a different name” other than the additional year. Some trainees also took this opportunity to raise concerns over the changes, specifically relating to the reduction in specialisation. One trainee highlighted that they “fear that there is a broad range of very superficial knowledge, rather than any depth anywhere”, though went on to note that their “hospital is very district general and not very specialist” so this may be a local issue. Another trainee raised a concern that there had been a “loss of the time to build specialist skills, which you probably end up having to make up with fellowships or at the end of your training.”

3.6.5 Admin time

Though not specifically asked about, several trainees referenced self-development time as something that could be improved about the IMT programme, with some explicitly referencing it when asked “what hasn’t worked well for you on the IMT programme so far?” Trainees did not seem to have clarity on whether the programme afforded them self-development (or admin) time as some requested that they be allocated time, whilst others noted they had not been able to take the time that should have been protected. The key message from trainees was that they would find it useful to have time allocated for portfolio, quality improvement projects and other admin tasks. Several trainees highlighted that they were having to complete these tasks in their own time or on their days off, with one raising concerns that this may make trainees feel burnt out. One trainee noted that the expectation that a trainee would be able to complete the quality improvement requirement at work made them feel as though the “people who come up with the curriculum, they are working in very big teaching hospitals, somewhere in London, extremely well-staffed and protected.” Other trainees referenced trainees on other training programmes such as the Foundation Training programme and Core Surgical Training as examples of programmes that had more self-development time than IMT and highlighted that they could not understand the reasoning for this. Another trainee believed that the allocation of self-development time “needs to be mandated at a Trust level” and that it should be protected in a similar way to the mandated teaching time (ie. that Trusts can be fined if they do not provide it). That said, one trainee who has been involved in discussions relating to this noted that they had heard concerns from employers about the financial implications of providing self-development time to IMT trainees.

3.6.7 Career Aspirations

Trainees were asked whether their career aspirations had been impacted by the IMT programme. Responses were not uniform, with some trainees highlighting that the programme has exposed them to specialties they were now considering, some noting there had been no change in their aspirations and others saying they were now less inclined to pursue certain careers. Two trainees noted that because of the IMT programme, they had become more inclined to pursue careers in the new mandatory placements (intensive care and geriatrics), as they were able to experience these specialities and understand their values. One of these trainees noted that the programme has also inspired them to undertake more research and highlighted that “without IMT, I would have never even thought about these things”. Conversely, several trainees suggested that the IMT programme had made

them lean away from a career in general medicine, with one having applied for GP training. The impact of the pandemic was highlighted by this trainee, who said that it “was a very bizarre time period [which] made the bad things seem worse and the good things seem more scarce.” A different trainee indicated that they were planning to take a break from training after IMY3, though this was largely impacted by the Covid-19 pandemic as they missed a specialty placement and were very focused on service provision and the acute take. They noted that they were not able to figure out what they were able to do “because of missed experiences.”

Based on these additional findings, we recommend:

- HEE seek to reduce variation in the interpretation of the curriculum, particularly regarding the implementation of IMY3 and the additional mandatory placements. Potential options include additional guidance being given to Trusts or webinars run that share best practice in these areas.
- HEE explore the possibility of providing additional support to IMY1 trainees when they first access the e-Portfolio, with particular emphasis on the less defined areas to evidence such as research and quality improvement.
- HEE clarify whether IMT trainees are allocated self-development time. If self-development time should be allocated, ensure this is done uniformly across Trusts and departments. If it is not currently allocated, HEE should explore the option of introducing it.

4. Quantitative Analysis

This section of the report explores the data collected in Year 1 of the evaluation and the high-level analysis of the baseline (CMT programme), including emerging insights for Year 1 of the IMT programme. A comprehensive analysis has been included within Appendix 1.

4.1 Data availability

Since the initial Preliminary Report, an updated dataset of trainee information and new workforce dataset has been received. It was agreed that updated data would not be collected from local offices in Year 1 due to limited availability of resources to collect these data because of the Covid-19 pandemic. Where possible, data has been collected for the last two years of CMT and the first year of the IMT programme.

Figure 4.1 – Data metrics and sources

Theme	Metrics	Data source
Trainee information	Number of trainees (Whole time equivalent (WTE)) by grade, region and demographics and Crest	Trainee Information System (TIS)
	ARCP outcomes	TIS
	Attrition data	TIS
Costs²	<ul style="list-style-type: none"> • Study leave costs by local office • TPD costs by local office • Tariff pay circular 	Local offices
Workforce	WTE medical staff by grade at a Trust level	Workforce team
	Progression rates (by region) and by outcome (eg. GP, Trust grade posts etc.) of trainees who have went through the CMT programme (3-year view)	Workforce team

4.2 Posts data

Data on the number of available CMT/IMT posts has been provided by HEE from TIS. The data has been taken on a snapshot basis from 31st October in 2018, 2019 and 2020, and includes the planned posts for each year. There were over 3,200 posts in 2018 across the CMT programme. There is an increase in the number of available posts in 2019 and 2020 is observed as the IMT programme was introduced. This increase was equivalent to a 5.5% increase between 2018 and 2019 and a 3.4% increase between 2019 and 2020. Over two thirds of CMT/IMT posts were funded by HEE via their tariff mechanism.

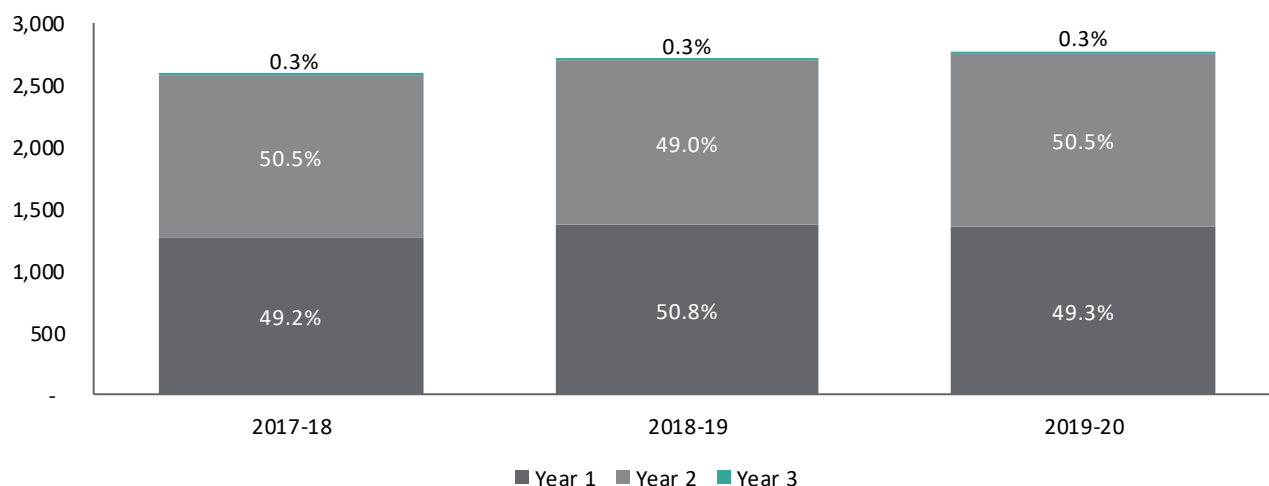
The number of the HEE tariff-funded posts increase marginally between 2018 and 2020 (increased funding for an additional 38 posts). However, when considered proportionally, alongside other funding mechanisms, relatively fewer CMT/IMT posts were funded through the HEE tariffs in 2020 versus 2018 (66.8% and 71.8% respectively).

² Please note: this information is collected via the local offices and there will be some interpretation variance. We will try and minimise this variation at the different data collection points throughout the evaluation.

4.3 Trainee data

4.3.1 FTE and Headcount

Figure 4.2 – Number of trainees by grade and academic year



In total, there were 2,581 trainees in the academic year 2017/18, 2,698 trainees in 2018/19 and 2,761 trainees 2019/20. This is an increase in the number of posts by 7.0% between 2017/18 and 2019/20. Roughly half of each academic year is made up of Year 1 and Year 2 trainees and only circa 0.3% of each academic year were Year 3 trainees. When looking at **Year 1** trainees, there was a large increase in the number of trainees between 2017/18 and 2018/19 (7.9%) but this then decreased by 0.7% between 2018/19 and 2019/20. For Year 2 trainees, there was a continued upwards trend, with a 6.8% increase in trainees on CMT between 2017/18 and 2019/20.

When considering the number of available CMT and IMT posts and the number of trainees, we can derive the take up rates in each academic year. Overall, in 2017/18 the take up rate of CMT posts is 84.0%. This decreased slightly in the academic year 2018/19 (81.5%).

In both CMT and IMT, there are trainees that choose to complete their training programme on a less than full-time basis. The proportion of trainees who choose to partake in part-time training increases between Year 1 and Year 2. Overall, there were 8.17% of trainees who were defined as less than full-time in 2017/18 and this reduced to 6.06% in 2019/20.

4.3.2 Demography

Across the academic years 2017/18 to 2019/20 over 95% of all trainees were under 40 years old and over half of trainees were under 30 years old. There is also an increased number of NULL ages within the 2019/20 data (0.9% of total trainees). When looking in more detail at the ages of **Year 1** trainees, there is progressively fewer trainees within the under 30 age bracket (a reduction of 4.7 percentage points) in the first year of the IMT programme.

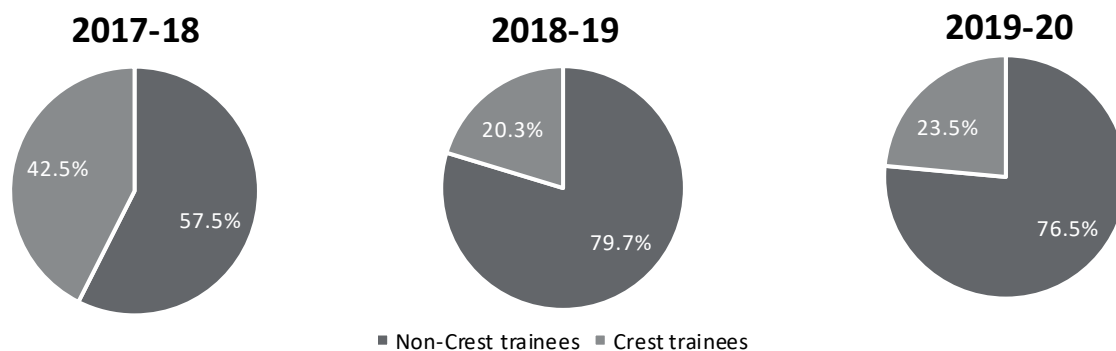
Across the three academic years of available data, there were more trainees who identify as female on the CMT/IMT programmes compared to those identifying as male (roughly a 45%/55% split between male and female in 2017/18 and 2018/19). Similar to the age data, there were a greater proportion of NULL gender in the 2019/20 data (4.0%). The majority of CMT/IMT programme trainees identify as white, followed by Asian across all three academic years. White and Asian trainees make up at least 73.3% in 2017/18 and 60.9% in 2019/20.

There are significantly fewer trainees who identify as Black, Mixed ethnicity or Other (this ranged between 10.3% and 9.8% across the three academic years). There were also a large number of Not recorded trainees, which increases in the year 2019/20 (29.3%), therefore we are unable to conclude whether there have been any changes within the ethnicity of trainees during the first year of the IMT programme.

1.1.1 CREST trainees

CREST trainees are trainees that have not completed their Foundation training within the UK. CREST stands for Certificate of Readiness to Enter Speciality Training, which is the certification that demonstrates that trainees have foundation level competences.

Figure 4.3 – Proportion of trainees by CREST and academic year



Over the last three years, there are a greater proportion on non-CREST trainees compared to CREST for the whole CMT/IMT programme cohorts. There were a greater proportion of CREST trainees in 2017/18 compared to 2018/19 and 2019/20. When looking at Year 1 trainees in isolation, the CMT programme has circa 20% of **Year 1** trainees who were CREST (from the last two CT1 trainee groups joining the programme in 2017/18 and 2018/19). In the first cohort of the IMT programme, the proportion of CREST trainees in Year 1 has increased to 25.6%.

4.4 Programme progression data (ARCP outcomes)

All doctors in training must be reviewed at least once a year to ensure that they are progressing satisfactorily through their training programme. This review is carried out at the Annual Review of Competence Progression (ARCP) panel. The key outcomes which we have focused on are:

- **Outcome 1** (Achieving progress and the development of competences at the expected rate) for Year 1 trainees;
- **Outcome 3:** Inadequate progress by the trainee – additional training time required
- **Outcome 5:** Incomplete evidence presented – additional training time may be required
- **Outcome 6** (Gained all required competencies - will be recommended as having completed the training programme) for Year 2 trainees; and
- **Outcome 10.1** (Recognises that the trainee has been making progress in their training but there has been delay in the acquisition of competencies/capabilities due to COVID-19) for those trainees whose training was impacted by the Covid-19 pandemic.

Figure 4.4 – Year 1 trainees by ARCP outcomes and academic year (all outcomes)³

CT1	2017-18	2018-19	2019-20
1	70.9%	74.1%	40.9%
5	33.6%	33.4%	9.9%
Not Assessed	7.8%	4.9%	5.4%
10.1	0.0%	0.0%	51.8%

When reviewing the **first** outcome that **Year 1** trainees received, 41.6% in 2017/18 and 46.7% in 2018/19 received an Outcome 1. The proportion of trainees who received an Outcome 1 as their first outcome dropped to 37.3% in 2019/20. In 2019/20, there was also the introduction of Outcomes 10.1 (to reflect the challenges from the Covid-19 pandemic), with 46.4% of Year 1 trainees receiving this as their first outcome. When looking at **all** of the outcomes received by **Year 1** trainees, a third of trainees had multiple outcomes in 2017/18 and 2018/19 and roughly 10% 2019/20. In total, 70.9% and 74.1% received an Outcome 1 (in 2017/18 and 2018/19 respectively), which decreased to 40.9% of Year 1 trainees in 2019/20.

