

# GASTROENTEROLOGY WORKFORCE REPORT, Oct 15

Chris Romaya & Melanie Lockett

## Key points:

- On 30th Sept 2015 there were 1414 substantive gastroenterology consultants in the UK, a 6.6% expansion from 30/09/14. The mean annual expansion over the last 10 years has been 4.9% per year but this is lower than it could have been as there are 42 locum consultants in post, and 51% of advertised consultant posts were not filled (despite there being 100 UK CCT holders without a substantive consultant post).
- In 2013 the RCP predicted that we need 6 whole-time equivalent consultants per 250,000 population (1 per 41,667) doing 11.5 PAs of gastroenterology & GIM, a total of 1516 consultants (102 more). As 14% of consultants work less than whole time (6.7 PAs on average) we need a total of 1610 consultants (1 per 39,243 population) or 196 more. If expansion continues at 5% per year then this will take 2-3 years to achieve. However, the UK population is expanding and aging and there have been major service changes that were not included in the 2013 figures (e.g. bowel scope & FiT testing, out of hours bleed rotas, 7 day services and increased access to endoscopy) so further expansion will be required.
- Over the last 5 years our gastroenterology & hepatology training programmes have produced an average output of 99 CCTs per year. Once predicted retirement posts have been replaced, this number is sufficient to produce a consultant expansion rate of 5.6% next year.
- The number of attempted consultant appointments in the UK (excluding Scotland) increased 77% in 2014 compared to the average from 2008-2011. There has been a 21% increase in successful appointments but a 312% increase in unfilled posts in the same time frame as CCT output has not changed to match the demand.
- There remains significant regional variation in consultant gastroenterologist provision in the UK; North East England & London have exceeded the RCP recommended number per population. South East Coast/South Central England, East Midlands and East of England have the least consultant gastroenterologists per population. There is also regional variation in the number of trainees per population. There is a higher than average density of trainees to population in London, the North East and the West Midlands, whereas Wales, Yorkshire & Humber and the South West have the least number of trainees per population. Redistributing NTN posts to areas of consultant under-provision or those with recruitment difficulty could help consultant recruitment in these areas.
- The proportion of female gastroenterology consultants is the same as 2014 (18% consultants) but the proportion of female trainees has increased (39% trainees are female compared to 37% in 2014) although both remain much lower than other medical specialties (33% UK consultant physicians, 52% medical higher specialty trainees female), medical students (57%) and doctors in training (54%) presumably as some females struggle to see how GIM & endoscopy on call rotas are compatible with family life. Encouraging LTWT training & working and flexibility of job planning would help. This would also help older consultants who wish to return to work after taking their pensions.
- There is a shortfall of 300 CMT posts below requirements so it is impossible to fill medical ST3 posts beyond the 70-80% level. Gastroenterology remains a popular specialty filling 100% NTN posts but only 48% of advertised LAT posts resulting in gaps in training programmes. Health Education England (HEE) has no plan to increase the number of CMT posts in 2016/17 as all available funding is being used to create more GP training posts and without additional foundation trainees, they probably wouldn't be filled.
- There will be no change in the number of gastroenterology or hepatology NTNs in 2015/16 but HEE have abolished LATs in England. This may drive trainees to take an NTN in their second choice specialty rather than a service post in gastroenterology in England or a LAT in a devolved nation, which could reduce gastroenterology CCT output (inhibiting consultant expansion) and cause rotation gaps unless the number of NTNs posts is increased to compensate. HEE have suggested this as a possible option where there are sufficient applicants and training capacity, and where an increased output of trained gastroenterologists is required. This is not likely to apply in London.

## Consultant gastroenterologists

### Consultant expansion

On 30.09.15 there were 1414 substantive gastroenterology consultants in the UK, an increase of 6.6% from 30.09.14 (tables 1 & 2). In addition, on the 30.09.15, there were 42 locum consultants with or without an NTN (41 in England, 1 in Northern Ireland, 0 in Scotland and 0 in Wales). 22 of these posts were filled by UK CCT holders without a previous substantive consultant appointment and are counted as trainees for the purposes of this report, 1 post was filled by a UK CCT holder who had had a previous substantive consultant post, 1 post was filled by an Irish CCT holder and 18 posts were filled with consultants trained outside the UK and Ireland. There was also 1 honorary consultant in England. In total therefore there were 1457 gastroenterology consultants in the UK, a 6.8% increase compared to the total number on the 30.09.14. In addition there is an unknown number of consultant posts that have not been advertised waiting for the “right” CCT holder to be available to apply.

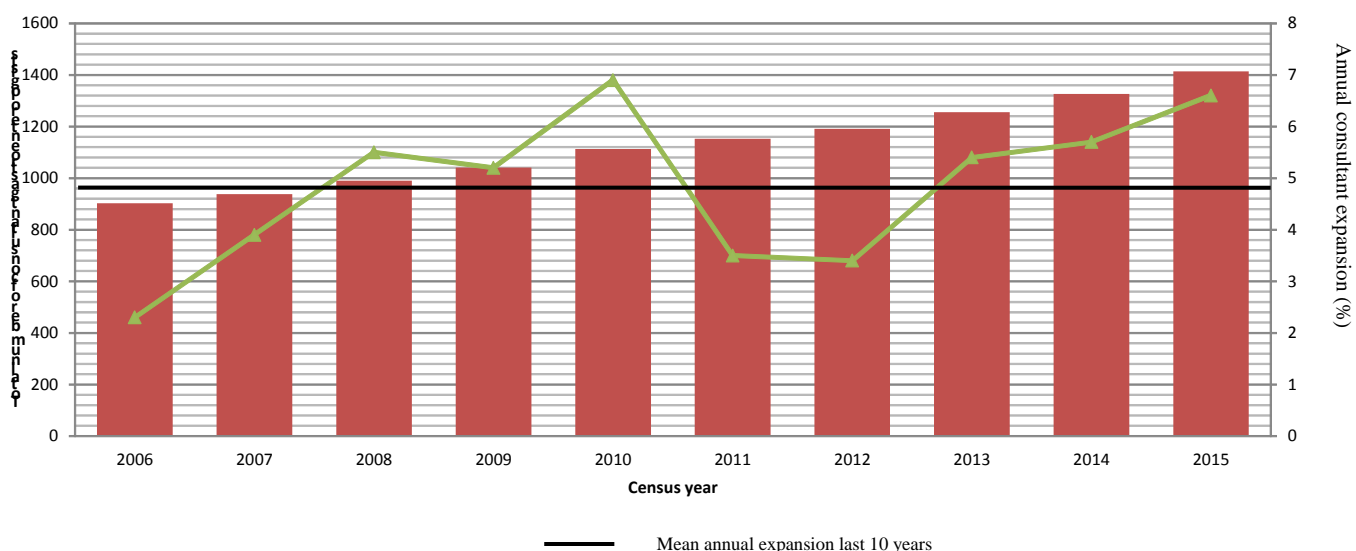
Table 1: Number of substantive UK consultant gastroenterologists by year

	30/9/6	30/9/7	30/9/8	30/9/9	30/9/10	30/9/11	30/9/12	30/09/13	30/09/14	30/09/15
England	752	780	824	866	926	957	996	1054	1107	1182
Wales	43	45	48	49	48	52	52	55	59	64
Scotland	82	86	89	96	108	108	107	111	122	128
Northern Ireland	26	27	29	30	31	35	36	35	39	40
<b>Total</b>	<b>903</b>	<b>938</b>	<b>990</b>	<b>1041</b>	<b>1113</b>	<b>1152</b>	<b>1191</b>	<b>1255</b>	<b>1326</b>	<b>1414</b>

Table 2: Annual expansion (%) of UK consultant gastroenterologists by year

	30/9/6	30/9/7	30/9/8	30/9/9	30/9/10	30/9/11	30/9/12	30/09/13	30/09/14	30/09/15
England	2.0	3.7	5.6	5.1	6.9	3.5	4.1	5.8	5.0	6.8
Wales	7.5	4.7	6.7	2.1	-2	8.3	0	5.8	7.3	8.5
Scotland	1.2	4.8	3.4	7.9	12.5	0	-0.9	3.7	9.9	4.9
Northern Ireland	4.0	3.8	6.9	3.4	3.3	12.9	2.9	-2.8	11.4	2.6
<b>Total</b>	<b>2.3</b>	<b>3.9</b>	<b>5.5</b>	<b>5.2</b>	<b>6.9</b>	<b>3.5</b>	<b>3.4</b>	<b>5.4</b>	<b>5.7</b>	<b>6.6</b>

Figure 1: Number of UK consultant gastroenterologists and annual expansion (%) by year



Over the last 10 years the mean annual % expansion of UK consultant gastroenterologists has been 4.8% per year (Table 2 & figure 1). Expansion was 2.3% in 2006 but increased to 6.9% in 2010, attributable to financially supported recruitment driven by national bowel cancer screening and other political targets e.g. the '18 week pathway'. It fell to 3.5 & 3.4% in 2011 & 2012 as NHS resources were reduced during the UK recession, but has increased to 5.4% in 2013, 5.7% in 2014 and 6.6% in 2015 attributable to financially supported recruitment driven by bowel scope, as well as Trusts expanding gastroenterology services as they move towards 7 day services. 70 substantive consultant posts were advertised from Jan to Dec 2014 but not filled due to lack of suitable applicants therefore actual expansion is lower than the potential expansion. Data from the 2013 RCP census shows that together, gastroenterology & hepatology are the medical specialties that have expanded the most in

2013 (figure2) and are now the second largest medical specialty (geriatric medicine is the largest).

Figure 2: Graph of expansion in consultant workforce by specialty (RCP census 2013-14)