Over half of Year 1 trainees (51.8%) received an Outcome 10.1 in 2019/20, which was a new outcome developed to be used where the acquisition of competences/capabilities by the trainee has been delayed by Covid-19 disruption. Interestingly, in this academic year, there was a significant reduction in the number of Outcome 5s received (Incomplete evidence presented – additional training time may be required) from 33.4% of Year 1 trainees receiving this outcome to 9.9% of Year 1 trainees. This may be as a result of the challenges with disaggregating whether the reason for a trainee not being able to evidence the required competencies is as a result of the Covid-19 pandemic versus other challenges.

Figure 4.5 – Year 2 trainees by ARCP outcomes and academic year (all outcomes)³

CT2	2017-18	2018-19	2019-20
3	21.5%	21.9%	9.1%
5	32.7%	36.9%	13.1%
6	66.7%	67.1%	43.4%
10.1	0.0%	0.2%	39.6%

When reviewing the **first** outcome that **Year 2** trainees received, roughly one third of trainees received Outcome 6 as their first outcome (38.7%, 37.1% and 36.5% in 2017/18, 2018/19 and 2019/20 respectively). In 2019/20 an additional third of Year 2 trainees (36.5%) also received an Outcome 10.1 as their first outcome.

When looking at **all** of the outcomes received by **Year 2** trainees, 66.7% and 67.1% received an Outcome 6 (in 2017/18 and 2018/19 respectively), which decreased to 43.4% for Year 2 trainees in 2019/20). It is likely that the additional trainees may have received their Outcome 6 following the date that this data was extracted (October 2020). Similar to the data for Year 1 trainees, a significant proportion of Year 2 trainees received an Outcome 10.1 in 2019/20 (39.6%). The introduction of this new outcome has a direct impact on the number of Outcome 3s (Inadequate progress by the trainee – additional training time required) and Outcome 5s received by Year 2 trainees, with 21.9% receiving an Outcome 3 in 2018/19 versus 9.1% in 2019/20 and 36.9% receiving an Outcome 5 in 2018/19 versus 13.1% in 2019/20.

³ The table does not include all of the outcomes received by trainees and has been included to provide context to the subsequent analysis. It includes outcomes where significant changes have been evidenced over the three academic years (Outcome 1, 3, 5, 6 and 10.1).

4.4.1 By CREST

There is a hypothesis that there is a differential in the attainment levels between non-CREST and CREST trainees within the CMT programme. With the IMT programme, it is expected that there will be a decrease in the attainment difference between these two groups.

Figure 4.6 – Trainees by ARCP Outcome 1 by CREST and academic year

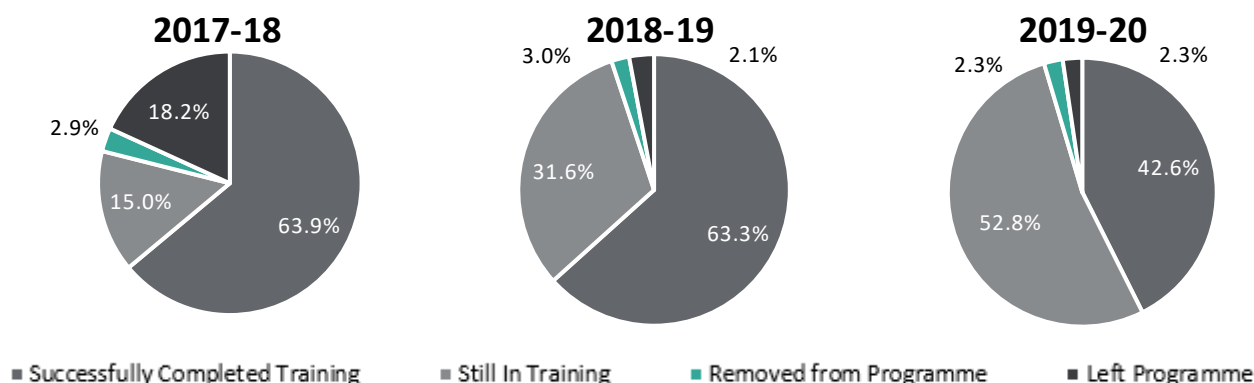
			2017-18	2018-19	2019-20
Year 1	Outcome 1 (first outcome)	Non-Crest	43.3%	48.4%	37.5%
		Crest	34.8%	39.5%	36.8%
	Outcome 1 (all outcomes)	Non-Crest	73.2%	77.1%	41.4%
		Crest	61.5%	61.6%	39.5%
Year 2	Outcome 6 (first outcome)	Non-Crest	28.0%	41.0%	39.1%
		Crest	44.5%	22.2%	27.1%
	Outcome 6 (all outcomes)	Non-Crest	48.5%	72.5%	46.3%
		Crest	76.4%	46.3%	32.5%

When comparing **Year 1** trainees, the non-CREST group have a greater proportion of trainees who received an Outcome 1 (both as their first outcome or as a subsequent outcome). In 2019/20, there is less variance between CREST and non-CREST trainees, with trainee outcomes skewed by the Covid-19 pandemic. For **Year 2** trainees, CREST trainees outperform non-CREST trainees in the academic year 2017/18. In 2018/19 and 2019/20, non-CREST trainees have a higher proportion of Outcome 6 in Year 2 (both as their first outcome or as a subsequent outcome). Similar to the Year 1 data, there is less variance between CREST and non-CREST trainees in 2019/20.

4.5 Attrition data

Through attrition data, insight can be provided into the proportion of trainees who left during their training programme, which will have a follow-on impact on the size of the prospective medical workforce. Attrition data has been extracted from TIS under the following definitions: Still in Training (not defined as attrition within analysis); Successfully Completed Training (not defined as attrition within analysis); Removed from Programme (defined as attrition within analysis); and Left Programme (defined as attrition within analysis).

Figure 4.7 – Year 2 trainees Attrition by academic year



For **Year 1** trainees, there was a reducing number of trainees who left the programme during Year 1 (from 4.1% in 2017/18 to 1.4% in 2019/20). For **Year 2** trainees across the three years, roughly 2% of trainees have been removed from the programme. In 2018/19 and

2019/20, there is also a similar proportion of Year 2 trainees who have left the CMT programme⁴. For 2019/20, there is an elevated number of people who are still in training as a significant number of extension outcomes were received due to the Covid-19 pandemic.

4.6 Programme Costs

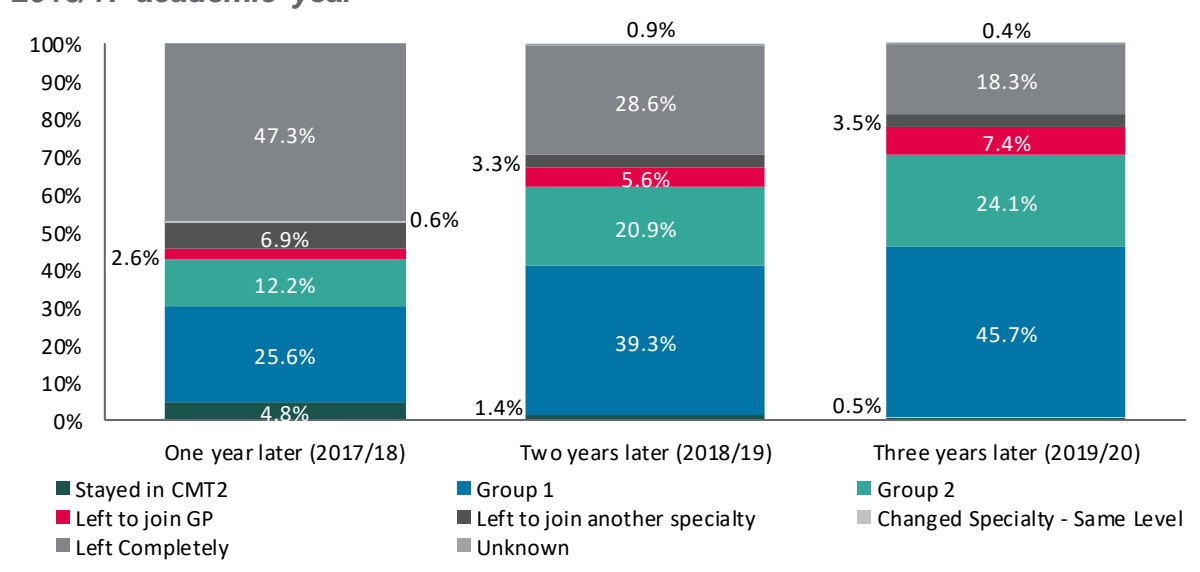
Within the October 2020 Preliminary Report, analysis was presented on programme costs, including factors such as study leave costs and TPD costs. This information was collected from local offices and there was a significant level of variation within returns. Due to the resource pressures on local offices at this time (primarily due to the Covid-19 pandemic) it was agreed that this data request would be further developed (to be more prescriptive) and sent to local offices in Year 2 of the evaluation to complete retrospectively. The updated data specification has been included within Next Steps (Section 6).

4.7 Progression data

Progression data has been collated by the workforce team at HEE and provides information into: (a) What trainees who were in CT1 were doing one year later; and (b) What trainees who were in CT2 were doing one, two and three years later. This will provide insight into the flow of trainees as they move through their training and career post CMT training. Please note that this dataset will have some overlap with the attrition data presented in Section 1.5, including telling us the destination of those trainees who left the programme.

When looking at the progression of Year 1 trainees in the last three years of the CMT programme, there are no significant variations in destination. The proportion of Year 1 trainees who left the CMT programme altogether has been on a downwards trend, from 8.1% in 2016/17 to 5.3% in 2018/19. The majority of Year 1 trainees who leave CMT, left to join another speciality followed by those who left completely and left to become a GP.

Figure 4.8 – The destination of CT2 trainees who completed their training in the 2016/17 academic year



⁴ In the earlier years (eg. 2017/18) there may be an inflated *Left Programme* as sometimes a CMT trainee may receive an extension outcome (and not take up the extension) but their outcome wasn't changed to Outcome 6.

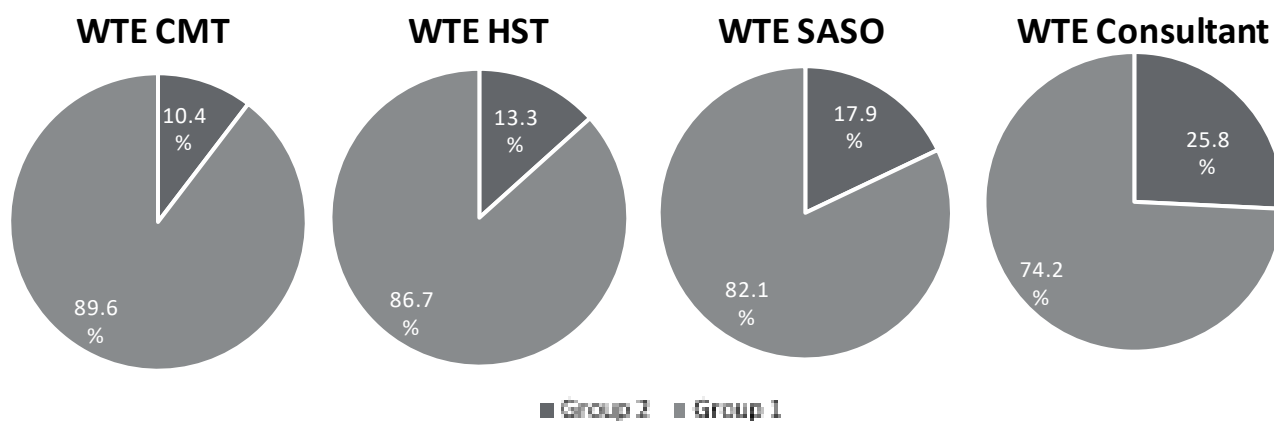
For **Year 2** trainees (those who would have been expected to complete their training in the academic year **2016/17**), the proportion of trainees who have progressed to Group 1 or Group 2 HST is 69.8% after three years. This is split roughly two thirds of those trainees progressing to Group 1 HST.

The progression of those **Year 2** trainees (those who would have been expected to complete their training in the academic year **2017/18**), does not vary significantly to that of trainees from the previous year after two years (less than 2 percentage points). The progression of those **Year 2** trainees (those who would have been expected to complete their training in the academic year **2018/19**), does not vary significantly to that of trainees from the previous two trainee cohorts (ie. those who were expected to finish their CMT training in 2016/17 and 2017/18).

4.8 Workforce data

The following analysis provides a high-level overview of the WTE medical workforce throughout training and to consultant level, with a particular focus on Group 1 and Group 2 specialties. This has been provided on a snapshot basis from 2019, with each WTE being segmented into a series of workforce groups (depending on their level of training).

Figure 4.9 – WTE workforce data relating to the CMT/IMT pathway, 2019



The charts above isolate the proportions of Group 1 and Group 2 workforce. This will help us to explore the flow of doctors within these roles. Within the training workforce groupings, there were a total of 2,416 WTE in CMT and 9,864 WTE in HST. In both instances, there were a greater proportion of Group 1 versus Group 2 WTE, however, this proportion decreases by 2.9% between the two training programmes (with HST having a larger proportion of Group 2 than CMT).

For staff grade doctors (SASO) and Consultants, the trends between Group 1 and Group 2 trainees represent those seen within training, with a greater proportion of Group 2 WTE evidenced at a more senior grade. In 2019, over a quarter of the WTE workforce at Consultant (25.8%) were Group 2 specialties, which is 7.8 percentage points greater than for staff grade doctors.