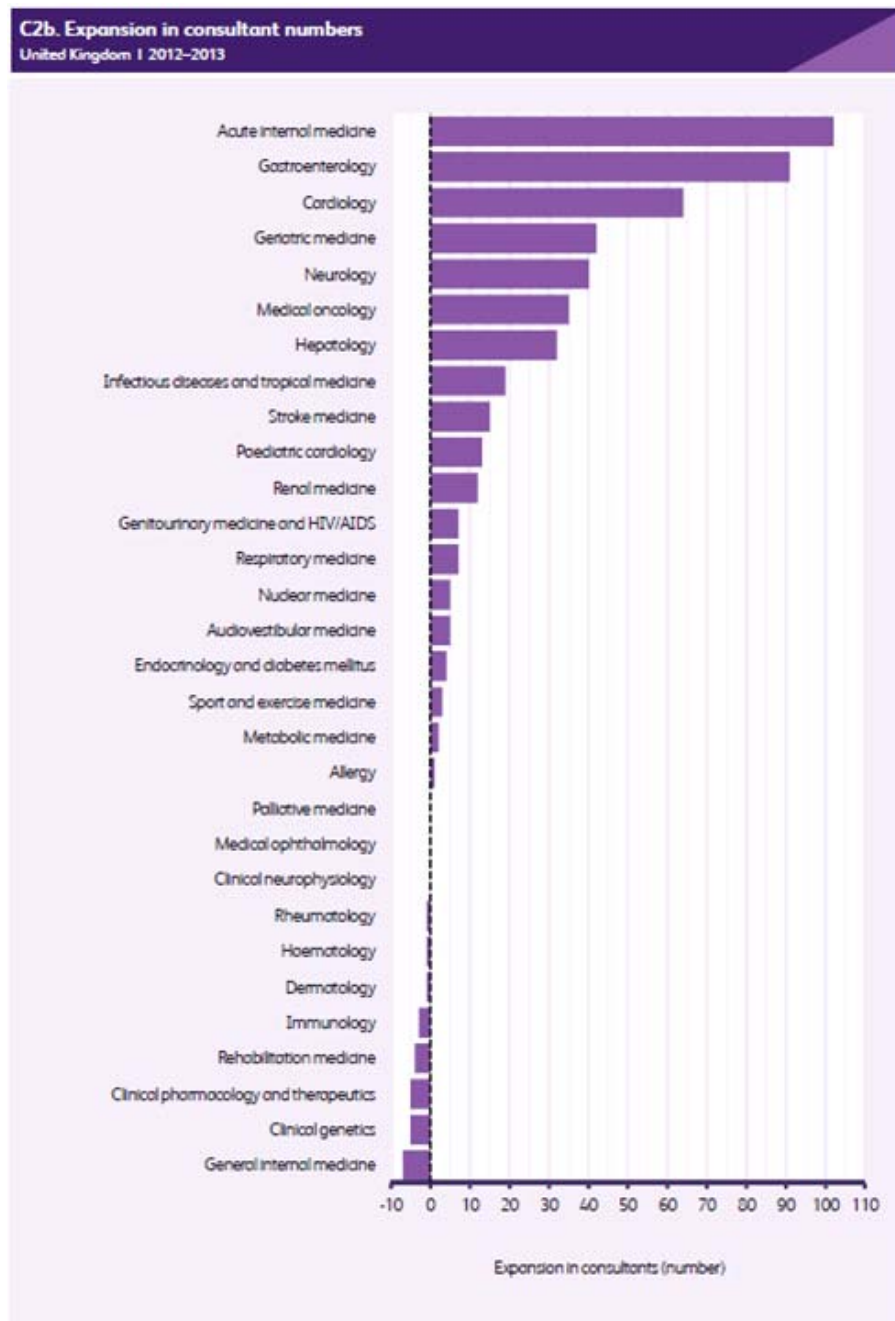
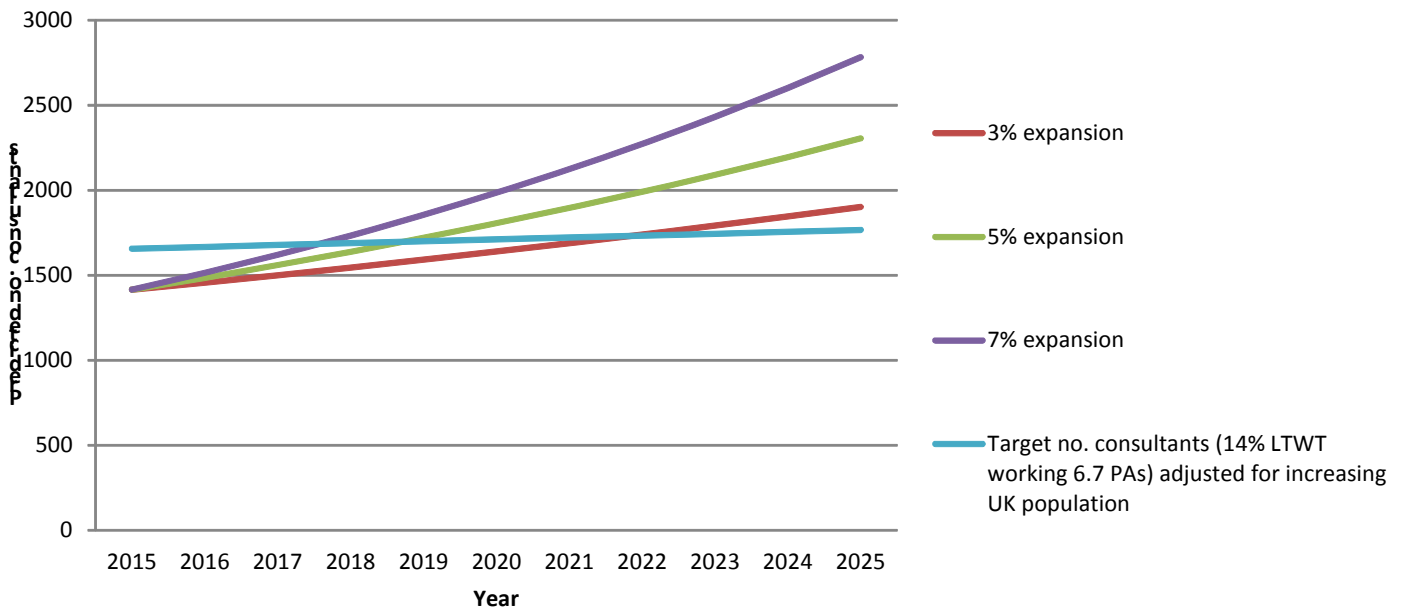


Figure 3: Graph of predicted WTE consultant expansion at 3%, 5% and 7%



The 2013 RCP document *Consultant Physicians Working for Patients* predicted that we need 6 whole-time equivalent (WTE) consultants in gastroenterology (with GIM) all working 11.5 PAs per week per 250,000 population (1 consultant per 41,667 population). For the 2011 UK population of 63,181,775 (office for national statistics (ONS) population census 2011) this is a total of 1,516 WTE, or an additional 102 WTE. With consultant expansion at 7% this would take 1 year to achieve, with consultant expansion at 5% 1-2 years, and with consultant expansion at 3% it would take 2-3 years to achieve (figure 3).

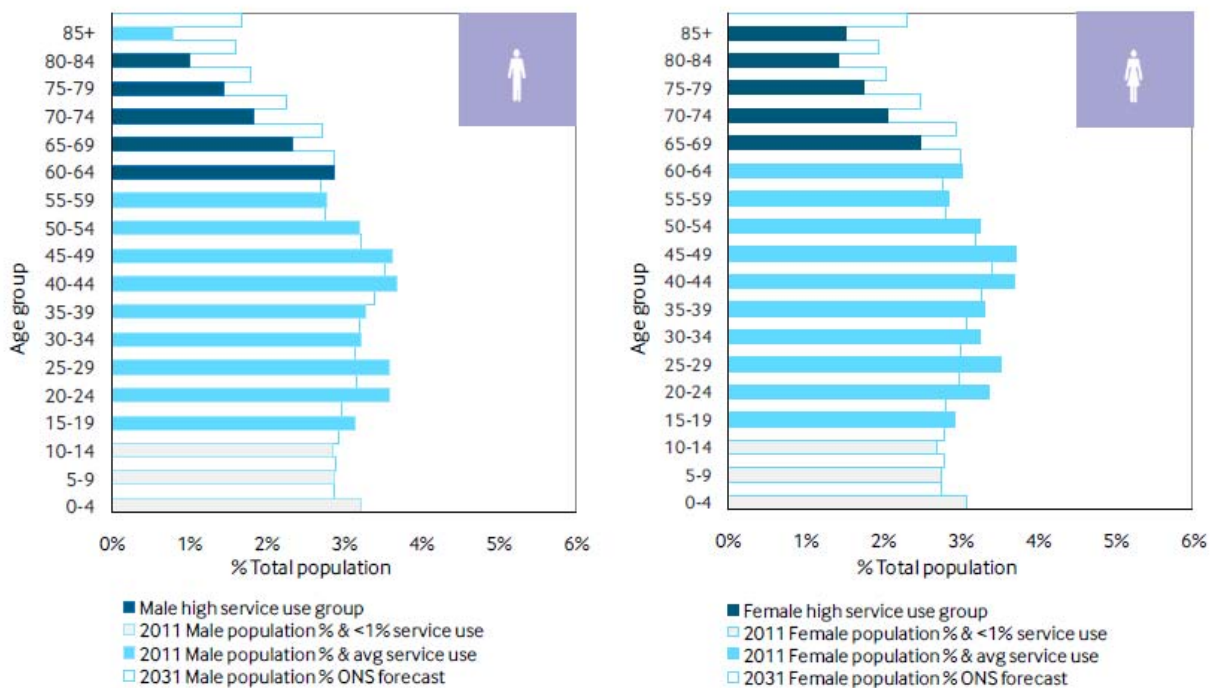
If we assume that the number of less than whole time (LTWT) consultants (anyone working <10PAs) will remain at 14%, and they will work 6.7 PAs on average, this gives a total of 1610 consultants (1 consultant per 39,243 population) or 196 more new consultants over and above retirement replacements. This would be achievable in 1-2 years if expansion is at 7%, 2-3 years if expansion is at 5% and 4-5 years if expansion is at 3% (figure 3).

If we assume that the number of LTWT consultants working 6.7 PAs on average increases to 30% (as the proportion of females and number of returning retired consultants increases) this would mean we would need a total of 1,718 consultants or 304 more. This would be achievable in 2-3 years if expansion is at 7%, 3-4 years if expansion is at 5% and 6-7 years if

expansion is at 3%.

The ONS predicts that the UK population will increase to 68.0 million by 2022 (1% expansion per year from 2011). This would require 1,632 WTEs (218 more) or 1,733 with 14% LTWT (319 more) or 1,849 with 30% LTWT (435 more). However, the elderly population is expected to grow by 3% per year and the elderly population is a high user of Gastroenterology services (figure 4).

Figure 4: 2031 population estimate and indication of age and gender of the 2011 population using gastroenterology (*Centre for Workforce intelligence medical specialty workforce factsheet gastroenterology Aug 2011*)



Source: HES Data provides the specialty specific age range that is applicable to the population using Gastroenterology (NHS IC, 2011b). Population statistics updated July 2008 (ONS, 2010).

Since 2011 there have been further drivers to expand gastroenterology services (including bowel scope, NICE recommendations for out of hours GI bleed rotas & 7 day services) which are not included in the RCP predicted figures. There is a push for this additional expansion now, but it has not been planned for, hence the inability to fill advertised consultant posts. There are more drivers for expansion around the corner: replacement of FOB by FIT testing in bowel cancer screening and 5 year forward view (DOH).

The RCP is undertaking a major overhaul of the document *Consultant Physicians Working with Patients* to create a new web-based resource which offers solutions to some of the challenges facing the healthcare system today by focusing on new ways of working and how they can be applied across different care settings, specialties and patient groups. The plan is for this resource - *Medical Care: A guide to planning and providing medical services for patients* to be launched in spring 2016.

The number of training posts is currently at a level that produces on average (over the last 5 years) an output of 99 CCT holders per year. This is because the average training time is 6.7 years rather than 5, there are some trainees that leave gastroenterology before CCT, it has not been possible to backfill all posts when NTN holders go out of programme leaving gaps in rotations (only 30 of 63 (48%) of LAT posts advertised in 2015 were filled), and not all LATs have gone on to be appointed to an NTN post. Even if LATs do go on to obtain an NTN, they may decide not to count their LAT post towards training. 99 CCTs per year is only sufficient to enable an average consultant expansion rate of 5.6% over the next 5 years once retirement posts have been replaced.

LAT appointments will cease in England from 1<sup>st</sup> January 2016. HEE have started that there is potential for Postgraduate Schools to increase NTN appointments within their existing funded establishment when there is evidence to justify an increased CCT output. This option is not likely to be applicable in London, but in other areas will allow enhanced training capacity in those areas of England which would benefit from increased output of trained doctors (areas with consultant recruitment difficulties). If the average training time for trainees on a 5 year programme is 6.7 years we should therefore be recruiting 1.34 NTNs for every clinical training post. There are currently 523 clinical training posts in the UK. This would therefore require 701 NTNs in total. The actual number would vary in each LETB according to the proportion of trainees going OOP, the number taking parental leave and working LTWT.

### **Gender**

On 30.09.15 1,153 (82%) of substantive gastroenterology consultants were male and 261 (18%) female. This is the same proportion of female gastroenterology consultants as 2014.

Across all medical specialties 33% consultants are female (RCP census 2013). Figure 5 illustrates the percentage of female consultants in different age ranges. Younger consultants are more likely to be female: 56% consultants younger than 35 years, 28% of 35-39 year olds and 10% of 55-59 year olds are female.

Within UK medical specialties, those now female-dominated are those with a lower GIM or out of hours commitment: palliative medicine, dermatology, clinical genetics and genitourinary medicine (RCP census 2013-14). The distribution of trainees suggests that this trend will continue.

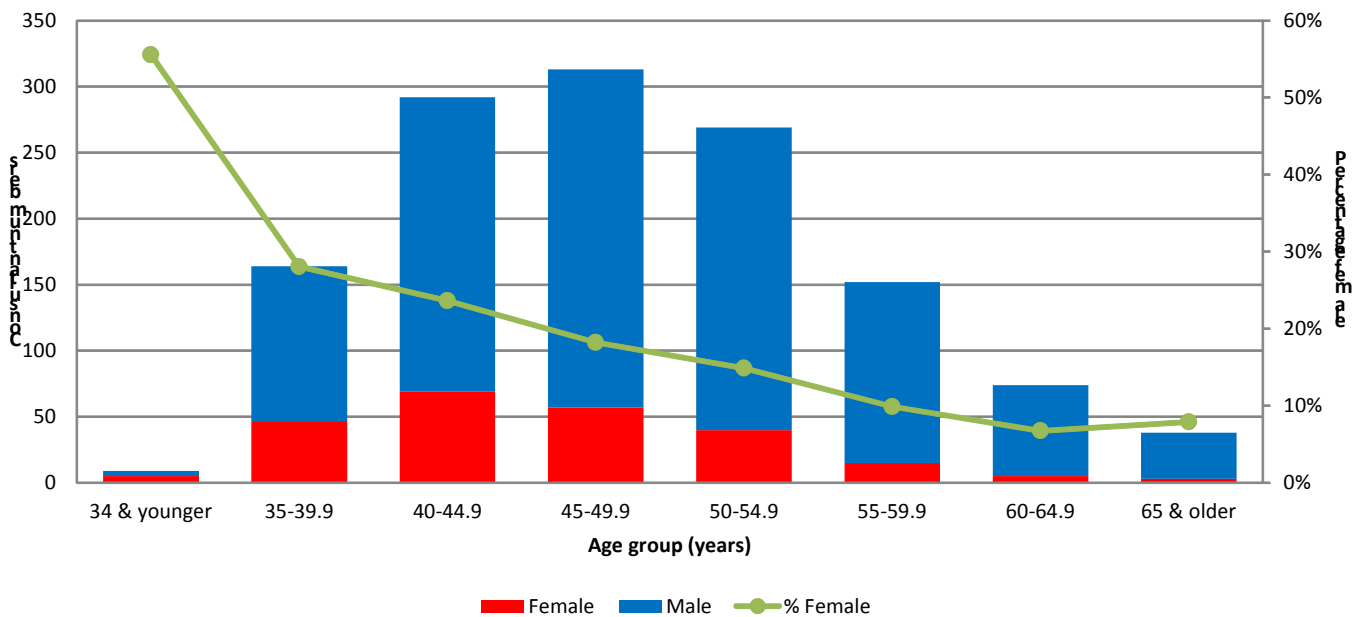
39% of trainee gastroenterologists are female (52% of medical higher specialty trainees are female (RCP census 2013-14). The 2015 GMC report "The state of medical education and practice in the UK" states that in 2014 females made up 55% of medical students and 57% of doctors in training. The RCP predicts that the number of female doctors will outnumber men sometime between 2017 and 2022.