5. Conclusions and Recommendations

Qualitative analysis

Our interviews with trainees provided key insights into a number of areas raised in our Preliminary Report, with additional insights and nuances identified. These interviews, along with our review of the IMT trainee Covid-19 Risk Log, show that the Covid-19 pandemic has had a significant impact on trainee experience (particularly clinic attendance and exams), though some trainees believe this has been an exacerbation of existing issues. The key findings and recommendations are as follows:

- 1. Quality of teaching and level of service provision:** trainees spoke positively about the training that they had undertaken, though noted that the running of training had been severely impacted by the pandemic. Many trainees felt that the level of service provision compared to training was too high, though this was not a unanimous view, with some trainees noting that that the ratio varied between Trusts and placements.

Recommendation: HEE should seek to understand the cause of the variation in the perceived level of service provision and, where this relates to Trust-level implementation of the curriculum, seek to address any issues. HEE should also work to change trainee perceptions and expectations around service provision, ensuring they understand the potential benefits of learning on the job.

- 2. Supervisor interaction:** the frequency of meetings with educational supervisors varies significantly amongst trainees, with many meeting much less than once a month. Despite this, trainees generally find their interactions with their educational supervisors to be useful.

Recommendation: HEE should encourage educational supervisors to meet monthly with their trainees. We also recommend additional research to understand what are the barriers to educational supervisors conducting formal meetings with their trainees. Extra guidance is needed on how educational supervisors based at different sites from their trainees can provide formal meetings (ie using online meetings).

- 3. Curriculum requirements:** trainees are finding it difficult to attend the required number of clinics for a number of reasons including not being able to take time away from the ward, having difficulty arranging clinics or factors relating to the pandemic (such as social distancing or an increase in telephone clinics). Trainees believe that the pandemic has exacerbated the issues relating to clinics, but that some existed beforehand.

Recommendation: Clinic time should be protected, and work should be undertaken to further understand and address the variation in access to clinics across Trusts and departments. Lessons should be learnt from areas where it is working well, with best practice shared.

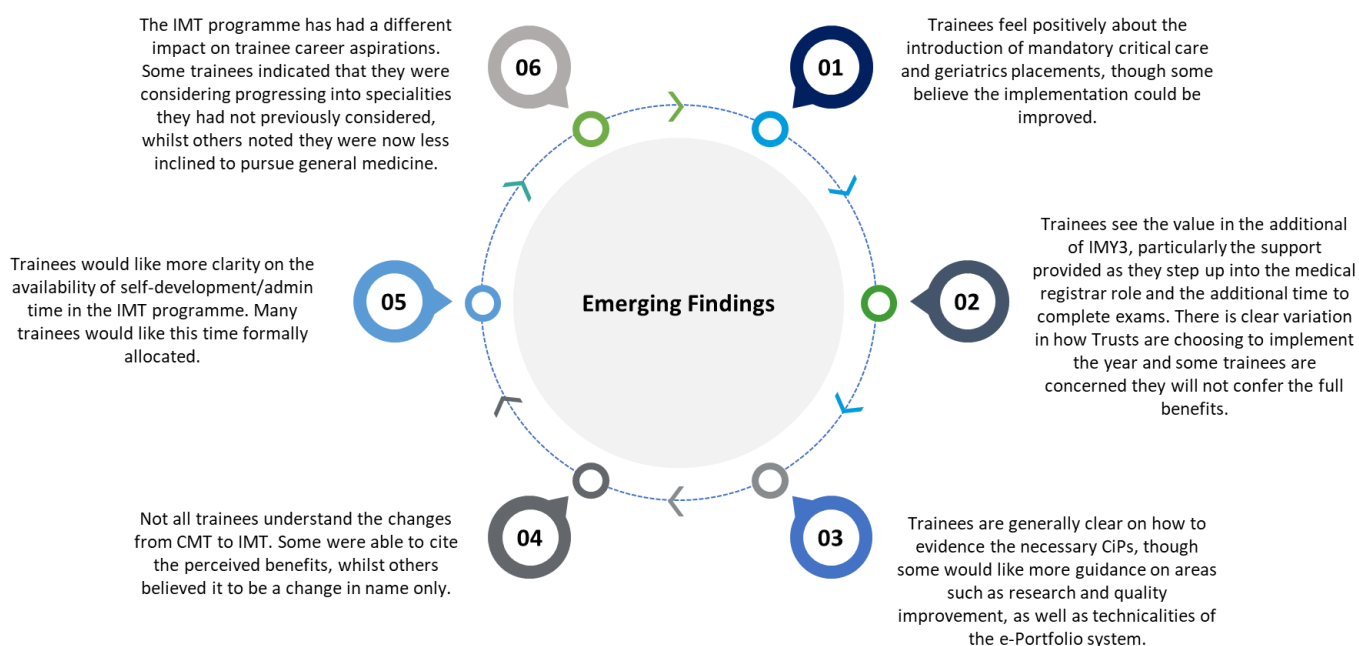
- 4. Educators understanding of the programme:** some trainees believe that a lack of understanding of the requirements of the IMT programme within Trusts is having a negative impact on their training. Others who felt their College Tutors had a good understanding of the programme felt that they had positively benefited from this.

Recommendation: Guidance on the requirements of the IMT curriculum should be disseminated to Trusts and filtered down to those working in the hospital, to reduce variation in the experience of trainees.

5. Variation between regions and specialties in roles and preparedness: there is significant variation in how prepared trainees feel for the next level of their training, though some noted they were unclear on how IMY3 would be delivered and were therefore unsure how prepared they were. Many trainees noted that their role does not feel different to that of a Foundation Trainee, with this contributing to a sense of unpreparedness for some.

Recommendation: Variation in trainee experience should be reduced, particularly relating to the distinction in roles between IMT and Foundation trainees. HEE should explore the possibility of providing extra support to trainees who have lost learning opportunities or have been unable to take their exams due to the Covid-19 pandemic. HEE should explore the possibility of providing management or leadership training to trainees progressing into IMY3, to prepare them to manage the acute take as registrars.

New insights gathered in the interviews include:



Based on these additional findings, we recommend:

- HEE seek to reduce variation in the interpretation of the curriculum, particularly regarding the implementation of IMY3 and the additional mandatory placements. Potential options include additional guidance being given to Trusts or webinars run that share best practice in these areas.
- HEE explore the possibility of providing additional support to IMY1 trainees when they first access the e-Portfolio, with particular emphasis on the less defined areas to evidence such as research and quality improvement.
- HEE clarify whether IMT trainees are allocated self-development time. If self-development time should be allocated, ensure this is done uniformly across Trusts and departments. If it is not currently allocated, HEE should explore the option of introducing it.

Quantitative analysis

The quantitative analysis within this report provides a baseline from the CMT programme and where possible some indicative insights in terms of areas where there may be emerging impacts as a result of the introduction of the IMT programme. There areas include:

- An upwards trend in relation to the number of training posts available and the number of trainees across both years of the programme (although a small dip was identified for Year 1 trainees in 2019/20);
- An increase in the proportion of CREST Year 1 trainees within the first cohort of the IMT programme;
- A reduction in the attrition of Year 1 trainees over the three academic years of data provided; and
- Changes in the ARCP outcomes received (although this has been skewed due to the Covid-19 pandemic and the introduction of two new outcomes – Outcomes 10.1 and 10.2).

In subsequent analysis, we will seek to understand whether these emerging changes continue into Year 2 (and then Year 3) of the programme. Having a longer timeframe of data will also support analysis to evidence where impacts have been brought about as a result of the changes to the programme or whether any impacts will be attributed predominantly to the Covid-19 pandemic (this may be the case in some instances within attrition and outcome data).

Within the analysis of ARCP outcomes, There is evidence to suggest for both Year 1 and Year 2 trainees that there has been disproportionate use of the Outcome 10.1 – this is because in previous academic years, there were more Outcome 3s and Outcome 5s received. This is likely resultant of challenges with disaggregating whether the reason for a trainee not being able to evidence the required competencies is due to the Covid-19 pandemic versus other challenges.

There was also evidence to support the hypothesis that CREST trainees have an attainment differential compared to non-CREST trainees. For the first year of the IMT programme, we have been unable to attribute any changes in attainment due to impact of the Covid-19 pandemic.

We would expect that the impact of Covid-19 will have a diminishing effect on outcomes over the course of the evaluation, however, we will also have to triangulate the quantitative data with primary research to understand these changes. The findings from both beneficiary and educator surveys will be able to inform whether the IMT programme has played a role in reducing the differential attainment between CREST and non-CREST trainees.

6. Next steps

Qualitative analysis

We will continue to explore emerging themes and insights to monitor and assess ongoing perceptions and experiences of those undertaking IMT training, particularly as trainees begin to enter IMY3. Key activities will include:

- a survey of local offices;
- surveys and interviews of IMT trainees;
- a survey of IMT educators; and
- conversations with employers.

Quantitative analysis

Data will be collected on an annual basis from systems (eg. TIS) regarding the number of posts, trainee information (including WTE, demographics and CREST), attrition data and ARCP outcome data. To continue to improve the data quality of this data, we propose that all TIS information is sent through in one extraction (as opposed to multiple extractions) and contains the grade of a trainee at a second point in time (in addition to the 30th September) for validation purposes. In Year 3 of the evaluation, there will be a requirement to look at HST post and application data for the final three years of CMT and the first year of IMT (based on the evaluation period).

For programme costs which are to be collected from the local offices, it was agreed during the Preliminary Report that a refined data specification would be sent in Year 2 to be completed retrospectively (for 2017/18 to 2020/21 if feasible). A more detailed draft specification has been included below and will be developed into an excel template for completion by local offices.

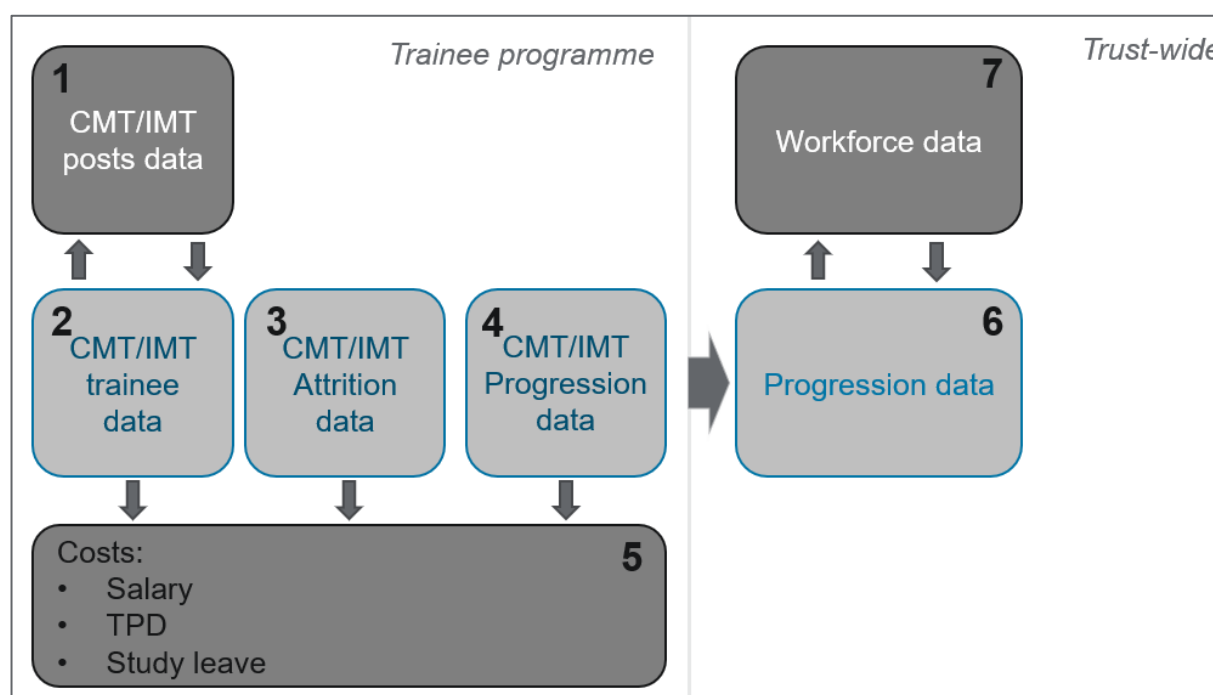
Figure 6.1 – Draft data specification for local offices

Theme	Description	Timeframe
TPD costs	<p>The number of PAs in each academic year split for the CMT and IMT programme and by grade.</p> <p>An additional commentary box will be provided to understand if any changes were made in each academic year, particularly related to the Covid-19 pandemic.</p>	2017/18 – 2020/21
Study leave costs	<p>The study leave costs in each academic year split for the CMT and IMT programme and by grade. This will also be split for trainee claims and locally delivered/bulk funded courses.</p> <p>An estimate of the mean number of training days in each academic year split for the CMT and IMT programme and by grade.</p> <p>An additional commentary box will be provided to understand if any changes were made in each academic year, particularly related to the Covid-19 pandemic.</p>	2017/18 – 2020/21

<p>Pay Costs</p>	<p>Confirmation that all trainees receive the same financial envelope for completing their training regardless of funding source (or commentary if this is not the case).</p> <p>Where London allowances are applicable (both inner and outer London), an indication of the proportion of trainees these would be relevant for.</p> <p>This will be supplemented by the Pay circular supplied by HEE.</p>	<p>2017/18 – 2020/21</p>
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Within the final report, we will model the changes in supply (training posts), demand (number of trainees on the programme) and trainee outcomes as a result of the IMT programme. This modelling will be undertaken in line with the quantitative analysis plan for this work (see below).

Figure 6.2 – Quantitative analysis plan



The outputs from the modelling will be linked back to the logic model to provide insights into whether the IMT programme is meeting its expected outputs and outcomes (and subsequently likely to be contributing to the impacts outlined). There will be a requirement to explore whether there are any bottlenecks in the training system and whether this is likely to have a significant impact on progression and workforce impacts and highlight any unexpected outcomes (this will be presented in the Final report).