### **Age**

Figures 5 and 6 show the age & gender distributions of UK substantive consultant gastroenterologists. The majority of the consultants are in the 45-49.9 year age group. The mean and median and mode age for males and females is 48 years. The mean age in females is 45 years (median 44 years, mode 37 years); the mean age in males is 49 years (median 48 years, mode 42 years).



Figure 5: Age/gender distribution of UK consultant gastroenterologists: age groups & percentage female



### Locum consultants

Locum consultants are employed to meet fluctuations in activity levels and to cover vacancies, sickness, maternity leave and sabbaticals of medical staff. On the 30.09.15 there were 42 locum gastroenterology consultants (41 in England, 1 in Northern Ireland, 0 in Scotland and in 0 Wales). This is a further increase of 10.5% compared to 2014 which is presumably because we cannot fill substantive consultant posts. 22 of these posts were filled by UK CCT holders, 1 by an Irish CCT holder, 1 by a previous substantive consultant trained in the UK & 18 with consultants trained outside the UK & Ireland. The duration of their post is known for 33 of the 42 locum consultants. These 33 individuals have been in post for 1 month to 8.7 years (average is 1.8 years). The UK trainees have been in post ranging from 1 month to 7 years (average 1.5 years).

Locum consultants trained abroad may not be familiar with the NHS and may not have a CCT in general internal medicine. They are more likely to have a complaint, have a complaint that is investigated & to receive a sanction or warning (GMC survey 2014). They are also very expensive for the employing Trust so the rise in the number of locum consultants is concerning.

## Retirements

### Actual retirements

Table 3: Number of substantive consultant posts vacated by calendar year

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>No. posts</b>	39	23	26	21	26	21	13	13	5	9

There have been 9 substantive consultants who have vacated their posts between 1<sup>st</sup> Oct 2014 and 30<sup>th</sup> Sept 2015. 8 have retired and left their consultant post, 1 has moved abroad. The mean retirement age has increased again to 64 years (it was 61 years in 2013 and 63 years in 2012 & 2014). The range of age at retirement was 53-68 years. This does not include 2 consultants who have taken their pension then returned to clinical work this year. Table 3 shows the number of posts vacated by calendar year for the last 10 years. The average has been 20 posts per year although this has dropped to 10 per year on average for the last 4 years.

On 30.09.2015 there were 24 substantive consultants (23 (96%) male and 1 (4%) female) who had retired then returned to work as consultants in a clinical post which is a 60% increase from 2014. Their age range is 58 to 74 years (mean 65 years). Information on PAs worked was available for 21 of the 24. 12 (57%) work less than 10 PAs and 9 (43%) work 10 or more PAs. This is an increase in the proportion working less than whole time compared to 2014 (36%).

### Predicted retirements

Table 4: Number of consultants at or reaching predicted retirement age

	Pre-2015	2015	2016	2017	2018	2019	2020
<b>England</b>	44	10	13	16	10	10	23
<b>Wales</b>	2	1	0	0	0	0	0
<b>Scotland</b>	2	2	1	2	1	0	5
<b>N Ireland</b>	0	0	1	0	0	0	1
<b>Total</b>	<b>48</b>	<b>13</b>	<b>15</b>	<b>18</b>	<b>11</b>	<b>10</b>	<b>29</b>

We have an estimated retirement year for 1315 of the 1414 substantive consultants (93%). Consultants have either stated when they plan to retire or if they have not stated their aim then it has been estimated as their state retirement age if their date of birth is known. On the 30.09.2015 there were 48 consultant gastroenterologists in the UK whose predicted retirement age was 2014 or earlier and who were still working (consultants who had taken their pension & returned to work have been excluded) and there were a further 13 who were predicted to retire in 2015 and are yet to retire (table 4). The average number of predicted retirements over the following 5 years (2016-2020) is 17 per year. There are 154 predicted retirements from 2021-2025 (31 per year), 204 from 2026 -2030 (41 per year) and 295 from 2031-2035 (59 per year). Figure 7 shows the number of predicted retirements per year and the percentage expansion in the number of substantive consultant gastroenterologists that would be achieved assuming that the CCT output remains static at 99 per year and assuming that the number of new jobs matched the number of new CCT holders minus the number of retirement posts.

Compulsory changes to the NHS pension scheme on 1st April 2015 linked usual retirement age (previously 60 for those in the 1995 scheme & 65 for those in the 2008 scheme) to State Pension age (increasing to 66-68 years depending on year of birth). Consultants within 11 years of retirement will have protection arrangements. In April 2026, when protection arrangements cease, the usual NHS retirement age will jump from 60 to 66 years overnight. This could result in a 6 year retirement vacuum leading to an excess of CCT holders over jobs. It has been proposed that in the Isle of Man the State Pension age should rise to 74 years for those born in 2011 or later.

Figure 6: Age/gender distribution of UK substantive consultant gastroenterologists: numbers

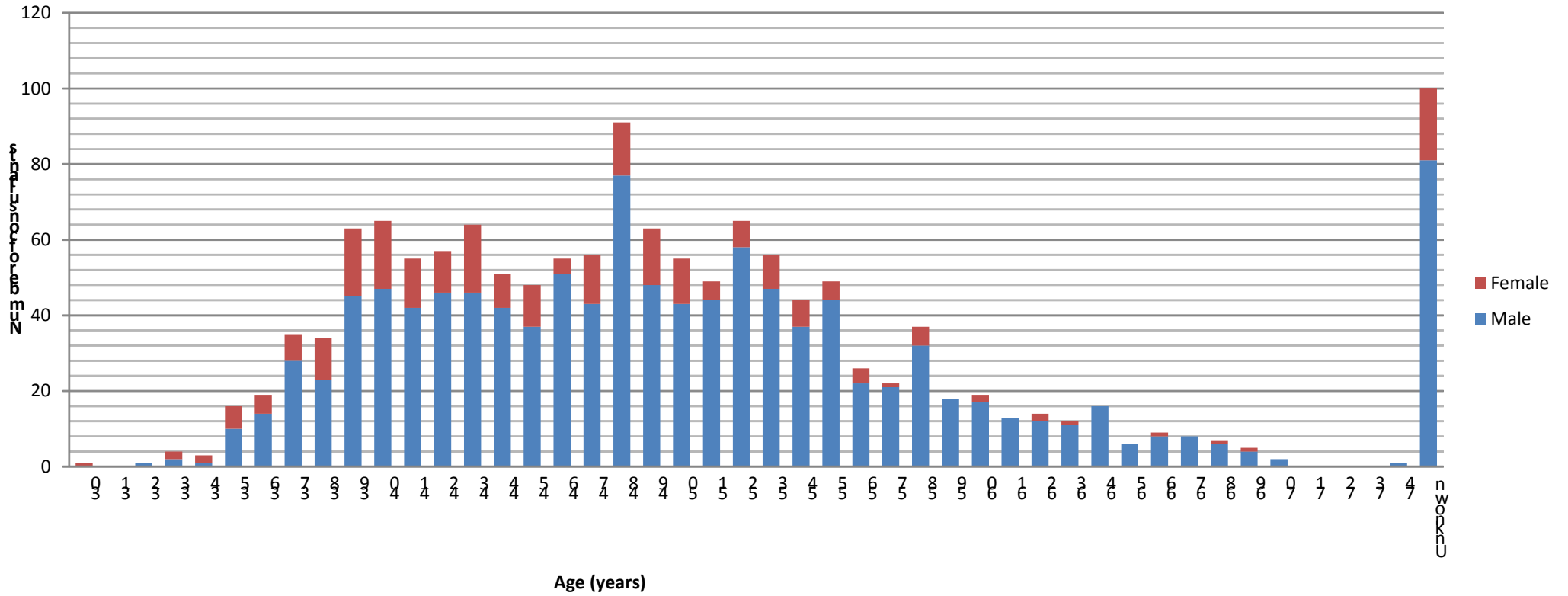
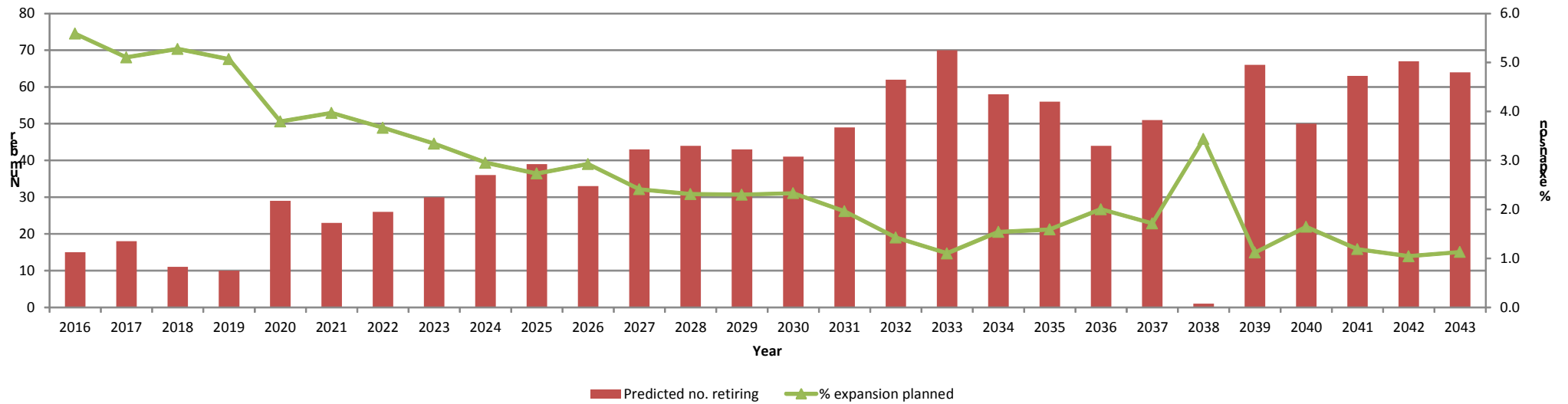


Figure 7: Predicted retirements of UK substantive consultant gastroenterologists and percentage expansion required to have jobs to match average CCT output over last 5 years



### **Sub-specialty, on call & 7 day services**

Information about specialty is known for 1413 of the 1414 consultants. 892 of 1413 (63%) consultant gastroenterologists have a job plan that includes general gastroenterology & general (internal) medicine. 390 (28%) just do gastroenterology with or without a sub-specialty interest (61 of these sub-specialise in hepatology) although will contribute to the unselected general medical take by seeing the gastroenterology patients which make up about 20-25% (coding data). There are 98 pure hepatologists, 5 hepatologists doing general (internal) medicine and one consultant in hepatobiliary (7% of total).

23 consultants (2%) are working within acute medicine and gastroenterology, the same percentage as 2014. There are two neurogastroenterologists, one pure endoscopist, and one intensive care gastroenterologist.

Figure 8 shows the RCP census data from 2014 for commitment to acute GIM of the 7 large medical specialties over time. The proportion of gastroenterologists doing acute GIM did appear to be falling from 2009 to 2013 however the proportion increased again to over 80% in 2014.

404 consultants (29%) indicated their sub-specialty interests (one or more sub-specialty interest could be chosen) (figure 9). The three most popular sub-specialty interests of consultants that answered the question were endoscopy, IBD and hepatology.

941 consultants (67%) answered the question about endoscopy on call rotas. 669 (71%) of those who answered this question have some sort of endoscopy on call rota, ranging from 1:1 to 1:52 on call frequency. 15 (2%) have an ad hoc/goodwill rota. 271 (29%) are not on call for endoscopy.