Reporting

The above activities will feed into a Final Report in February 2023. This report will include our evidence-base, comparative evaluation of learning outcomes of the cohort, and key findings.

Appendix 1: Detailed quantitative analysis

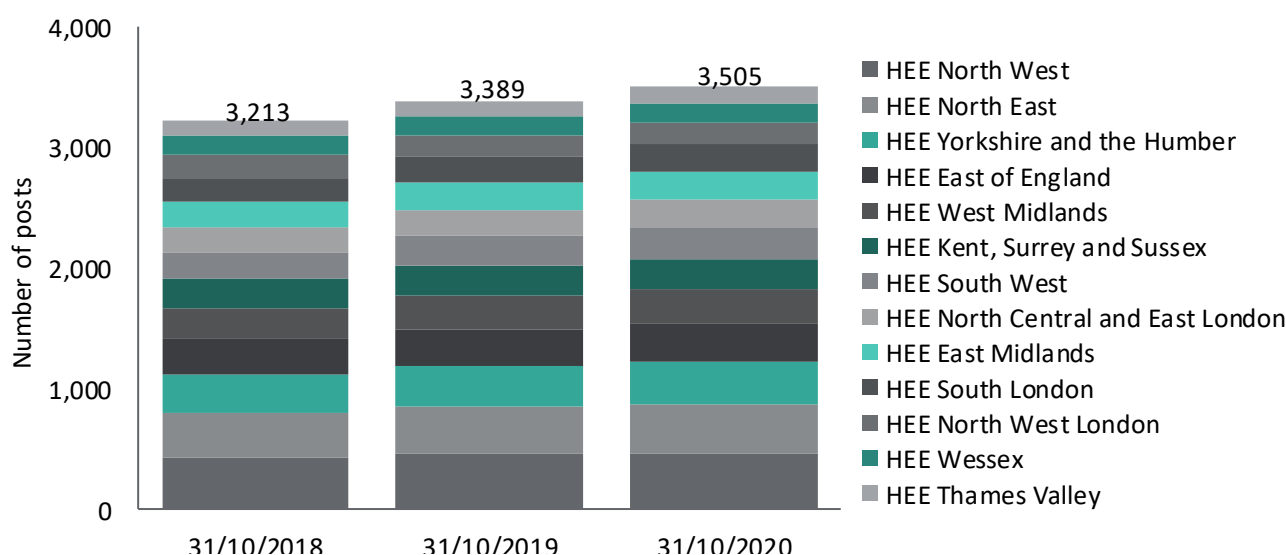
7.1 Posts data

Data on the number of available CMT/IMT posts has been provided by HEE from TIS. The data has been taken on a snapshot basis from 31st October in 2018, 2019 and 2020 includes the planned posts for each year. The posts are not able to be broken down by grade (eg. CT1, CT2 etc.) as they can be used interchangeably, however, they have been broken down by HEE region and the funding source of each post.

As posts data has been provided on a snapshot basis, a summary of how this will link to the academic years has been included below:

- 31st October 2018 – academic year 2018/19;
- 31st October 2019 – academic year 2019/20; and
- 31st October 2020 – academic year 2020/21 (trainee data from 2020/21 will be explored within the Year 2 report).

Figure 7.1 – Number of posts by HEE region

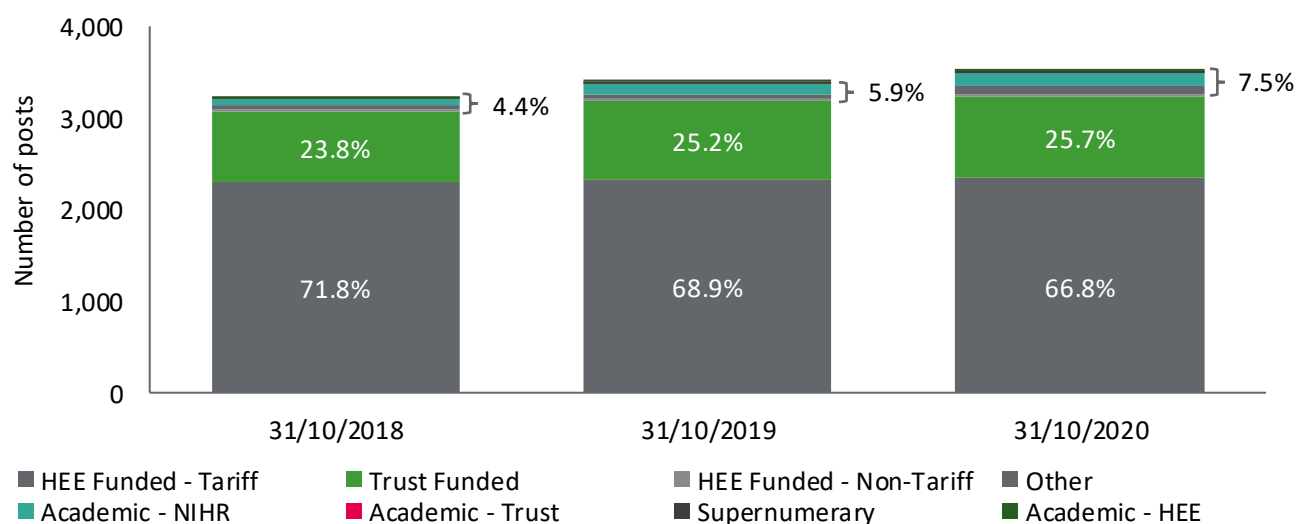


There were over 3,200 posts in 2018 for across the CMT programme. There is an increase in the number of available posts in 2019 and 2020, as the IMT programme was starting to be introduced. This increase was equivalent to a 5.5% increase between 2018 and 2019 and a 3.4% increase between 2019 and 2020.

Between October 2018 and October 2020, the three regions with the greatest number of CMT posts (North West, North East and Yorkshire and Humber) and the three regions with the smallest number of CMT posts (Thames Valley, Wessex and North West London) all remained the same. The HEE region with the greatest number of posts available is the North West, which held 13.1% of all CMT post in 2018 and 13.2% of all CMT posts in 2020. Conversely, the HEE region with the smallest number of CM|T posts is Thames Valley, with only 3.8% of all CMT posts in 2018 and 4.2% of all CMT posts in 2020.

Most of the HEE regions increased their number of posts between 2018 and 2020 (hence the overall upwards trend), however, Kent Surrey and Sussex and North West London both had a decrease in their number of available CMT/IMT posts over this same time period (of 0.1% and 4.9% respectively). The HEE region which has seen the greatest level of growth in available posts between 2018 and 2020 was the South West region. They increased their CMT/IMT posts by almost a quarter (24.1%), which is equivalent to 53 additional posts.

Figure 7.2 – Number of posts by funding source



Over two thirds of CMT/IMT posts were funded by HEE via their tariff mechanism. The number of the HEE tariff-funded posts increase marginally between 2018 and 2020 (increased funding for an additional 38 posts). However, when considered proportionally, alongside other funding mechanisms, relatively fewer CMT/IMT posts were funded through the HEE tariffs in 2020 versus 2018 (66.8% and 71.8% respectively).

Around a quarter of CMT/IMT posts are funded via the Trust and this proportion of funded posts has increased between 2018 and 2020 (23.8% and 25.7% respectively). The remaining posts (4.4% in 2018 and 7.5% in 2020) were funded through HEE (non-tariff), Other, Academic (NIHR), Academic (Trust), Supernumerary and Academic (HEE).

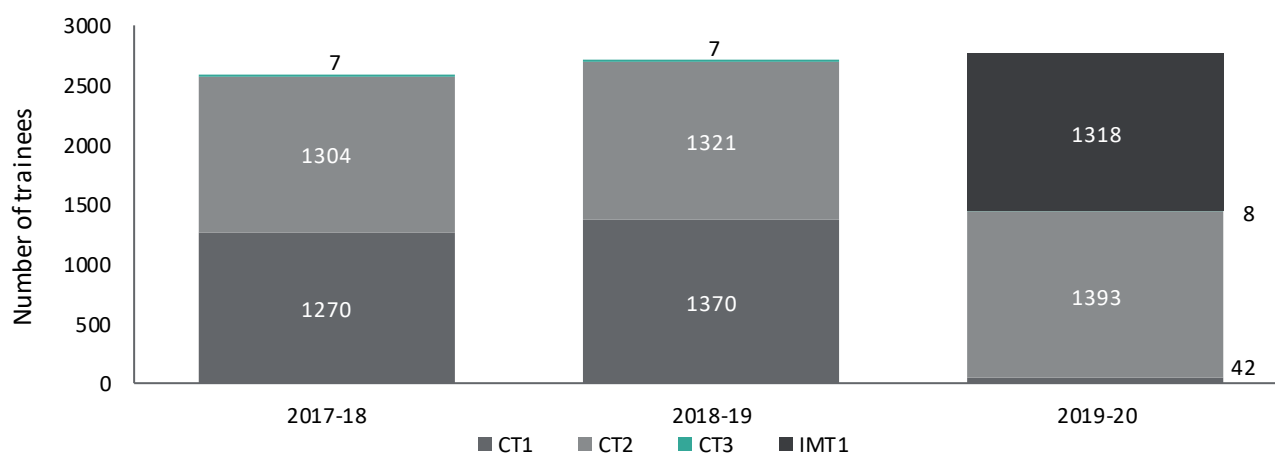
Based on the continued increase in the number of posts, we would expect to see increasing numbers of IMT trainees in subsequent academic years.

7.2 Trainee data

Trainee data has been extracted from the trainee information system (TIS) for the academic years 2017/18, 2018/19 and 2019/20. The grades which have been allocated to each trainee are based on what grade a trainee is on the 30th September of each academic year (this is due to there being no fixed start/end dates for each CMT/IMT training programmes). In addition, an exercise has also been undertaken to align the grades of trainees across the different datasets. In the data validation exercise prior to data analysis, a small amount of data cleansing has been completed, where data was seen to be missing. This was completed using the start and end dates of a trainee’s programme and using the pseudonymised unique reference ID for each trainee record across the multiple data extractions. The following section only includes analysis for trainees who were coded as CT1, CT2 and CT3 trainees within TIS.

7.2.1 Programmes

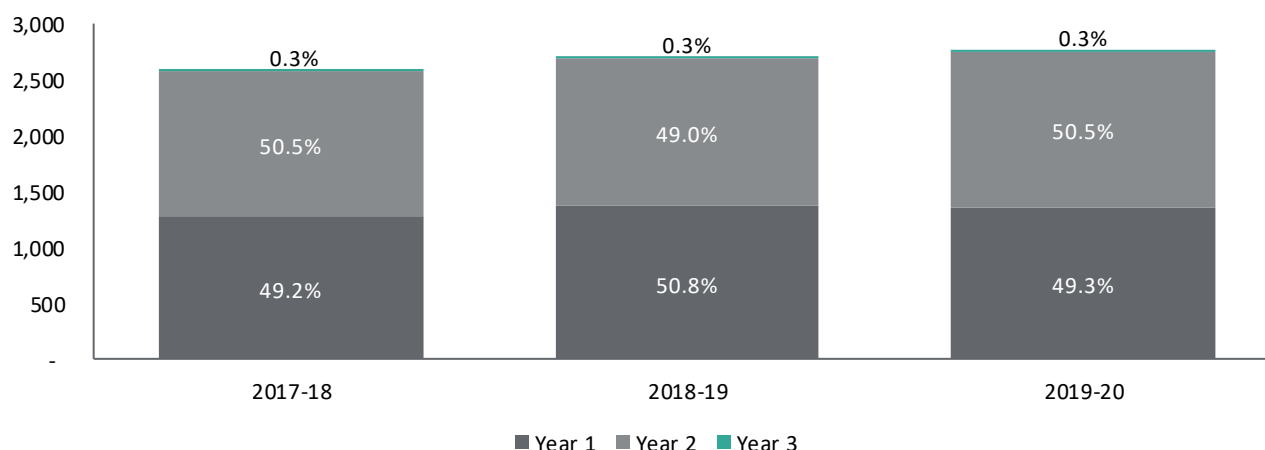
Figure 7.3 – Number of trainees by programme type and academic year



In 2017/18 and 2018/19, trainees were only part of the CMT programme, with the majority of trainees in CT1 and CT2. In August 2019, the IMT programme commenced, with the first cohort of trainees on IMT1. While we would expect that there to be no CT1 trainees in the academic year 2019/20, there was evidence of some trainees being categorised as such (42 CT1 trainees). Potential reasons for this might include: trainees completing CMT on a less than full time basis, trainees taking longer than one year to complete CT1; and trainees returning from a break in training (during their CT1 training) in 2019/20 being placed onto the IMT programme. As these were both <2% of total trainees for the 2019/20 academic year, they will be included in the analysis relative to their grade (ie. Year 1 or Year 2) in the subsequent analysis.

7.2.2 Whole Time Equivalent (WTE) and Headcount

Figure 7.4 – Number of trainees by grade and academic year



In total, there were 2,581 trainees in the academic year 2017/18, 2,698 trainees in the academic year 2018/19 and 2,761 trainees in the academic year 2019/20. This is an increase in the number of posts by 7.0% between 2017/18 and 2019/20. Roughly half of each academic year is made up of Year 1 and Year 2 trainees and only circa 0.3% of each academic cohort had Year 3 trainees.

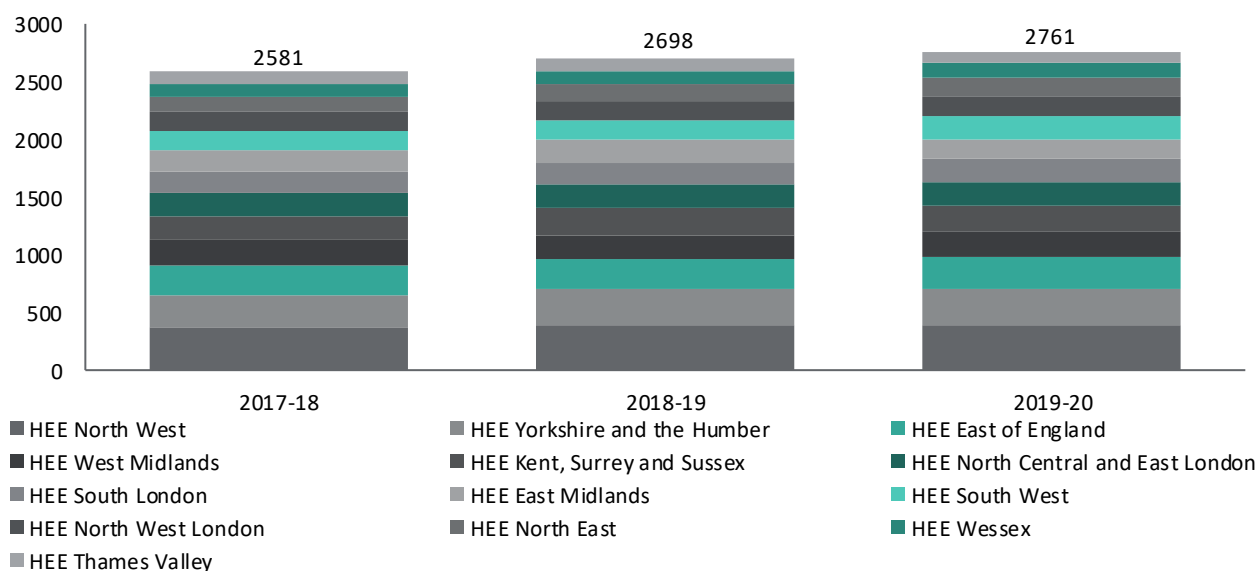
Figure 7.5 – Number of trainees by grade and academic year

	2017-18	2018-19	2019-20
Year 1	1,270	1,370	1,360
Year 2	1,304	1,321	1,393
Year 3	7	7	8

When looking at Year 1 trainees, there was a large increase in the number of trainees between 2017/18 and 2018/19 (7.9%) but then decreased between -0.7%. For Year 2 trainees there was a continued upwards trend, with a 6.8% increase in trainees on CMT between 2017/18 and 2019/20.

When considering the number of available CMT and IMT posts and the number of trainees, we can derive the take up rates in each academic year. Overall, in 2017/18 the take up rate of CMT posts is 84.0%. This decreased slightly in the academic year 2018/19 (81.5%). This will continue to be tracked within subsequent reporting, as the IMT programme is implemented.

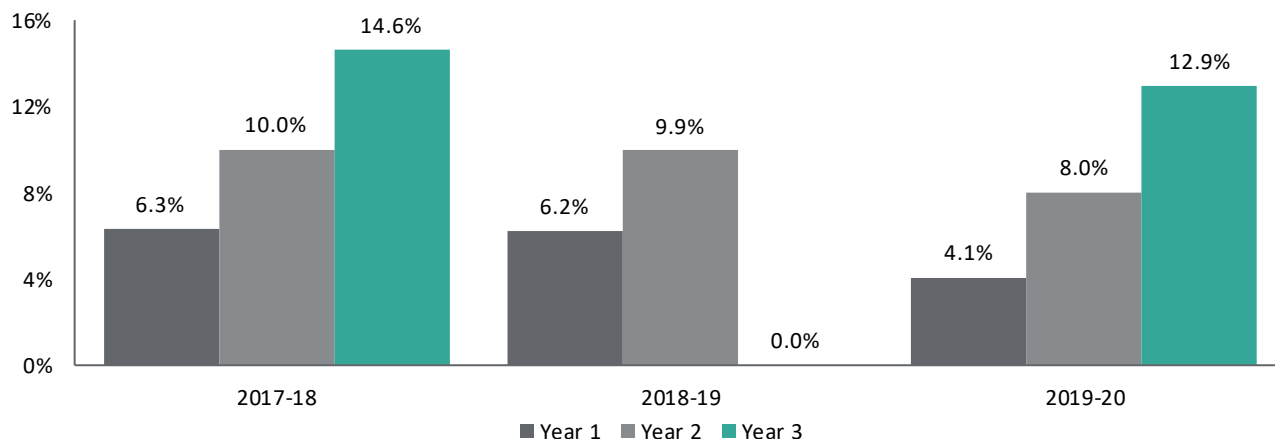
Figure 7.6 – Number of trainees by HEE region and academic year



Similarly to the number of available posts, the HEE North West has the greatest number of CMT trainees (and including IMT trainees in academic year 2019/20) and the Thames Valley region has the smallest number of CMT trainees (and including IMT trainees in academic year 2019/20) across the academic years 2017/18, 2018/19 and 2019/20. In the North West region, there was 14.7% of all CMT trainees in 2017/18 and between 2017/18 and 2019/20, there was a 2.6% increase in the number of trainees.

When considering the number of available CMT and IMT posts and the number of trainees across each HEE region, we can derive the take up rates on an annual basis. Overall, in 2017/18 the take up rate of CMT posts is the highest in *South London* (99.5%) and lowest in *North East* (38.3%). In 2018/19 the HEE region with the highest uptake of CMT trainees (relative to posts) was *North East and Central London*. This measure will continue to be tracked within subsequent reporting, as the IMT programme is implemented.

Figure 7.7 – Proportion of trainees in each performance year who were working less than full time by age academic year



In both CMT and IMT, there are trainees that choose to complete their training programme on a less than full-time basis. The proportion of trainees who choose to partake in part-time training increases between Year 1 and Year 2⁵. Overall, there were 8.2% of trainees who were defined as less than full-time in 2017/18 and this reduced to 6.1% in 2019/20. Of those who were completing their training a part-time basis, the mean WTE is between 0.81 and 0.82 across these academic years.

For Year 1, there has been a significant drop in the proportion of the trainee population that were training on a part-time basis in the first cohort of CMT (4.1% in 2019/20 compared to 6.3% in 2017/18). Of those Year 1 trainees who were completing their training on a part-time basis, the mean WTE is between 0.78 and 0.81 across these academic years, with 2019/20 being the lowest WTE.

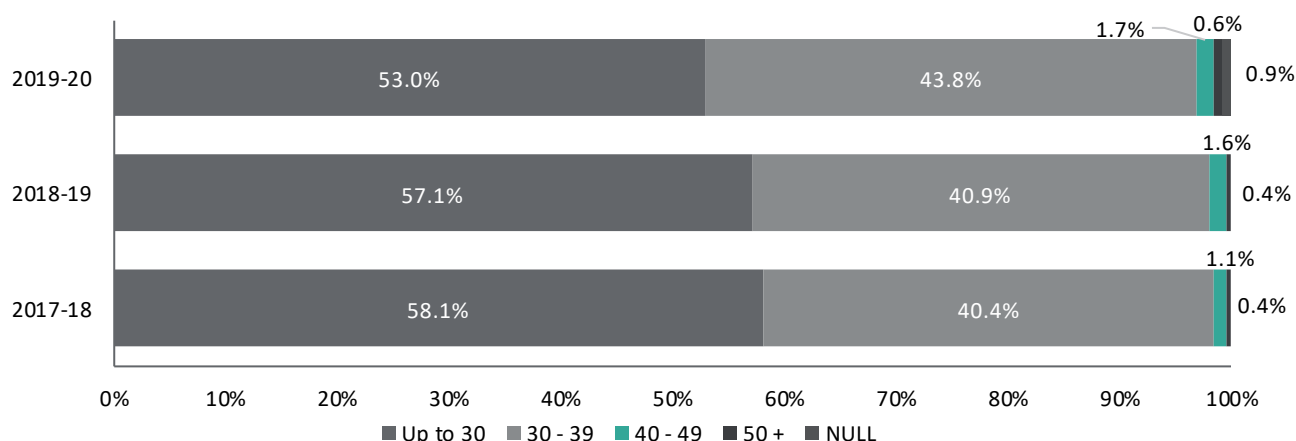
For Year 2, while there is a greater proportion of trainees compared to Year 1, the mean of Year 2 trainees who were completing their training on a part-time basis were doing this on a slightly higher WTE basis, ranging from 0.81 and 0.84.

7.2.3 Demography

The demography of trainees undertaking CMT training (and Year 1 on IMT training in 2019/20) has been broken down by age, gender and ethnicity. Additionally, we also explore whether trainees were CREST trainees, where the trainee has undertaken their previous training outside of the UK. This will be tracked throughout subsequent reporting and analysis to understand whether there may be any demographic changes between CMT and IMT.

⁵ While there is also an increase in the proportion of part-time trainees, this may be skewed due to the small number of Year 3 trainees in each academic year.

Figure 7.8 – Proportion of trainees by age academic year



Across the academic years 2017/18 to 2019/20, over 95% of all trainees were under 40 years old and over half of trainees were under 30 years old. In 2017/18, only 1.5% of trainees were 40 years old or older and this figure increased to 2.3% by 2019/20. There is also an increased number of NULL ages within the 2019/20 data (0.9% of total trainees). These NULL values were not present in the 2017/18 and 2018/19 data.

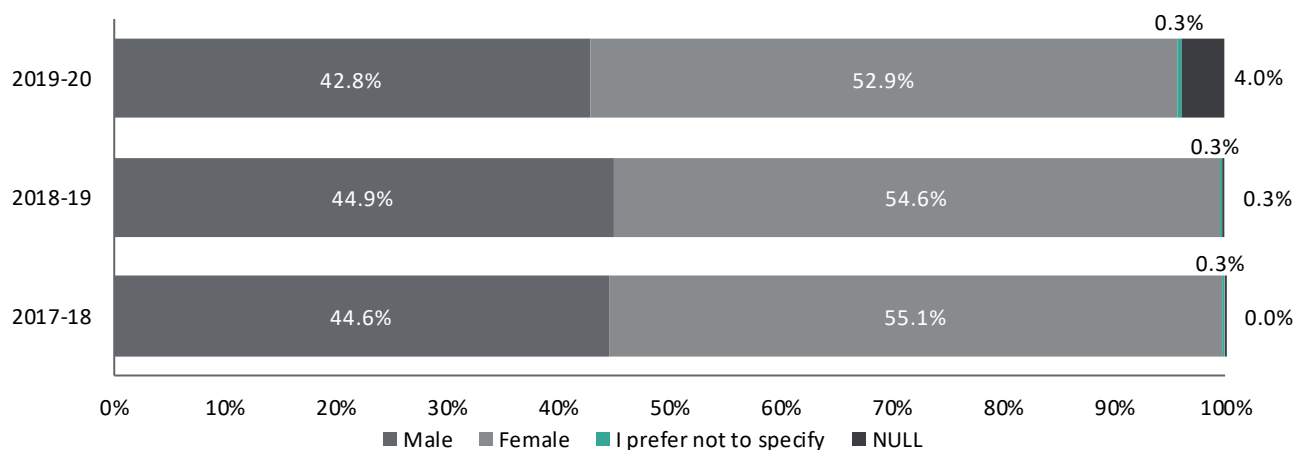
Figure 7.9 – Proportion of Year 1 trainees by age academic year

Year 1	2017-18	2018-19	2019-20
Under 30	65.8%	66.0%	61.3%
30 - 39	32.3%	32.3%	35.3%
40 - 49	1.7%	1.2%	1.5%
50 +	0.2%	0.5%	0.5%
NULL	0.0%	0.0%	1.4%
Total	100.0%	100.0%	100.0%

When looking in more detail at the ages of Year 1 trainees, there is a relatively stable proportion of trainees within each cohort during CMT (ie. the variation is never greater than 0.5 percentage points). In the first year of the IMT programme, there is a movement towards a greater number of trainees within the 30-39 age bracket (an increase of 3.0 percentage points) and fewer trainees in the under 30 age bracket (a reduction of 4.7 percentage points)⁶.

Figure 7.10 – Proportion of trainees by gender and academic year

⁶ It is relevant to highlight that there are a greater number of NULL ages within the 2019/20 TIS dataset. This may partially be attributed to the decrease in the up to 30 age bracket, however, there would still be a significant decrease notwithstanding.



Across the three academic years of available data, there were more trainees who identify as female on the CMT/IMT programmes overall than trainees who identified as male (roughly a 55%/45% split between female and male in 2017/18 and 2018/19). There were also a consistent 0.3% of trainees who did not wish to disclose their gender. Similar to the age data, there were a greater proportion of NULL gender in the 2019/20 data (4.0%). We are unable to tell whether there were any significant differences in the gender split of trainees in the 2019/20 academic year versus previous years due to the proportion of NULL records.

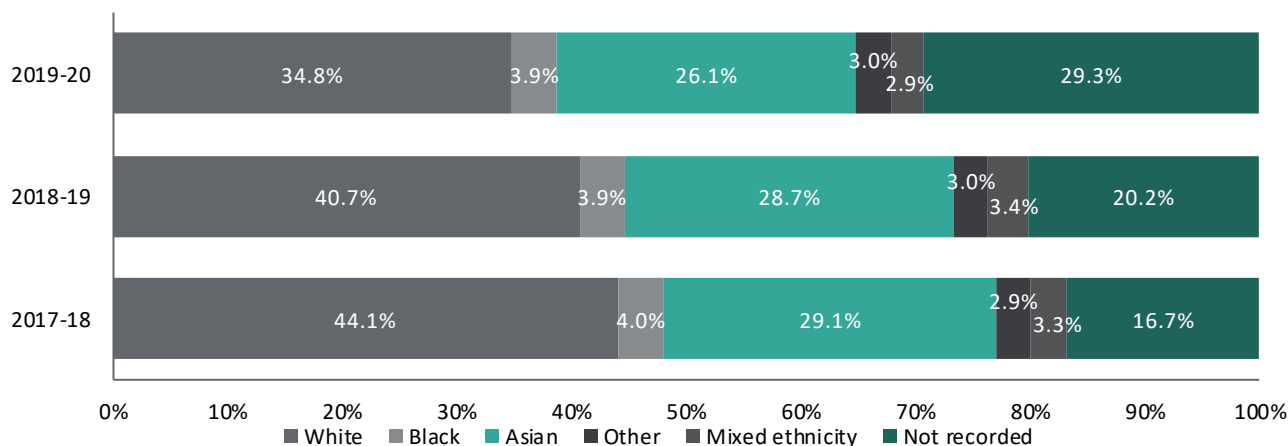
Figure 7.11 – Proportion of Year 1 trainees by gender and academic year

	2017-18	2018-19	2019-20
Male	45.8%	45.5%	41.5%
Female	53.9%	53.6%	50.7%
I prefer not to specify	0.2%	0.4%	0.3%
NULL	0.0%	0.5%	7.6%
Total	100.0%	100.0%	100.0%

When looking at Year 1 trainees in isolation, the gender split roughly mirrors that seen in the overall training CMT/IMT programmes, although there is a significant proportion of NULL records (7.6% of total trainees).