547 consultants (39%) answered the question about 7 day services. Of these, 299 (54%) are part of a 7 day service (an increase from 46% in 2014) working a 1:8 rota most commonly (range 1:1 to 1:30 weekends).

Figure 8: Commitment to acute GIM by RCP census year

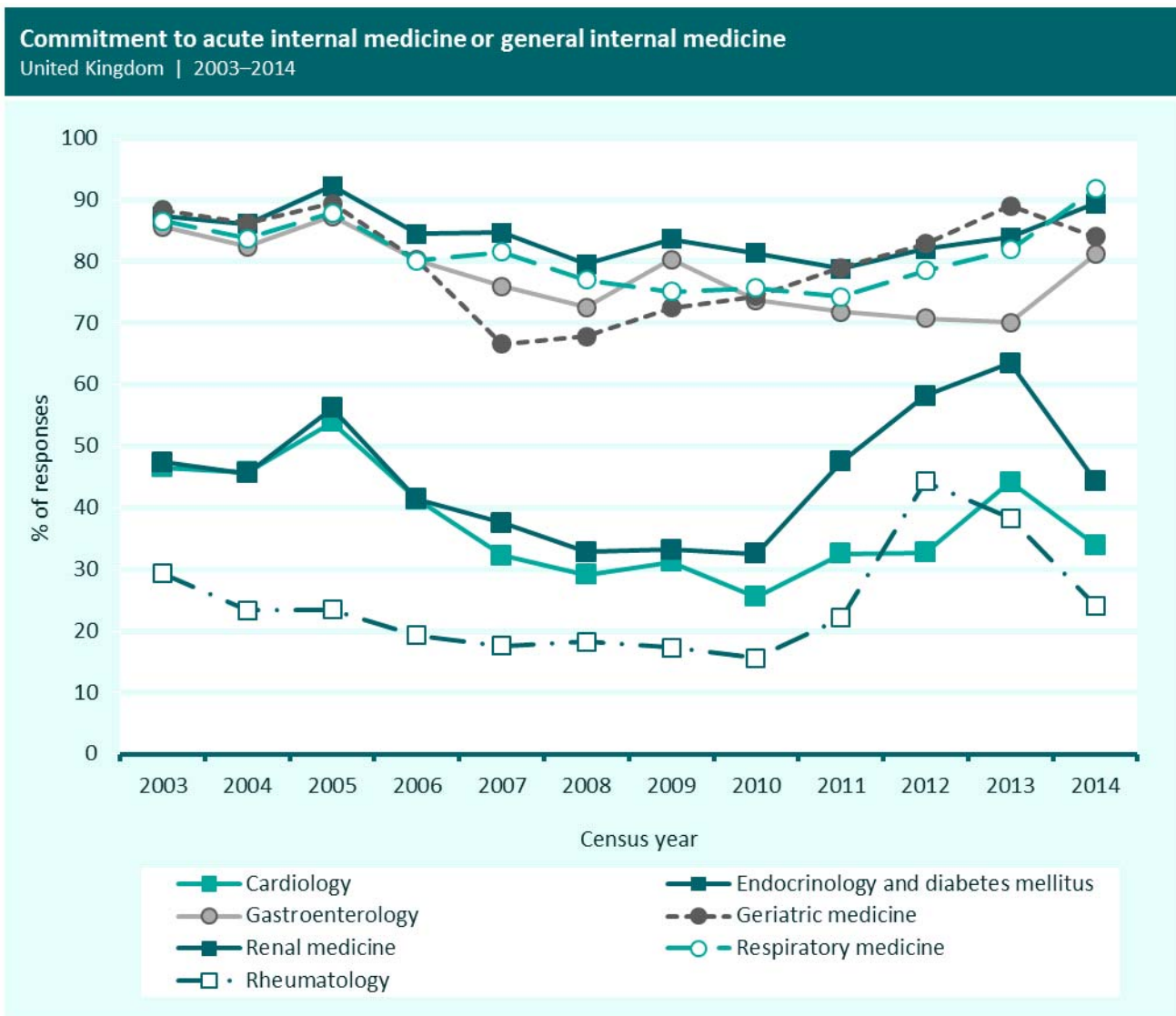
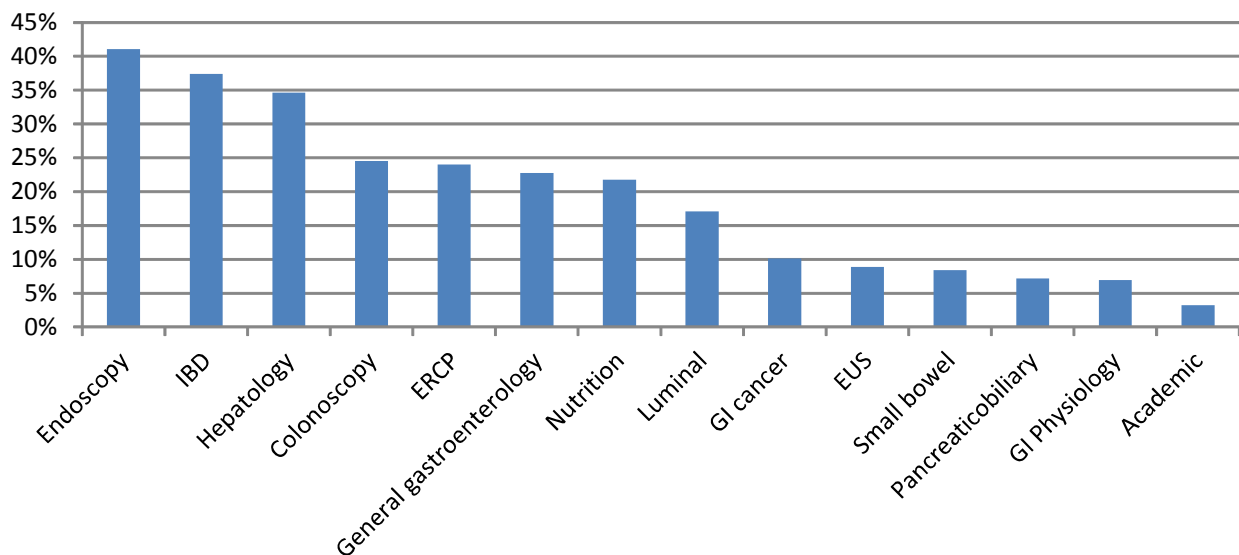


Figure 9: sub-specialty interests

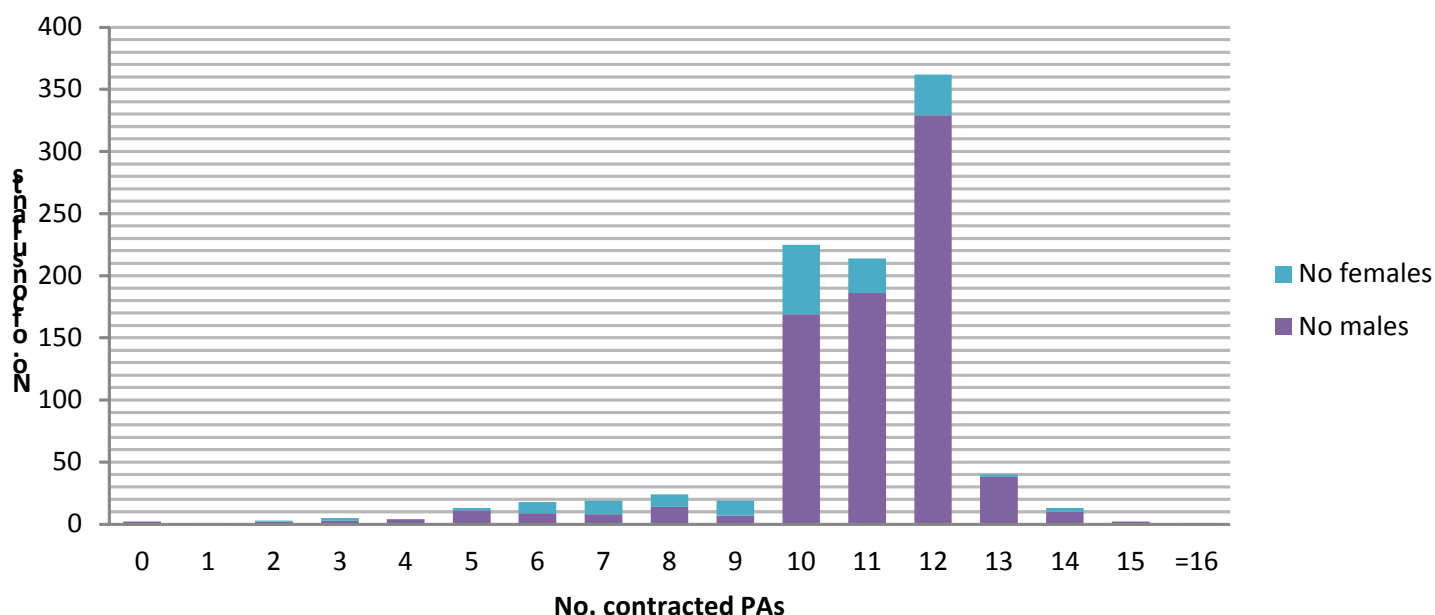


## Academics

Of the 991 consultants who answered the question, 113 (11%) described themselves as academics and 15 (13%) of these academics were female. 38 were professors, 5 associate professors, 40 senior lecturers, 5 lecturers and 6 readers, 2 clinical scientists, 1 associate dean, 1 clinical sub-dean, 1 senior clinical tutor, 1 senior clinical fellow, 1 GSK fellow, 1 MRC clinician scientist and 11 unknown. In addition there were 9 consultants who did not describe themselves as academic who were professors (3), honorary senior lecturers (4), senior lecturers (1) or clinical teachers (1).

## PAs, SPAs & private practice

Figure 10: Distribution of contracted total PAs



We have data on total contracted PAs per week from 965 of 1414 consultants (68%) shown in figure 10. Gastroenterology consultants are contracted for an average of 10.8 PAs (the same as 2014), median 11 PAs, mode 12 PAs. We have data on number of PAs actually worked per week from 418 of 1414 consultants (30%). Gastroenterology consultants work for an average of 11.9 PAs (1.1 PAs per week above contracted hours on average), median 12 PAs, mode 12 PAs.

980 of 1414 consultants told us whether they had SPAs in their contract (69%). The average was 1.35 SPAs (lower than the average in 2014 which was 2.1 SPAs) per consultant with a range of 0 to 8 SPAs (median 1.5 (down from 2 in 2014), mode 0).



297 of 1414 consultants (21%) answered the question about private practice. 174 (59% of those that answered) are seeing private patients.

### **Less than whole-time (LTWT) appointments**

Details of whole time (WT) or less than whole time (LTWT) contracts were available for 1059 of the 1414 consultants (75%). 182 of these consultants are female & 877 male. 150 (14%) are contracted LTWT (defined as less than 10 PAs per week). This compares to 18% of all consultants in all medical specialties (RCP census 2013-14). 56 (37%) of those contracted LTWT are female and 94 (63%) male. There continues to be a significant increase in males working LTWT (in 2014 45% of consultants working LTWT were female and 55% were male), some of whom have taken their pensions and returned to work LTWT, or have taken an increasing role in management, education, research or other national roles.

31% of females work LTWT (compared to 38.5% of female consultants in all medical specialties (RCP census 2013-14), 11% of males now work LTWT (compared to 5.5% of male consultants in all medical specialties (RCP census 2013-14) and 8% of males in 2014.

Details of total contracted PAs were available for 966 of the 1414 consultants (68%) comprising 171 females & 795 males. 111 are contracted for <10 PAs in total (11% of respondents for this question). The LTWT consultants work 6.7 PAs on average (median 7 PAs, range 0-9.5 PAs).

### **Distribution of gastroenterologists nationally: regional variations**

The 2013 RCP document *Consultant Physicians Working for Patients* predicted that we need 69 PAs per week or 6 whole-time equivalent (WTE) consultants in gastroenterology (with GIM) all working 11.5 PAs per week per 250,000 population. For the current UK population of 63,181,775 this is a total of 1,516 WTE. Therefore ideally 1 WTE consultant should serve a population of 41,677. Adjusted for 14% LTWT working we need 1610 consultants (1 consultant per 39,243 population). The average gastroenterologist in the UK currently serves a population of 44,557. In England the average is 44,699, in Wales there is one consultant per 47,867

population, in Northern Ireland one per 45,272 population and in Scotland one per 41,367.