As the IMT programme is embedded, there will be a continuation in the tracking of the trainee demographic (including age and gender). In the final reporting (where more data will be available), sensitivity testing into whether these variables have an impact on attrition and/or ARCP outcomes will also be explored.

Figure 7.12 – Proportion of trainees by ethnicity and academic year



The majority of CMT/IMT programme trainees identify as White, followed by Asian across all three academic years. White and Asian trainees make up at least 73.3% in 2017/18 to 60.9% in 2019/20. There were significantly fewer trainees who identified as Black, Mixed ethnicity or Other (this ranged between 10.3% and 9.8% across the three academic years).

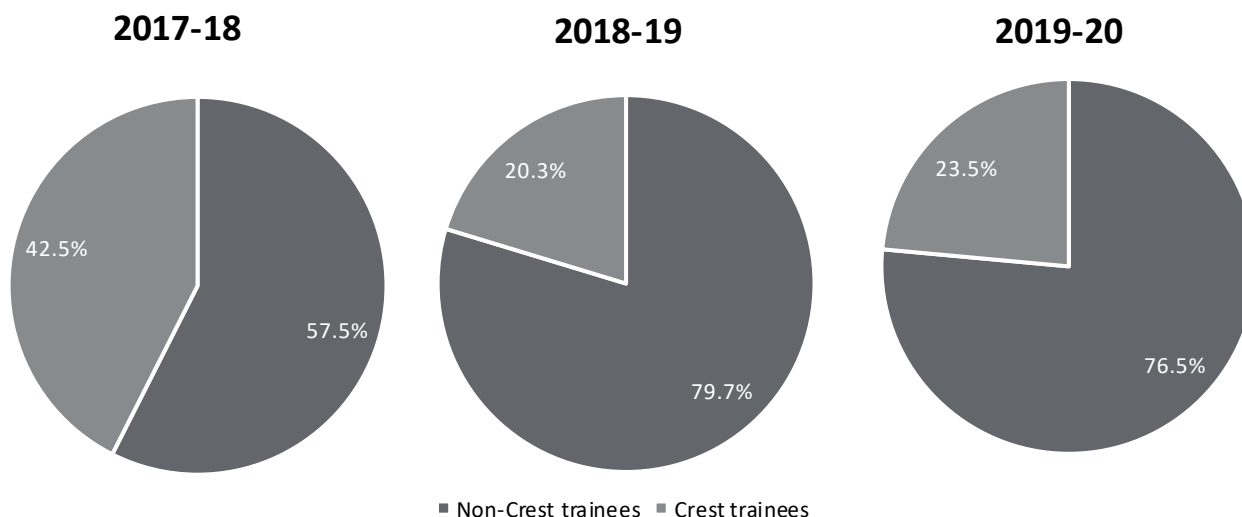
Due to the large number of NULL ethnicity records within TIS which means that it is difficult to draw significant conclusions from the data presented above. This will be deprioritised in subsequent reporting unless there is an improvement within the data quality.

7.2.4 CREST trainees

CREST trainees are trainees that have not completed their Foundation training within the UK. CREST stands for Certificate of Readiness to Enter Speciality Training, which is the certification that demonstrates that trainees have foundation level competences.

Within this report (and subsequent reporting), we will explore the proportion of CMT/IMT trainees who were CREST and whether there were any significant differentials in attainment (please see section 7.3.1).

Figure 7.13 – Proportion of trainees by CREST and academic year



Over the last three years, there were a greater proportion on non-CREST trainees compared to CREST for the whole CMT/IMT programme cohorts. There were a greater proportion of CREST trainees in 2017/18 compared to 2018/19 and 2019/20.

Figure 7.14 – Proportion of trainees by CREST and academic year

Year 1	2017-18	2018-19	2019-20
Non-CREST trainees	80.1%	80.4%	74.3%
CREST trainees	19.9%	19.6%	25.7%
Total	100.0%	100.0%	100.0%

When looking at Year 1 trainees in isolation, the CMT programme has circa 20% of Year 1 trainees who were CREST (from the last two CT1 trainee groups joining the programme in 2017/18 and 2018/19). In the first cohort of the IMT programme, the proportion of CREST trainees in Year 1 has increased to 25.6%.

7.3 Programme progression data (ARCP outcomes)

All doctors in training must be reviewed at least once a year to ensure that they are progressing satisfactorily through their training programme. This review is carried out at the ARCP panel. The following analysis below is based on the potential ARCP outcomes outlined below:

- **Outcome 1:** Achieving progress and the development of competences at the expected rate
- **Outcome 2:** Development of specific competences required – additional training time not required
- **Outcome 3:** Inadequate progress by the trainee – additional training time required
- **Outcome 4:** Released from training programme with or without specified competences
- **Outcome 5:** Incomplete evidence presented – additional training time may be required
- **Outcome 6:** Gained all required competencies - will be recommended as having completed the training programme
- **Outcome 8:** Out of programme (for those currently undertaking research or experience)
- **Outcome 10.1:** recognises that the trainee has been making progress in their training but there has been delay in the acquisition of competencies/capabilities due to COVID-19
- **Outcome 10.2:** progress is satisfactory but the acquisition of competences/capabilities by the trainee has been delayed by COVID-19 disruption. The trainee is at a critical progression point in their programme and additional training time is required.
- **Not assessed:** There are circumstances when an ARCP panel is not able to recommend an outcome eg. if a trainee is absent due to statutory leave

The following analysis presents trainees who have received an outcome across the 2017/18, 2018/19 and 2019/20 academic years and which outcomes they have received. Due to some trainees undertaking CMT/IMT on a part-time basis and/or taking breaks within the training programme, there may be slight variation in the numbers of trainees from the demographic data.

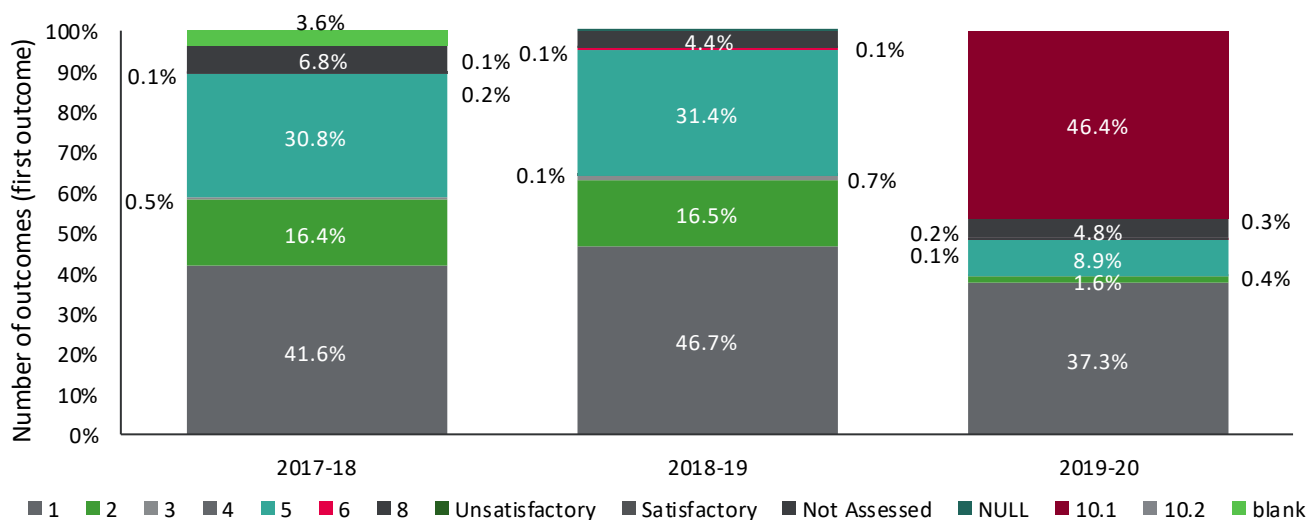
Figure 7.15 – Total number of assessments and number of first assessments for a CMT/IMT trainee by grade and academic year

Total assessments	2017-18	2018-19	2019-20
CT1	1,768	1,812	1,490
CT2	1,863	1,893	1,634
CT3	6	7	10
Total	3,637	3,712	3,134

First assessment	2017-18	2018-19	2019-20
CT1	1,262	1,347	1,341
CT2	1,286	1,301	1,370
CT3	5	5	8
Total	2,553	2,653	2,719

Overall, there were roughly 3,700 outcomes received by trainees on the CMT/IMT programmes in 2017/8 and 2018/19. There was a reduction in the number of total outcomes in the 2019/20 academic year. Across the academic years and grades, the mean number of outcomes were 1.11 and 1.46, with the first year of the IMT programmes having the lowest total number of outcomes per trainee (1.11). In 2017/18 and 2019/20 the maximum number of outcomes for any one trainee is four in 2018/19 this increased to five.

Figure 7.16 – Year 1 trainees by ARCP outcomes and academic year (first outcome)



When reviewing the first outcome that Year 1 trainees received, 41.6% in 2017/18 and 46.7% in 2018/19 received an Outcome 1. The proportion of trainees who received an Outcome 1 as their first outcome dropped to 37.3% in 2019/20. In 2019/20, there was also the introduction of Outcome 10.1 (to reflect the challenges from the Covid-19 pandemic), with 46.4% of Year 1 trainees receiving this as their first outcome.

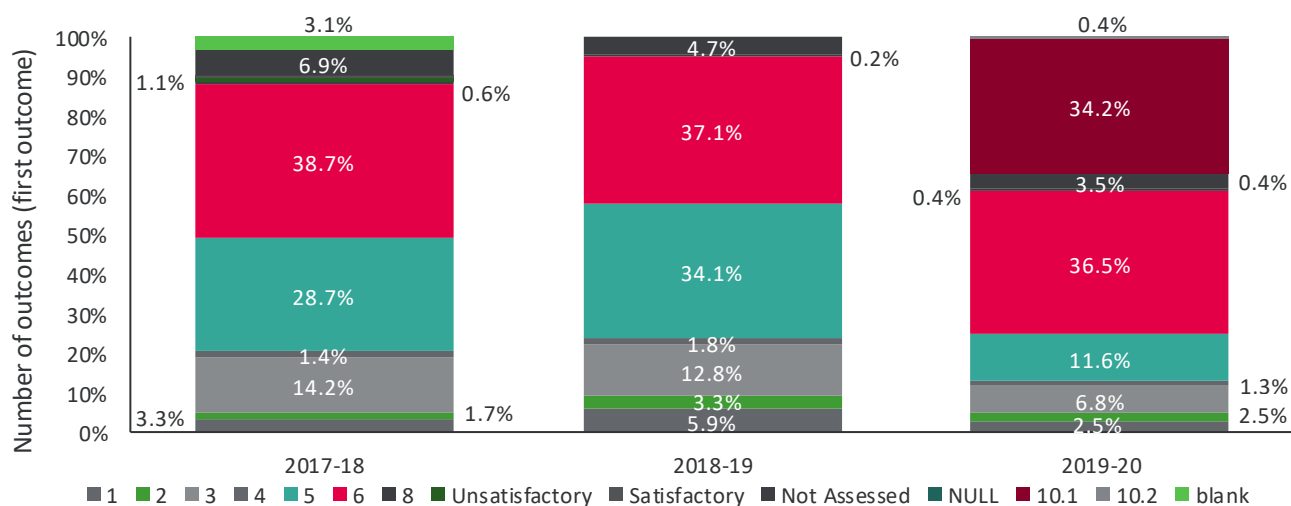
Figure 7.17 – Year 1 trainees by ARCP outcomes and academic year (all outcomes)⁷

CT1	2017-18	2018-19	2019-20
1	70.9%	74.1%	40.9%
2	22.7%	20.7%	1.7%
3	1.0%	0.9%	0.4%
4	0.0%	0.1%	0.0%
5	33.6%	33.4%	9.9%
6	0.1%	0.1%	0.1%
8	0.2%	0.2%	0.4%
Satisfactory	0.1%	0.0%	0.0%
Not Assessed	7.8%	4.9%	5.4%
NULL	0.1%	0.1%	0.4%
10.1	0.0%	0.0%	51.8%
blank	3.6%	0.0%	0.0%

When looking at all of the outcomes received by trainees, roughly a third of trainees received multiple outcomes in 2017/18 and 2018/19 and roughly 10% 2019/20. In total, 70.9% and 74.1% received an Outcome 1 (in 2017/18 and 2018/19 respectively), which decreased to 40.9% of Year 1 trainees in 2019/20).