Table 5: Distribution of substantive UK gastroenterology consultants by region

Region (previously SHA)	Pop (1,000s) for 2011	No. cons 30/9/14	No. cons 30/9/15	% change	N (%) female	Population served by 1 consultant	Recommended no. (14% LTWT)
North East	2596.900	78	78	0.0	15 (19)	33,294	66
London	8173.900	221	237	7.2	44 (19)	34,489	208
Scotland	5295.000	122	128	4.9	21 (16)	41,367	135
South West	5288.900	114	123	7.9	23 (19)	42,999	135
North West	7052.200	145	160	10.3	23 (14)	44,076	180
Northern Ireland	1810.863	39	40	2.6	5 (13)	45,272	46
West Midlands	5601.800	109	122	11.9	20 (16)	45,916	143
Wales	3063.456	59	64	8.5	13 (20)	47,867	78
Yorkshire & the Humber	5283.700	106	107	0.9	25 (23)	49,380	135
East of England	5847.000	114	118	3.5	23 (19)	49,551	149
East Midlands	4533.200	80	88	10.0	12 (14)	51,514	116
South East Coast / South Central	8634.800	139	149	7.2	37 (25)	57,952	220
<b>UK</b>	<b>63181.775</b>	<b>1326</b>	<b>1414</b>	<b>6.6</b>	<b>261 (18)</b>	<b>44,683</b>	<b>1610</b>

Population statistics 2011: Office for national statistics population census 2011 <http://www.ons.gov.uk/ons/rel/census/2011-census/population-and-household-estimates-for-the-united-kingdom/stb-2011-census--population-estimates-for-the-united-kingdom.html> (accessed Mar 2014).

There continues to be significant variation across England; South Coast/South Central having among the highest populations per gastroenterologist (57,952) and the North East the lowest (33,294) (table 5). Only the North East and London meet the RCP recommendation of number of gastroenterologists for the population served (adjusted for 14% working LTWT).

There is also regional variation in the percentage of female gastroenterology consultants. The average for the UK is 18% but it is 20% in Wales, 19% in England, 16% in Scotland and 13% in Northern Ireland. In England the percentage of female consultants varies from 14% in the East Midlands and the North West to 25% in

South East Coast/ South Central.

### **Single handed gastroenterologists**

There are 15 consultants working alone (a significant reduction compared to 30 in 2014). 14 are in England and 1 is in Northern Ireland. 1 is working on an island.

### **Non-consultant career grades (NCCGs), GPs & other consultants**

On the 30.09.2015 there were 319 in total (3.6% less than 2014), of which there were:

- 79 associate specialists (14 of these are surgical)
- 51 staff grades (13 of these are surgical)
- 44 GPs providing 0 to 3 endoscopy sessions per week (median 1 session).
- 25 hospital practitioners
- 12 acute physicians/consultants in acute medicine
- 23 consultants from other specialties (e.g. radiology, care of the elderly, cardiology) contributing to gastroenterology
- 18 clinical assistants
- 14 specialty doctors
- 31 trust doctors
- 10 surgical trainees
- 5 radiographers (1 consultant)
- 3 locum surgical consultants
- 1 non-UK trainee
- 1 honorary gastroenterology consultant
- 1 clinical scientist
- 1 unknown

The above doctors work 0-7 endoscopy sessions per week, median 1 session. Gender is known for 280; 121 (43%) are male and 59 (21%) female.

Compared to 2014, there has been a reduction in the number of staff grades and hospital practitioners but generally this is a very stable workforce.

### **Nurses and allied health professionals in gastroenterology**

On the 30.09.2015 there were 1123 known specialist nurses & allied health

professionals working in clinical gastroenterology within the UK, an increase of 60 (5.6%) compared to 2014. However, this number includes only 7 stoma nurses and 21 dietitians and is likely to be a significant underestimate of the true number. Gender is known for 1026; 942 (92%) are female and 84 (8%) male.

There are:

- 374 nurse practitioners
- 367 clinical nurse specialists
- 304 nurse endoscopists
- 30 nurse consultants
- 22 GI dietitians (1 consultant)
- 12 GI physiologists
- 8 GI pharmacists
- 2 non-medical endoscopists
- 4 unknown

There are 15 nurses who are currently in training. Each nurse may have one or more roles including:

- 287 nurse endoscopists / nurses performing  $\geq 1$  endoscopy session / week
- 206 IBD nurses
- 190 hepatology nurses (99 hepatology, 22 hepatitis/viral hepatitis/hepatitis C, 3 liver transplant, 2 hepatobiliary, 1 liver tumour, 1 HFE, 1 fatty liver disease, 1 paracentesis)
- 149 general gastroenterology/not specified
- 118 cancer nurses (71 UGI, 45 colorectal, 2 general)
- 58 nutrition nurses
- 30 alcohol nurses
- 18 bowel cancer screening nurses (an underestimate)
- 16 research nurses
- 14 stoma nurses (an underestimate)
- 11 capsule nurses
- 10 physiology nurses
- 7 PEG nurses
- 5 IBS nurses
- 3 anaemia nurses

- 2 dyspepsia nurses
- 2 coeliac nurses
- 2 family cancer nurses
- 2 pre-assessment nurses
- 1 neuroendocrine tumour nurse
- 1 bariatric nurse
- 1 HIV nurse
- 1 polyp follow up nurse
- 1 RIG nurse
- 1 breath test nurse
- 1 rectal bleeding nurse
- 1 allergy nurse

### **Surgeons in gastroenterology**

On 30.09.2015 there were 1333 GI surgeons in the UK contributing to service provision, a 1.7% increase from 2014. Gender is known for 1324. 100 (8%) are female and 1224 (92%) male. 499 perform 0.25-3 sessions (median 1) per week of OGD, 789 perform 0.2-4 (median 1) sessions per week of lower GI endoscopy and 72 perform 0.5-2 sessions (median 1) per week of ERCP.

### **Trainees in gastroenterology**

On 30.09.15 there were 850 gastroenterology trainees in the UK, an increase of 7 (0.8%) on 2014. Of these 768 are or were in the UK training scheme (718 NTN, 43 academic NTN, 1 CESR NTN, 4 VTNs 1 military NTN and 1 industry NTN) and 39 are LATs and may choose to count their LAT time towards training (807 in total).

- 712 specialist registrars with NTNs (711) or VTNs (1) in UK hospital training posts
- 39 LATs
- 36 clinical fellows (33 no NTN, 3 VTN) (15 unspecified, 15 research, 3 endoscopy, 2 teaching, 1 IBD)
- 22 locum consultants
- 15 UK post CCT fellows (5 endoscopy, 4 hepatology)
- 17 clinical lecturers
- 1 clinical assistant professor
- 2 locum appointment for service (LAS) (no NTN)
- 2 CMTs (no NTN)
- 2 unknown
- 1 acute trainee in a gastroenterology training post (acute medicine NTN)

1 pre-CCT trainee has been appointed to a consultant post and is waiting for their CCT date.

There are 121 CCT holders without a substantive consultant post a 14% increase since 2014. 22 are locum consultants, 17 are post CCT fellows, 82 are in clinical registrar posts (80 are StRs, 2 are doing hepatology ATPs). Of the registrars in clinical training posts 50 are in their 6 month grace period and 33 are > 6months post CCT (time expired).

There will be no change in the number of Gastroenterology NTN posts in 2016/17 but LAT posts were withdrawn on 1<sup>st</sup> Jan 2016 which may affect CCT output & could result in the loss of some trainees from Gastroenterology to their second choice & less competitive specialty.

Table 6: Distribution of trainees with a UK NTN by parent LETB/deanery (rather than current post) (30/09/15)

	<b>England</b>	<b>Wales</b>	<b>Scotland</b>	<b>N Ireland</b>	<b>UK</b>
Specialist Registrar/Clinical Lecturer	635	27	47	19	<b>730</b>
Out of programme	117	4	4	3	<b>128</b>
Visiting Registrar	1	0	0	0	<b>1</b>
LAT	35	1	3	0	<b>39</b>
Locum Consultant	22	0	0	0	<b>22</b>
Academic NTN	38	3	2	0	<b>43</b>
Post CCT fellow	15	0	0	0	<b>15</b>

Some trainees may be counted in more than one category if for example they have an academic NTN and are out of programme.

17% of trainees with a training number are currently out of programme a similar proportion to 2014.

Table 7: No. of LATs appointed by calendar year

	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>No. LATs</b>	55	58	57	64	59	45	65	58	59	30

The number of LATs appointed in 2015 has fallen to 30 which is well below the average number over the last 10 years of 55 (table 7). HEE reduced the number of LATs available for all medical specialties by 20% in 2015, but in fact we just did not have sufficient appointable candidates to fill available posts (9 LAT posts unfilled in recruitment round 1, 24 LAT posts offered in recruitment round 2 but none filled). LATs have now been abolished for all specialties the money saved to be diverted to GP training.

In addition there are CMTs, clinical fellows and LASs in clinical posts, but numbers are insufficient to cover, leaving an unknown number of gaps in the service (on the 2<sup>nd</sup> Sept 2013 there were 28 unfilled posts in the UK (TPD census 2013).

Table 8: Number of trainees in training and within 6 months of CCT date in different parts of the UK by year

	2006	2007	2008	2009	2010	2011	2012*	2013*	2014*	2015*
<b>England</b>	586	602	661	696	689	698	622	624	674	608
<b>Wales</b>	25	25	25	25	28	28	29	26	30	26
<b>Scotland</b>	40	44	53	56	55	48	47	45	42	45
<b>Northern Ireland</b>	16	15	19	18	18	16	16	12	12	19
<b>Total</b>	<b>667</b>	<b>686</b>	<b>759</b>	<b>795</b>	<b>790</b>	<b>790</b>	<b>714</b>	<b>707</b>	<b>758</b>	<b>698</b>
<b>% change</b>	<b>7.7</b>	<b>2.8</b>	<b>10.6</b>	<b>4.7</b>	<b>-0.1</b>	<b>0</b>	<b>-9.6</b>	<b>-1.0</b>	<b>7.2</b>	<b>-7.9</b>

\*The definition of trainees changed in 2012 to those training or within 6 months of CCT date. Prior to 2012 the total trainee population was counted accounting for the apparent 9.6% reduction in 2012.

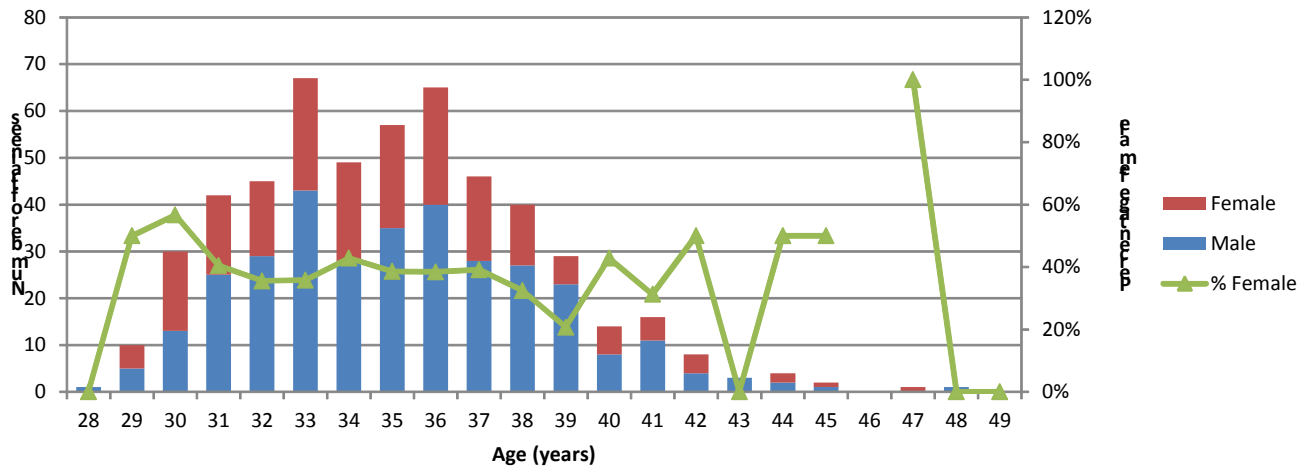
### Gender

328 of the 850 trainees (39%) are female and 522 (61%) are male. The proportion of female trainees continues to increase (37% in 2014) but is still significantly lower than the average percentage female for all medical specialties within the Royal College of Physicians: 52% (JRCPTB database 26<sup>th</sup> Aug 2014). 10 of the 43 trainees with academic NTN are female (23%). If the 15 trainees on parental leave, sick leave & career breaks are excluded from the 127 trainees out of program, 44 of the remaining 112 (39%) are female and 68 male (61%). 3 of the 44 females out of program (7%) work LTWT and 1 of the 68 males (1%).



## Age

Figure 11: Age/gender distribution of UK gastroenterology trainees

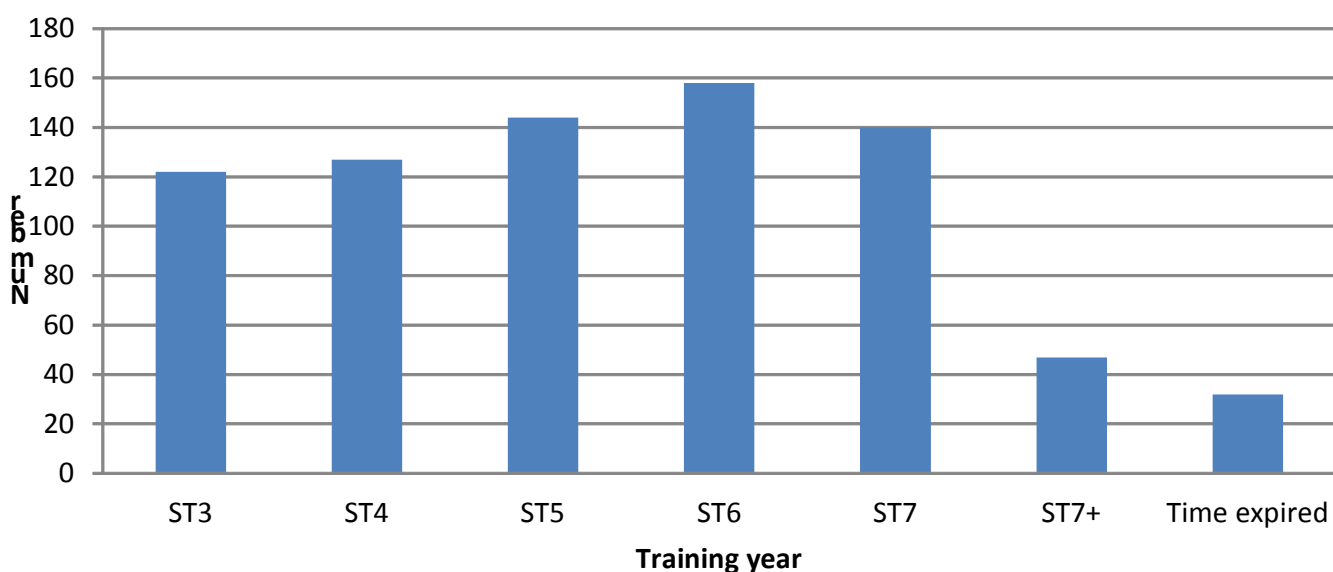


Age is known for 532 of the 850 UK gastroenterology trainees (63%; 329 males & 203 females). Figure 11 shows the age & gender distribution of these 532 trainees. The mean and median age for males and females is 35 years, the mode is 30 years. The mean age in females is 35 years (median 35 years, mode 33 years); the mean age in males is 35 years (median 35 years, mode 31 years).

## Year of training

Of the 770 trainees still in training the year of training is shown in figure 12 below. LATs have been counted as ST3 if they are in their first LAT year, ST4 if in their second LAT year and so on. The numbers are skewed towards more senior trainees as trainees often take time out of programme, go less than whole time or have their CCT date adjusted for other reasons at this stage in their careers prolonging the time spent at ST5-7 years and lengthening training time.

Figure 12: Number of trainees in a UK training post by training year (includes LATs)



ST7+ = within 6 months of CCT date

Time expired = >6 months after CCT date

### Less than whole time (LTWT) trainees

There are 45 LTWT trainees representing 5% of the total trainees which is the same as 2014 despite the higher proportion of female trainees compared to 2014. 32 LTWT trainees are in clinical training posts, 9 are out of programme (3 OOPR, 1 OOPE and 5 OOPC (parental leave)), 1 is doing a post-CCT fellowship, 1 is a clinical lecturer, and 2 are locum consultants. 2 LTWT trainees have an academic NTN. 39 (87%) of LTWT trainees are female and 6 (13%) male. 12% of female trainees work LTWT (in 2014 it was 13%) and 1% of male trainees. This compares to 9.8% of female trainees in all medical specialties working LTWT (RCP census 2013-14).

LTWT trainees usually work 60% (range 50-80%). Only two LTWT trainees have supernumerary funding.

The new junior doctor's contract from Aug 2016 states that there will be improved access to LTWT training.

### Parental Leave

64 trainees have taken parental leave within their training programme. 17 (27%) were male and 47 (73%) were female. The average duration of parental leave for males was 0.67 months (range 0.5 to 2 months) and for females 14.4 months (range

5-40 months).

## **Advanced Training Programme Posts (ATPs)**

### **National ATPs**

#### **Hepatology**

In 2016/17 there will be 14 English & 1 Scottish hepatology ATP posts. The 14 English posts were recruited nationally for the third time in Jan 2016. Scotland joined the national recruitment process for the first time this year. 24 candidates were interviewed, 23 were deemed appointable and all offers of posts were accepted by the trainees. 12 trainees will complete the hepatology ATP year before (11 trainees) or at the same time (1 trainee) as obtaining their gastroenterology & GIM CCT (i.e. within the training programme), 2 trainees have a CCT date before completion of the hepatology ATP post (although will complete the ATP within their 6 month grace period) and will therefore extend their training time.

There may be a second Scottish ATP post in the future if funding can be secured.

#### **Nutrition**

4 nutrition ATP posts were offered for 2016/17 (2 St Mark's/Addenbrookes, John Radcliffe Hospital, Hope Hospital). 3 candidates were interviewed in Jan 2016 and deemed appointable. Another candidate is due to be interviewed on 1<sup>st</sup> Mar 2016 therefore the outcomes & CCT dates are not yet known. There does not appear to be the demand from trainees to create more posts.

### **Local ATPs**

There are 4 trainees doing an endoscopy ATP (one as an OOPT). 3 trainees are doing an IBD ATP within their parent LETB (2 are post CCT).

### **Relationship of trainees in clinical posts according to population**

There is a variation across the UK for the number of trainees in a clinical post per population (figure 13). As with consultants there is a higher than average density of trainees to population in London (1:42,572) and the North East (1:72,136). The West Midlands also has a higher than average density of trainees to population (1:83,609). Wales, Yorkshire and the Humber and the South West have the lowest density:

Wales 1:127,648, Yorkshire and the Humber 1: 135,479 and the South West 1:142,943.

Fig 13: Population served by 1 trainee in a clinical post

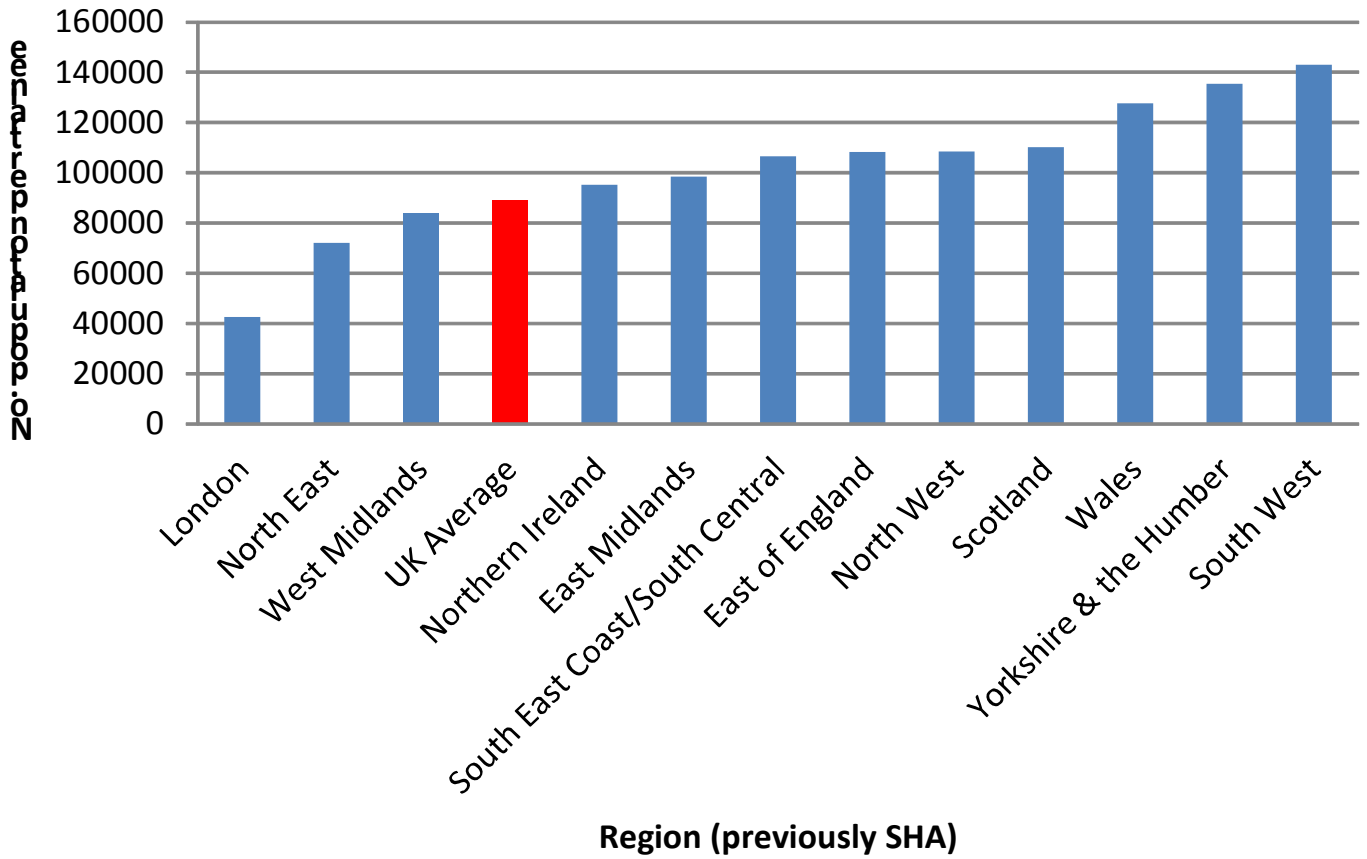
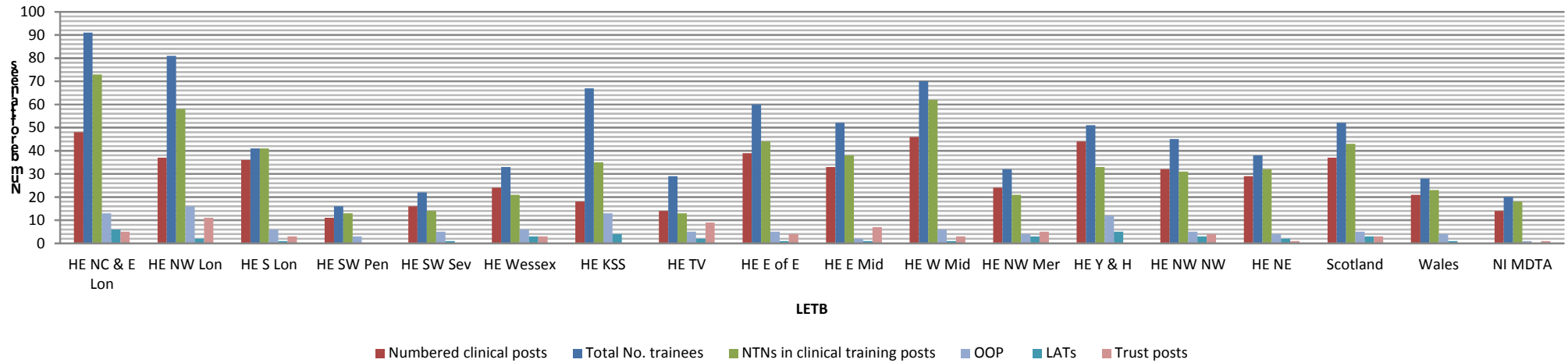


Fig 14: Trainees in each LETB



Numbered clinical posts - refers to the number of clinical posts in each LETB declared in the TPD survey in 2013.

Total number of trainees - categorises trainees according to the LETB of their NTN.

NTNs in clinical training posts - categorises trainees according to the LETB of their current post.

Trust posts - includes CMTs, LASSs, clinical fellows, post CCT fellows and an acute trainee.

2 trainees are unknown & not shown.