Over half of Year 1 trainees (51.8%) received an Outcome 10.1 in 2019/20, which was a new outcome developed to be used where the acquisition of competences/capabilities by the trainee has been delayed by COVID-19 disruption. Interestingly, in this academic year, there was a significant reduction in the number of Outcome 5s received (Incomplete evidence presented – additional training time may be required) from 33.4% of Year 1 trainees receiving this outcome to 9.9% of Year 1 trainees. This may be as a result of the challenges with disaggregating whether the reason for a trainee not being able to evidence the required competencies is as a result of the Covid-19 pandemic versus other challenges.

Figure 7.18 – Year 2 trainees by ARCP outcomes and academic year (first outcome)



⁷ Please note that the sum of each percentages for each academic year will be greater than 100% as some trainees received more than one outcome
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When reviewing the first outcome that Year 2 trainees received, roughly one third of trainees received an Outcome 6 as their first outcome (38.7%, 37.1% and 36.5% in 2017/18, 2018/19 and 2019/20 respectively). In 2019/20 an additional third of Year 2 trainees (36.5%) also received an Outcome 10.1 as their first outcome.

Figure 7.19 – Year 2 trainees by ARCP outcomes and academic year (all outcomes)⁸

CT2	2017-18	2018-19	2019-20
1	4.2%	6.7%	2.9%
2	1.9%	4.0%	3.0%
3	21.5%	21.9%	9.1%
4	3.3%	2.7%	2.2%
5	32.7%	36.9%	13.1%
6	66.7%	67.1%	43.4%
8	0.7%	0.2%	0.4%
Unsatisfactory	1.2%	0.0%	0.0%
Satisfactory	0.4%	0.0%	0.0%
Not Assessed	8.4%	5.6%	4.5%
NULL	0.3%	0.2%	0.7%
10.1	0.0%	0.2%	39.6%
10.2	0.0%	0.0%	0.4%
blank	3.6%	0.0%	0.0%

A greater proportion of trainees received multiple outcomes in Year 2 (39.1% in 2017/18, 41.2% in 2018/19 and 17.7% in 2019/20).

When looking at **all** of the outcomes received by Year 2 trainees, 66.7% and 67.1% received an Outcome 6 (in 2017/18 and 2018/19 respectively), which decreased to 43.4% for Year 2 trainees in 2019/20). It is likely that the additional trainees may have received their Outcome 6 following the date that this data was extracted (October 2020).

Similar to the data for Year 1 trainees, a significant proportion of Year 2 trainees received an Outcome 10.1 in 2019/20 (39.6%). The introduction of this new outcome has a direct impact on the number of Outcome 5s received by Year 2 trainees, with 36.9% receiving an Outcome 5 in 2018/19 versus 11.6% in 2019/20.

7.3.1 By CREST

There is a hypothesis that there is a differential in the attainment levels between non-CREST and CREST trainees within the CMT programme. With the IMT programme, it is expected that there will be a decrease in the attainment differently between these two groups⁹.

The ARCP outcomes for trainees within these two groups has been explored within this report for 2017/18, 2018/19 and 2019/20. This analysis will also be undertaken in subsequent reporting to track any changes in attainment across the two groups as the IMT programme embeds.

⁸ Please note that the sum of each percentages for each academic year will be greater than 100% as some trainees received more than one outcome

⁹ Attainment data may unexpectedly fluctuate in 2019/20 due to the Covid-19 pandemic and the introduction of Outcomes 10.1 and 10.2.

Figure 7.20 – Year 1 trainees by ARCP Outcome 1 by CREST and academic year

		2017-18	2018-19	2019-20
Outcome 1 (first outcome)	Non-Crest Trainee	43.3%	48.4%	37.5%
	Crest Trainee	34.8%	39.5%	36.8%
Outcome 1 (all outcomes)	Non-Crest Trainee	73.2%	77.1%	41.4%
	Crest Trainee	61.5%	61.6%	39.5%

When comparing Year 1 trainees, non-CREST trainees have a greater proportion of trainees who received an Outcome 1 (both as their first outcome or as a subsequent outcome). In 2019/20, there is less variance between CREST and non-CREST trainees, with trainee outcomes skewed by the Covid-19 pandemic.

Figure 7.21 – Year 2 trainees by ARCP Outcome 6 by CREST and academic year

		2017-18	2018-19	2019-20
Outcome 6 (first outcome)	Non-Crest Trainee	28.0%	41.0%	39.1%
	Crest Trainee	44.5%	22.2%	27.1%
Outcome 6 (all outcomes)	Non-Crest Trainee	48.5%	72.5%	46.3%
	Crest Trainee	76.4%	46.3%	32.5%

For Year 2 trainees, CREST trainees outperform non-CREST trainees in the academic year 2017/18. In 2018/19 and 2019/20, non-CREST trainees have a higher proportion of Outcome 6 in Year 2 (both as their first outcome or as a subsequent outcome). Similar to the Year 1 data, there is less variance between CREST and non-CREST trainees in 2019/20.

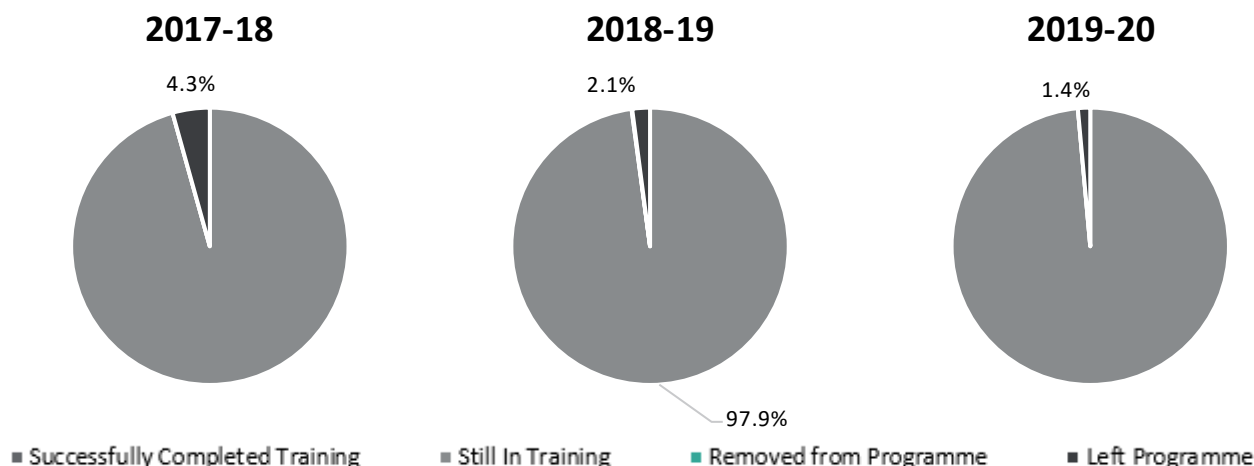
7.4 Attrition data

Through attrition data, insight can be provided into the proportion of trainees who left during their training programme, which will have a follow-on impact on the size of the prospective medical workforce. Attrition data has been extracted from TIS under the following definitions:

- Still in Training (not defined as attrition within analysis);
- Successfully Completed Training (not defined as attrition within analysis);
- Removed from Programme (defined as attrition within analysis); and
- Left Programme (defined as attrition within analysis).

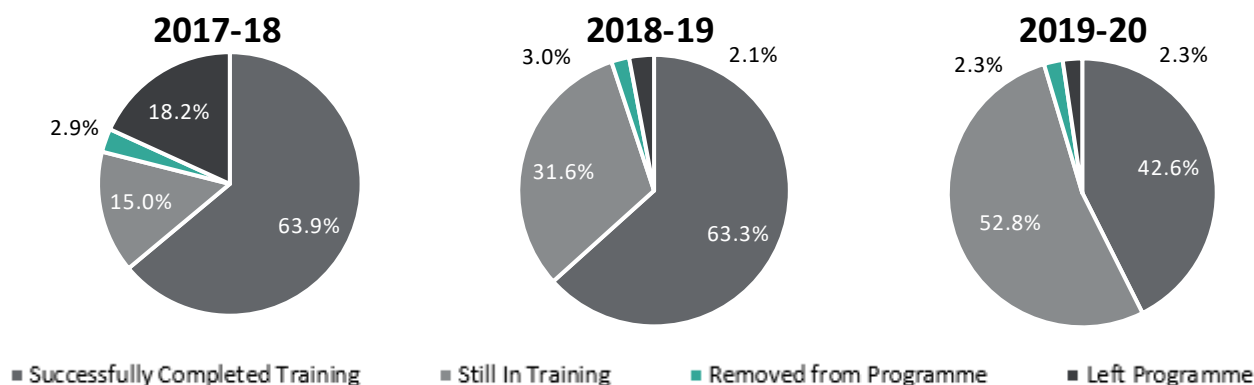
Attrition of trainees will continue to be tracked throughout subsequent reporting as the IMT programme embeds. Data will also need to be triangulated with other data sources to understand what changes in attrition were as a result of the training programme and what were as a result of the Covid-19 pandemic.

Figure 7.22 – Year 1 trainees Attrition by academic year



Within Year 1 of the CMT programme (2017/18 and 2018/19) there was a reducing number of trainees who left the programme at this stage (from 4.1% in 2017/18 to 2.1% in 2018/19). In 2019/20 (the first year of the IMT programme) attrition in Year 1 continued to fall, with 1.4% of Year 1 trainees leaving the programme.

Figure 7.23 – Year 2 trainees Attrition by academic year



For Year 2 trainees across the three years, roughly 2% of trainees have been removed from the programme. In 2018/19 and 2019/20, there is also a similar proportion of Year 2 trainees who have left the CMT programme¹⁰. For 2019/20, there is an elevated number of people who were still in training as a significant number of extension outcomes were received due to the Covid-19 pandemic.

7.5 Progression data

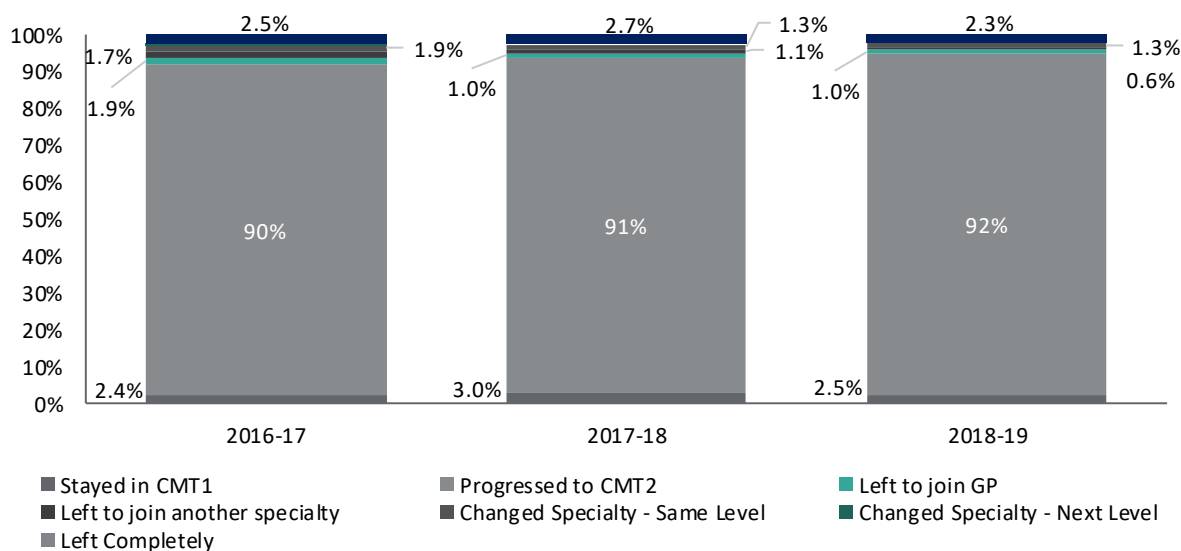
Progression data has been collated by the workforce team at HEE and provides information into:

- what trainees who were in CT1 were doing one year later; and
- what trainees who were in CT2 were doing one, two and three years later.

¹⁰ Attrition is determined by the trainee’s assessment outcome and the programme end date in that academic year. In the earlier years (eg. 2017/18) there might be an inflated Left Programme figures as sometimes a CMT trainee might have received an extension outcome but didn’t take up the extension but their outcome wasn’t changed to an outcome 6.

This will provide insight into the flow of trainees as they move through their training and career post CMT training. Please note: this dataset will have some overlap with the attrition data presented in Section 7.4, including telling us the destination of those trainees who left the programme.

Figure 7.24 – The destination of CT1 trainees one year later by academic year

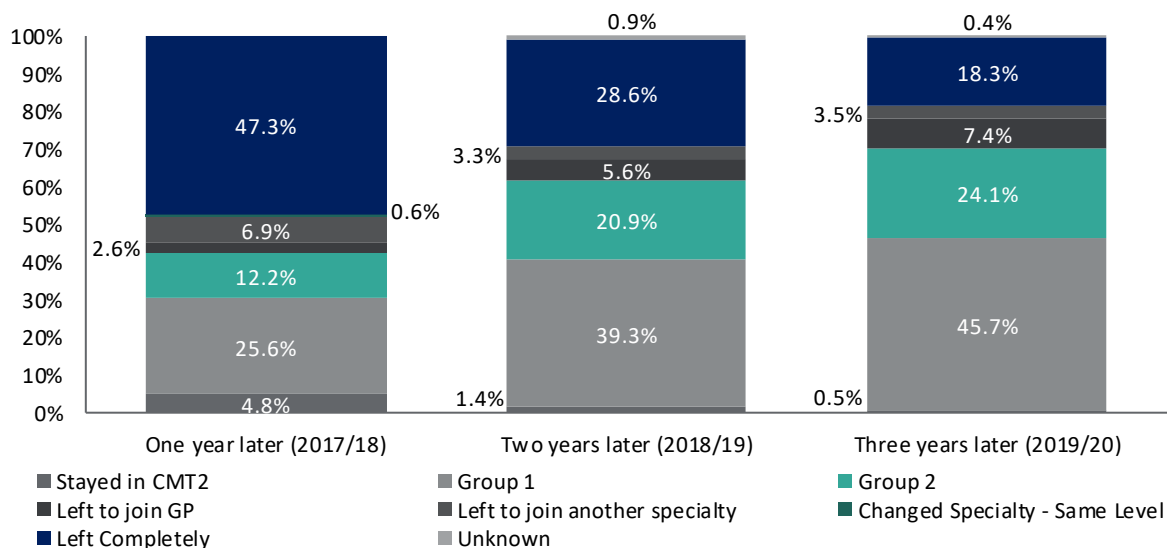


When looking at the progression of Year 1 trainees in the last three years of the CMT programme, there were no significant variations in destination. Over 90% each year progressed to Year 2, while between 2.4%-3.0% of trainees remained within Year 1 (this will likely be as a result of their ARCP outcome and/or an extended period of time away from the programme).