Fig 15: Total number of consultants and trainees in each LETB

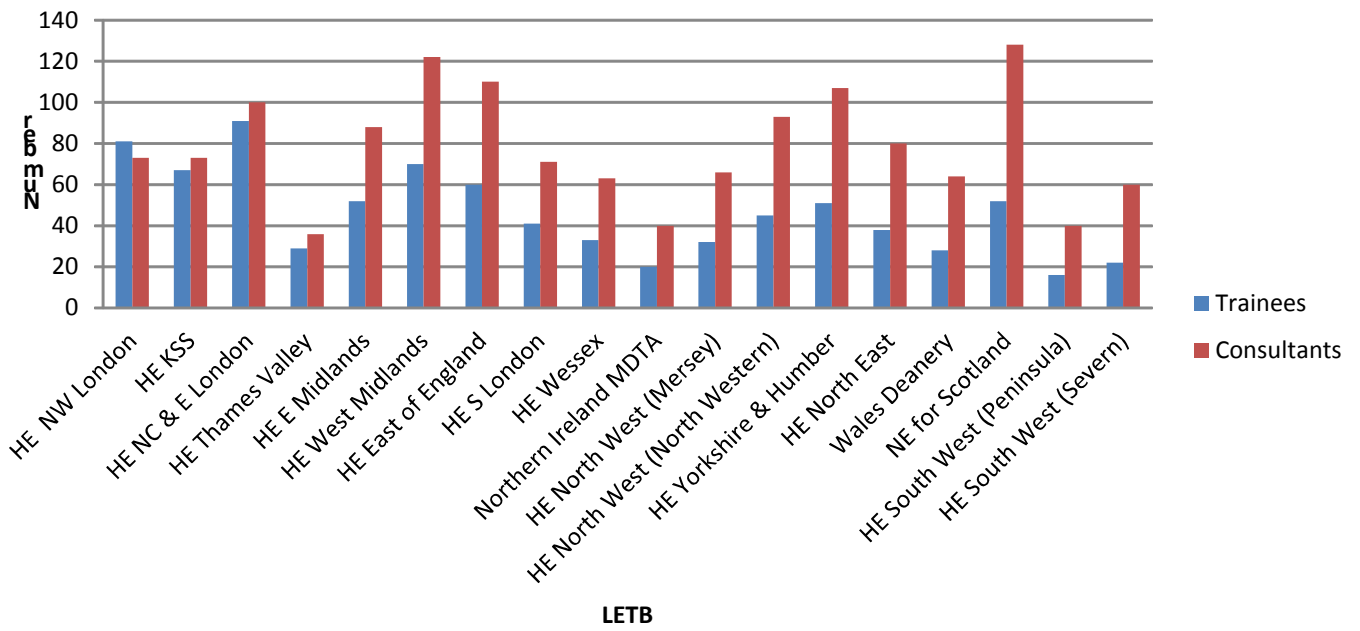
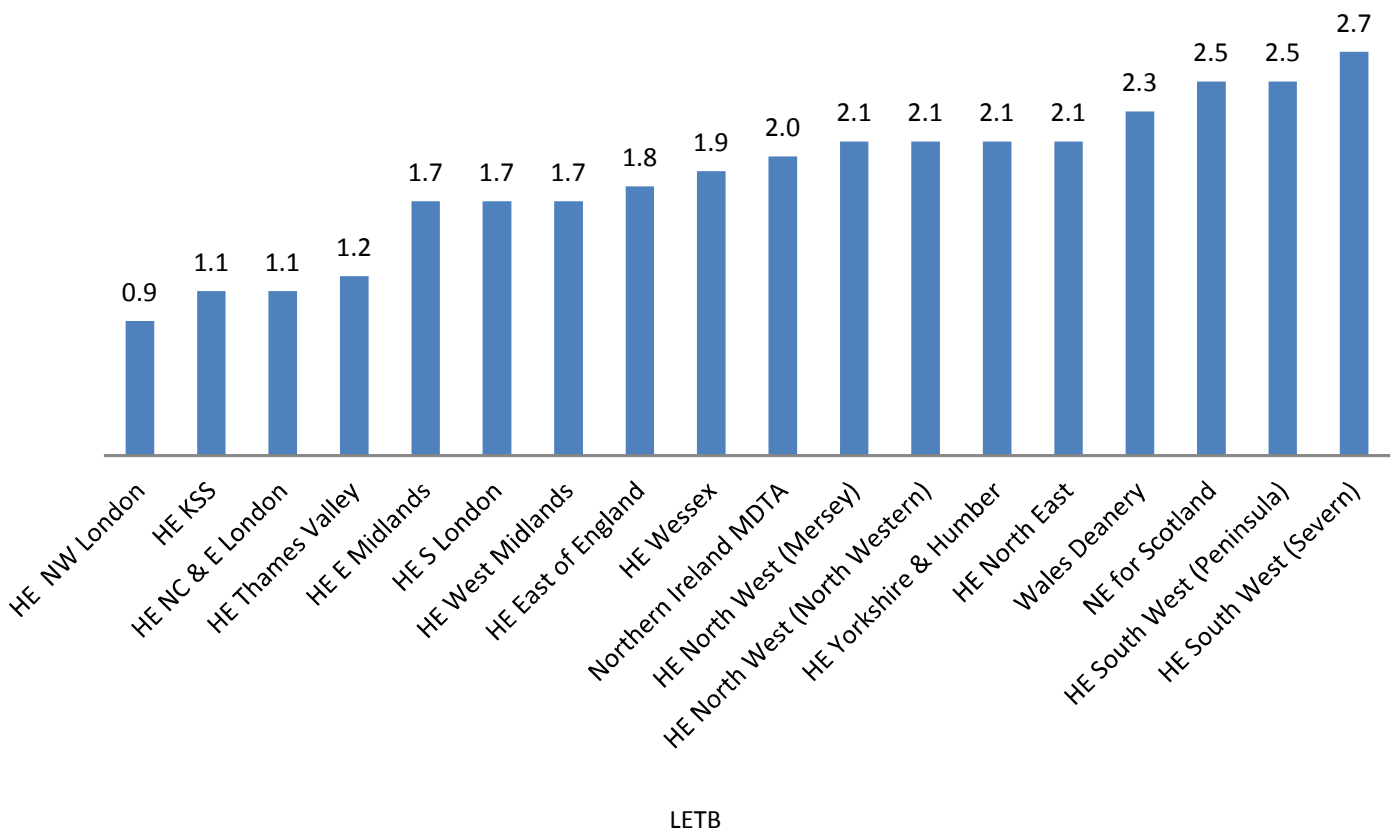


Fig 16: Consultant: trainee ratio according to LETB



## Predicted CCT dates

Fig 17: Graph of predicted number of CCTs per year

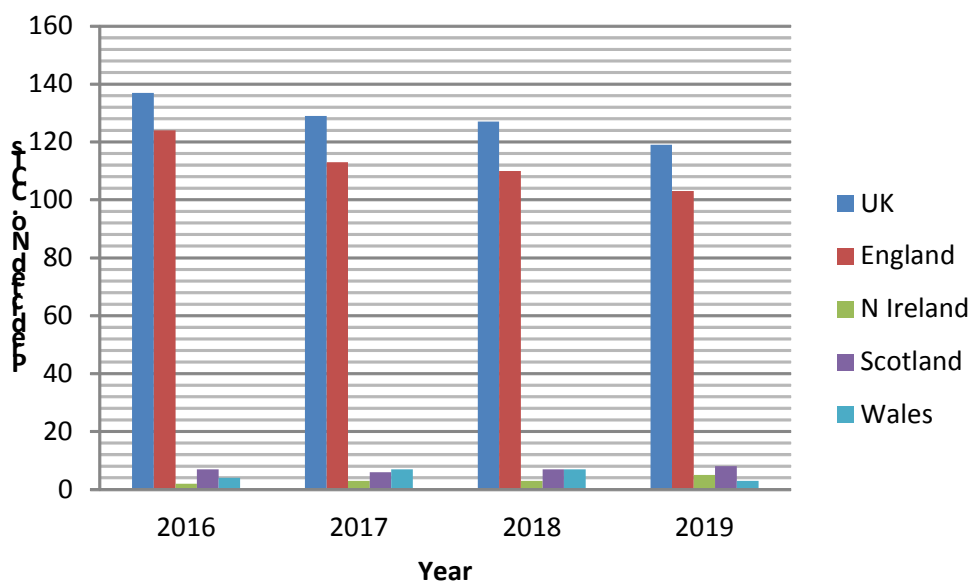
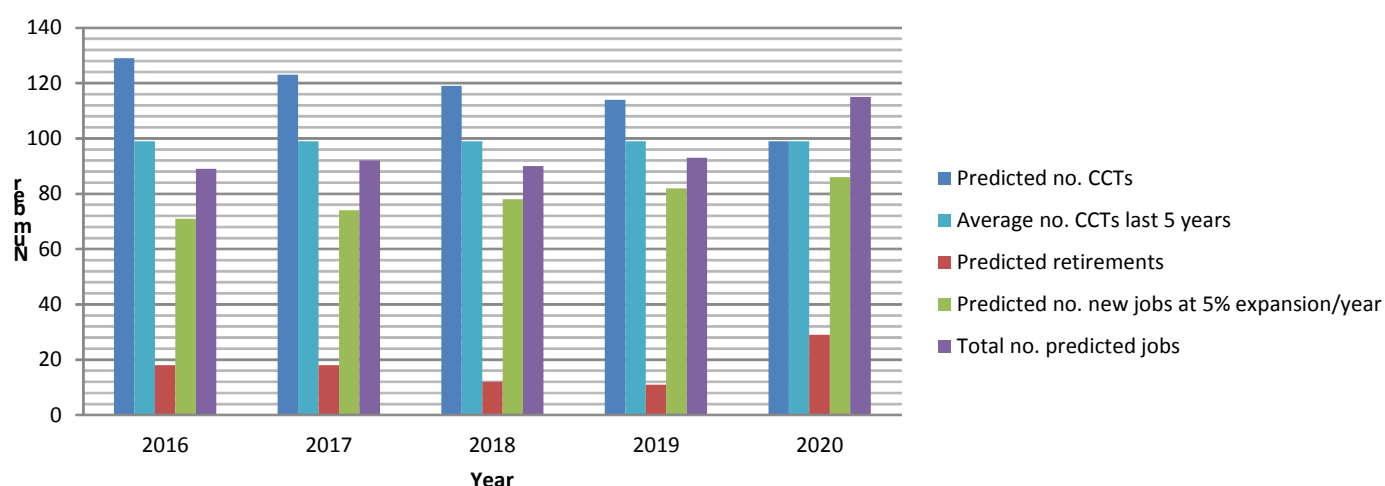


Figure 17 shows the predicted number of CCTs each year in the UK. This takes no account of “CCT drift” – trainees delaying their CCT by a few months or years by taking time out of program, having parental leave, going LTWT, having training time extended at ARCP or choosing not to count LATs. This is likely to extend at least 14% of predicted CCTs in the last 18 months of training when a final CCT date is set at PYA. The actual number of CCTs awarded has averaged 99 per year for the last 5 years.

The number of predicted retirements is on average 17 per year for the next 5 years (figure 18). As the average CCT output has been 99 per year for the last 5 years this leaves 82 CCT holders in excess of retirements, per year. At least 2 of these (2%) will probably leave the UK workforce permanently leaving 80 per year who will require a new consultant post in the UK. 5% expansion would result in 71 new consultant posts next year. 5.6% consultant expansion next year would produce 80 new posts.

Fig 18: Planned retirements and CCT dates



### Actual CCTs awarded

Table 9: No CCTs awarded by calendar year

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>No. CCTs</b>	55	61	71	89	88	74	69	98	104	152

152 UK gastroenterology CCTs were awarded in the 2015 calendar year (table 9). I have data on mean training time for 151. In total, the mean UK training time was 6.7 years the same as 2014 (range 5 to 11.7 years; median 6 years). 55 (36%) trained in 5 years, 21 (14%) in 6 years and 96 (64%) in 6 years or more. Of those that took more than 5 years to train the average additional training time was 2.6 years (range 0.5 to 6.7 years). Training time does not take into account absences due to for example paternity leave and has not been adjusted for LTWT training. The average training time in females was 6.9 years (range 5.0 to 11.7 years, median 6.2 years); the average training time in males was 6.6 years (range 5.0 to 10.7 years, median 6.1 years).

Of these 152 CCT holders, 84 (55%) are still working in UK training posts, 40 (26%) have been appointed to substantive NHS consultant posts, 10 (7%) are in research posts, 5 (3%) are in UK clinical fellowships, 4 (3%) to locum consultant posts, 3 (2%) have moved abroad, 3 (2%) are out of programme (1 of these 3 is abroad), 1 (1%) is acting up as a consultant, 1 (1%) has resigned and 1 (1%) has been suspended.