The proportion of Year 1 trainees who left the CMT programme altogether has been on a downwards trend, from 8.1% in 2016/17 to 5.3% in 2018/19. The majority of those Year 1 trainees who left the CMT programme, left to join another speciality¹¹ followed by left completely and leaving to become a GP.

¹¹ Left to join another speciality encompasses the following codes within the dataset: Left to join another speciality; Changed Specialty - Same Level; and Changed Specialty - Next Level.

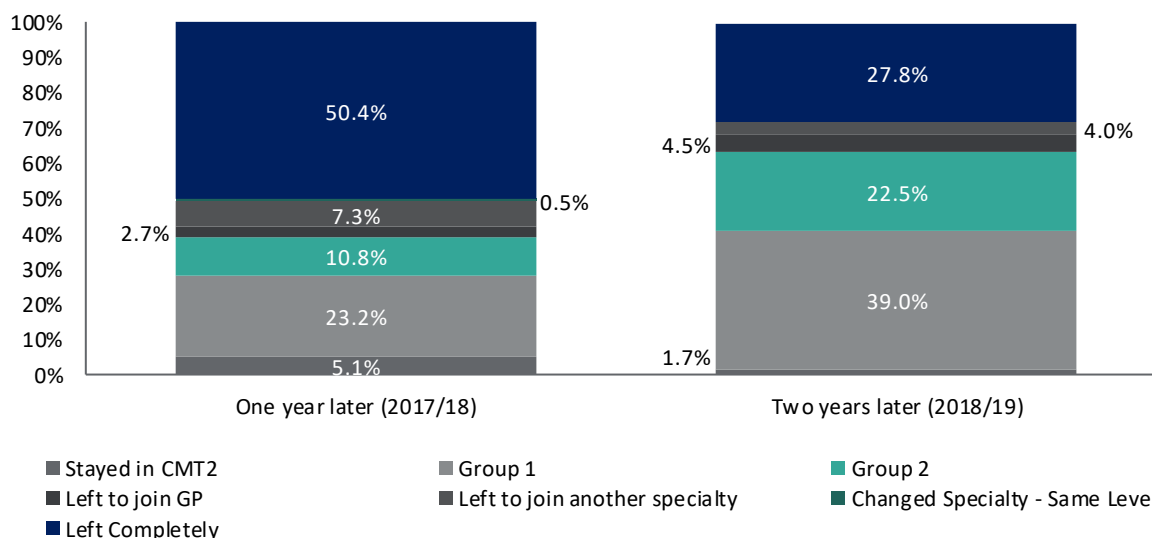
Figure 7.25 – The destination of CT2 trainees who completed their training in the 2016/17 academic year after one, two and three years



For Year 2 trainees (those who would have been expected to complete their training in the academic year 2016/17), the graph above presents the overall flow of doctors in the following three years. There were a decreasing number of trainees who were still on CMT training (from 4.8% one year later to 0.5% three years later). This is likely due to trainees undertaking CMT on a part-time basis and/or needing a longer period of time to reach the required competencies of the CMT programme.

The proportion of trainees who have progressed to Group 1 or Group 2 HST is 69.8% after three years, with roughly two thirds of those trainees progressing to Group 1 HST. In the year following CMT training, almost half of trainees (47.3%) had left the programme completely. This figure reduces to less than one fifth of trainees (18.3%) having left the programme completely after three years. Around 10% of CT2 trainees change specialty over the next three years, with the majority (7.4%) of those leaving to join general practice three years after their CMT training.

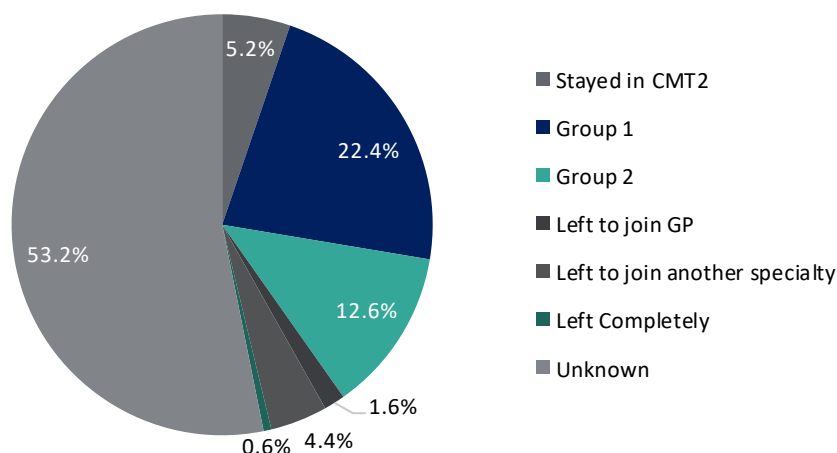
Figure 7.26 – The destination of CT2 trainees who completed their training in the 2017/18 academic year after one and two years



The progression of those Year 2 trainees (those who would have been expected to complete their training in the academic year 2017/18), does not vary significantly to that of trainees from the previous year after two years (less than 2 percentage points).

After one year, over half of trainees had left completely, however this reduced by almost half (44.8%) by the following year. Concurrently, number of trainees still on the CMT programme reduced from 5.1% to 1.7% (after one and two years respectively). After two years, 61.5% of trainees have progressed onto either Group 1 or Group 2 HST (which is marginally more than the previous trainee cohort after two years).

Figure 7.27 – The destination of CT2 trainees who completed their training in the 2018/19 academic year after one year



The progression of those Year 2 trainees (those who would have been expected to complete their training in the academic year 2018/19), does not vary significantly to that of trainees from the previous two trainee cohorts (ie. those who were expected to finish their CMT training in 2016/17 and 2017/18). This most significant difference is that a greater proportion of trainees had left completely (53.2% for trainees expected to complete CMT in 2018/19 versus 50.4% and 47.3% for 2017/18 and 2016/17 respectively).

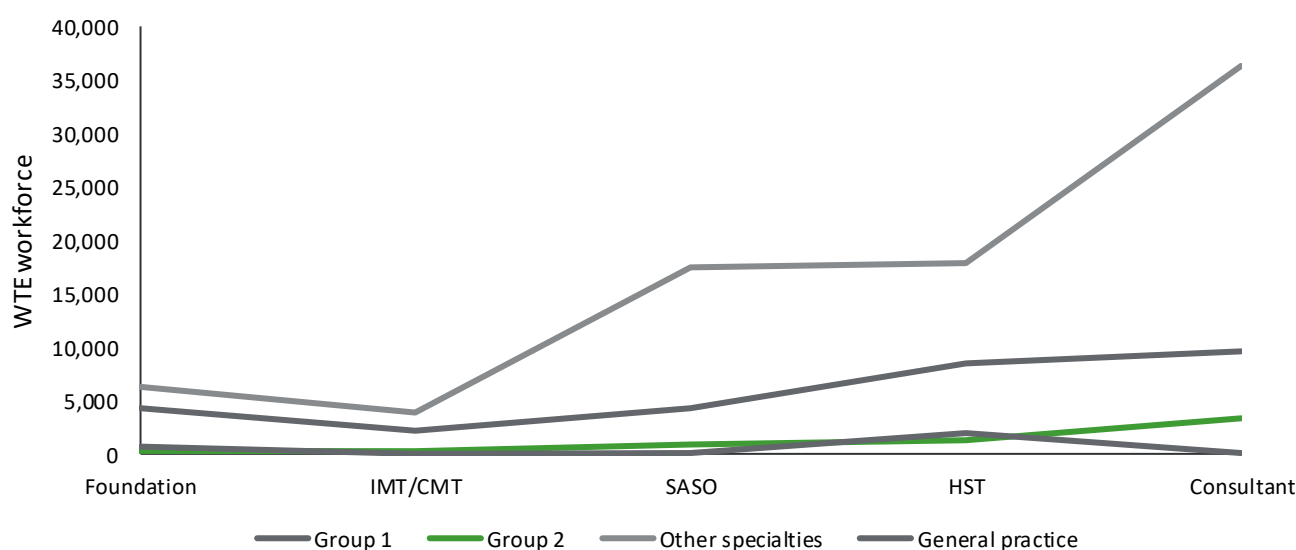
Progression data will continue to be tracked throughout the evaluation to explore whether the implementation of the IMT programme is leading to any emerging changes in the progression of trainees.

7.6 Workforce data

The following analysis provides a high level overview of the WTE medical workforce throughout their training and to consultant level, with a particular focus on Group 1 and Group 2 specialties. This has been provided on a snapshot basis from 2019, with each all WTE being segmented into a series of workforce groups (depending on their level of training).

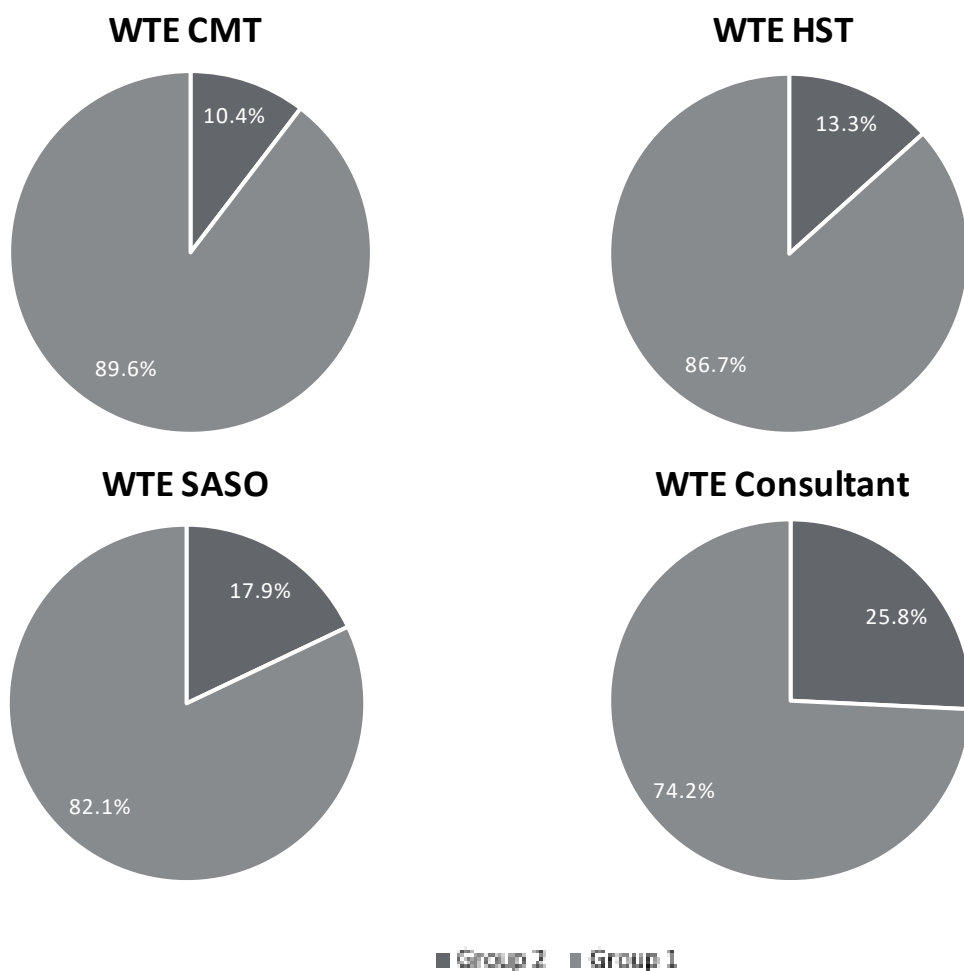
Within the final report, the emerging changes in outcomes and progression for the IMT programme will be modelled and high-level insights on the resultant changes to the workforce will be proposed.

Figure 7.28 – WTE workforce data relating to the CMT/IMT pathway, 2019



Within 2019, there were a total of 119,326 WTE staff, with the majority of WTE working for other specialties (ranging from 53.9% and 76.9% across the different workforce groups). There is also a significantly greater Group 1 than Group 2 specialty workforce (in WTE) across each workforce group.

Figure 7.19 – WTE workforce data relating to the CMT/IMT pathway, 2019



The charts above isolate the proportions of Group 1 and Group 2 workforce. This will help us to explore the flow of doctors within these roles. Within the training workforce groupings, there were a total of 2,416 WTE in CMT and 9,864 WTE in HST. In both instances, there were a greater proportion of Group 1 versus Group 2 WTE, however, this proportion decreases by 2.9% between the two training programmes (with HST having a larger proportion of Group 2 than CMT).

For staff grade (SASO) and Consultants, the trends between Group 1 and Group 2 trainees represent those seen within training, with a greater proportion of Group 2 WTE evidenced at a more senior grade. In 2019, over a quarter of the WTE workforce at Consultant (25.8%) were Group 2 specialities, which is 7.8 percentage points greater than for staff grade doctors.

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The matters raised in this report are only those which came to our attention during the course of our review and are not necessarily a comprehensive statement of all the weaknesses that exist or all improvements that might be made.

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