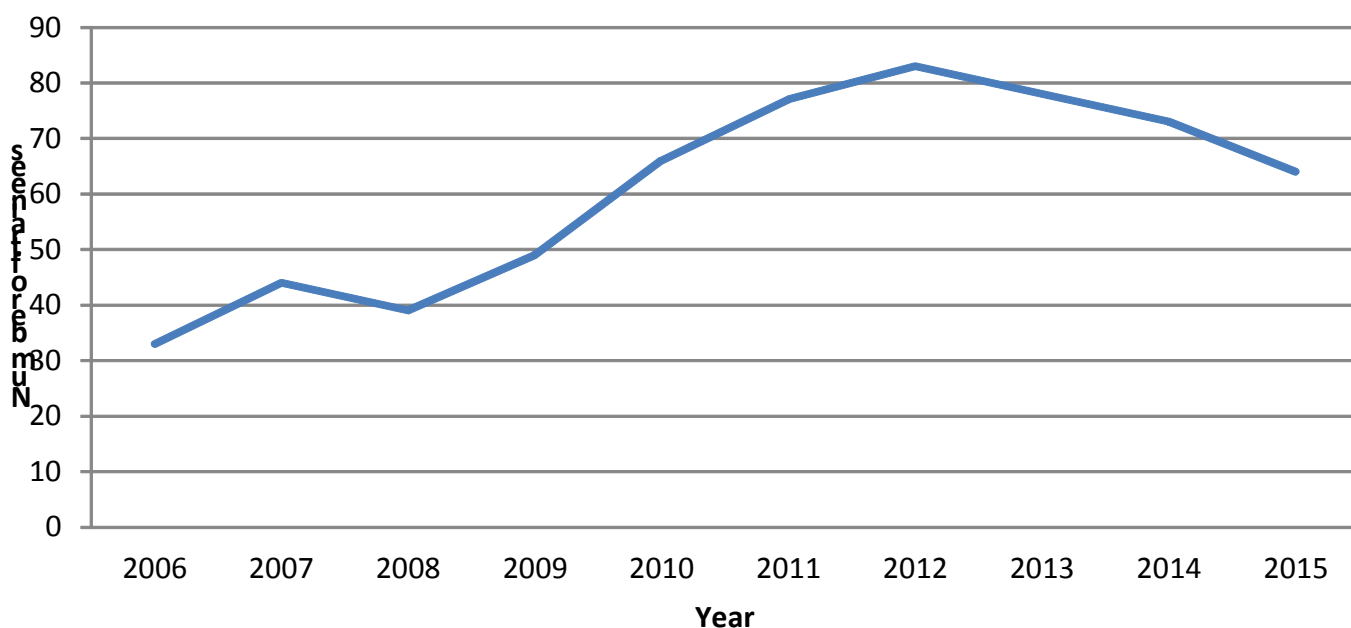
The average number of CCTs awarded has been 86 per year for the last 10 years. The average of 73 per year from 2006 to 2010 increased to 99 per year from 2011 to 2015.

On 30.09.2015 there were 121 CCT holders without a substantive consultant gastroenterology post.

### Outcome of trainees >6 months post CCT

Table 10 & figure 19: Number of trainees >6 months post-CCT without a substantive consultant post by calendar year

	2006	2007	2008	2009	2010	2011	2012	2013	2014	30.09.15
<b>No. &gt;6/12 post CCT</b>	33	44	39	49	66	77	83	78	73	64



On 30.09.15 64 trainees were more than 6 months post CCT and unappointed to a substantive consultant post, a 12% reduction from the end of 2014.

Of these:

- 33 (52%) are in specialist registrar posts (1 is a VTN)
- 18 (28%) are in locum consultant posts
- 11 (17%) are in clinical post CCT fellowships
- 1 (2%) is in post a CCT research fellowship
- 1 (2%) is in a clinical lecturer post

Anecdotal evidence suggests that some CCT holders are preferring locum posts to substantive appointments as the remuneration is significantly higher (c£3600 per day).

### Post CCT fellowships

Table 11: Number of trainees in post-CCT fellowships by year

	2009	2010	2011	2012	2013	2014	2015
<b>No. trainees in a post CCT fellowship</b>	0	4	7	2	7	24	17

Post CCT fellows first appeared in the workforce figures in 2010. There was a dramatic increase in the number of trainees undertaking a fellowship post CCT in 2014 but the number has reduced by 29% in 2015 (table 11). The number may increase again in the next year few years with the abolition of LATS in England as it will be more difficult for trainees to take time out of programme to gain sub-specialty experience.

### Career aims of trainees

282 of 850 trainees answered questions regarding career aims (33%).

Of 204 trainees that answered, 73 (36%) want to be a consultant in a district general hospital (DGH), 84 (41%) want to be a consultant in a teaching hospital (TH), 46 (23%) would work in either a DGH or TH and 1 (0.5%) did not know.

268 trainees answered questions regarding one or more sub-specialty interests that they wish to pursue. 21 (8%) want to be a general gastroenterologist without a sub-specialty interest. 41 (15%) want to sub-specialise in hepatology (20 of these pure hepatology only). The following want to be a general gastroenterologist with a sub-specialty interest in: IBD 75 (28%), hepatology 76 (28%), endoscopy 78 (29%), ERCP 63 (24%) bowel cancer screening 35 (13%) and nutrition 29 (11%). 28 (10%) are planning to obtain a consultant post abroad, 2 others (1%) plan to work in the UK but outside the NHS.

## **Recruitment**

### **Core Medical Trainees (CMTs)**

In the first round of medical ST3 recruitment in 2015 there were 285 posts that were unfilled (21%). This is because approximately 15% of CMT trainees choose to go into non-medical specialties such as general practice or clinical oncology and a proportion also choose to spend some time working abroad. The number of UK CMT/ACCS posts advertised in round 1 has changed from 1555 in 2013 to 1549 in 2015 and 1572 in 2016 (23 more posts in 2016 compared to 2015) with overall CMT fill rates of 100% in 2013 and 97% in 2015. However the number of training posts in general practice increased from 3609 in 2015 to 3790 in 2016 (181 more posts). Unless the number of foundation trainees increases (either by increasing the number of medical students or by opening up foundation training to non-UK medical graduates) it is unlikely that the number of CMT posts will be increased further, as this might affect recruitment to general practice which is being seen as a priority. According to the Guardian newspaper who have obtained leaked figures from HEE in a report on Wed 10<sup>th</sup> Feb 2016, applications of F2 doctors who have applied to start training as a specialist in a branch of medicine in Aug 2016 (assumed to mean CMT) are falling (17,106 in 2013, 16,308 in 2015 and 15,855 in 2016, 7.3% lower than in 2013). The number of F2 doctors applying to become GPs has fallen even more sharply (6,447 in 2013 and 4,863 in 2016 a 25% reduction). The dispute with the Government over junior doctor contracts and the imposition of the new contract on junior doctors in England from Aug 2016 may result in more doctors applying to the devolved nations, leaving the NHS to go abroad, taking non-training posts or leaving medicine altogether, at least in the short term. This is very concerning and could affect ST3 and consultant recruitment in the future.

### **2015 ST3 recruitment**

A total of 1337 medical ST3 posts were offered in round 1 2015 recruitment. The total number of ST3 posts to be offered in 2016 round 1 is not yet known.

The new junior doctor's contract from Aug 2016 gives a pay premium in addition to nodal pay values for academia, emergency medicine, general practice, oral &

maxillofacial surgery, and psychiatry training programmes. This may have an effect on recruitment to other specialties in 2017.

In the 2015 ST3 recruitment round 1 97 NTN and 39 LATs were advertised in Gastroenterology, a total of 136 training posts (table 12). 100% of the NTNs were filled but only 77% of the LATS (overall fill rate was 127/136 posts (93%)). This compares to fill rates for all medical specialties of 85% of NTN posts, 54% of LAT posts & 79% of posts overall. The specialties that filled 100% of training posts were audiovestibular medicine, haematology and medical ophthalmology (none of which dual train with GIM).

ST3 recruitment round 1 resulted in 115 new trainees starting gastroenterology training (90 NTNs and 25 LATs). The difference in appointments and new trainees reflects the fact that some existing gastroenterology LATs will be appointed to an NTN post or a second (or third) LAT post. If this is within the LETB that they are a LAT then this means that this LETB will require another LAT to fill clinical posts but are unlikely to appoint (resulting in gaps). If the LAT moves LETBs for their NTN this will leave the LETB they are leaving with the need to appoint an additional LAT.

In the 2015 ST3 recruitment round 2 26 NTNs and 24 LATs were advertised in Gastroenterology, a total of 50 training posts. Some of these posts will have been unfilled posts from R1 and some will have been new posts. 100% of the NTNs were filled but none of the LATS (overall fill rate was 26/50 posts (52%)). This compares to fill rates for all medical specialties of 52% of NTN posts, 2% of LAT posts & 38% of posts overall. Allergy and dermatology were the only medical specialties to fill 100% of training posts in R2.

Table 12: 2015 ST3 recruitment for gastroenterology by deanery/LETB

LETB/Deanery	Round 1			Round 2		
	NTNs	LATs	Total	NTNs	LATs	Total
HE East Midlands	6/6 (100%)	1/2 (50%)	<b>7/8 (88%)</b>	4/4 (100%)	0/3 (0%)	<b>4/7 (57%)</b>
HE East of England	6/6 (100%)	0/0 (N/A)	<b>6/6 (100%)</b>	3/3 (100%)	0/2 (0%)	<b>3/5 (60%)</b>
HE Kent, Surrey & Sussex	6/6 (100%)	3/5 (60%)	<b>9/11 (82%)</b>	2/2 (100%)	0/1 (0%)	<b>3/3 (67%)</b>
HE North East	4/4 (100%)	2/2 (100%)	<b>6/6 (100%)</b>	0/0 (N/A)	0/0 (N/A)	0/0 (N/A)
HE NW Mersey	3/3 (100%)	3/4 (75%)	<b>6/7 (86%)</b>	1/1 (100%)	0/1 (0%)	<b>1/2 (50%)</b>
HE NW North Western	4/4 (100%)	3/3 (100%)	<b>7/7 (100%)</b>	2/2 (100%)	0/1 (0%)	<b>2/3 (67%)</b>
HE SW Peninsula	3/3 (100%)	0/0 (N/A)	<b>3/3 (100%)</b>	2/2 (100%)	0/0 (N/A)	<b>2/2 (100%)</b>
HE SW Severn	5/5 (100%)	1/1 (100%)	<b>6/6 (100%)</b>	1/1 (100%)	0/1 (0%)	<b>1/2 (50%)</b>
HE Thames Valley	1/1 (100%)	2/3 (67%)	<b>3/4 (75%)</b>	0/0 (N/A)	0/0 (N/A)	0/0 (N/A)
HE Wessex	3/3 (100%)	3/3 (100%)	<b>6/6 (100%)</b>	0/0 (N/A)	0/2 (0%)	<b>0/2 (0%)</b>
HE West Midlands	9/9 (100%)	0/0 (N/A)	<b>9/9 (100%)</b>	4/4 (100%)	0/0 (N/A)	<b>4/4 (100%)</b>
HE Yorkshire & Humber	5/5 (100%)	2/4 (50%)	<b>7/9 (78%)</b>	2/2 (100%)	0/7 (0%)	<b>2/9 (22%)</b>
London recruitment	24/24 (100%)	7/7 (100%)	<b>31/31 (100%)</b>	5/5 (100%)	0/2 (0%)	<b>5/7 (71%)</b>
Scotland	13/13 (100%)	2/2 (100%)	<b>15/15 (100%)</b>	0/0 (N/A)	0/0 (N/A)	0/0 (N/A)
Wales	2/2 (100%)	1/3 (33%)	<b>3/5 (60%)</b>	0/0 (N/A)	0/4 (0%)	<b>0/4 (0%)</b>
Northern Ireland	3/3 (100%)	0/0 (N/A)	<b>3/3 (100%)</b>	0/0 (N/A)	0/0 (N/A)	0/0 (N/A)
<b>Total</b>	<b>97/97 (100%)</b>	<b>30/39 (77%)</b>	<b>127/136 (93%)</b>	<b>26/26 (100%)</b>	<b>0/24 (0%)</b>	<b>26/50 (52%)</b>

Table 13: The “NTN weave”

Deanery/LETB	No. clinical training posts (CTP)	Actual no. of NTN	No OOP	NTNs - OOP	CTP x 1.34 (NTN weave)	NTN weave - actual no. NTN
HE East Midlands	33	45	2	43	44	-1
HE East of England	39	53	5	48	52	-1
*HE Kent, Surrey & Sussex	18	63	13	50	24	-39
HE North East	29	35	4	31	39	4
HE NW Mersey	24	25	4	21	32	7
HE NW North Western	32	38	5	33	43	5
HE SW Peninsula	11	16	3	13	15	-1
HE SW Severn	16	20	5	15	21	1
HE Thames Valley	14	18	5	13	19	1
HE Wessex	24	28	6	22	32	4
HE West Midlands	46	65	6	59	59	-6
HE Yorkshire & Humber	44	45	12	33	59	14
*HE London S	36	37	6	31	48	11
HE London NW	37	69	16	53	50	-19
HE London NC & E	48	79	13	66	64	-15
Scotland	37	46	5	41	50	4
Wales	21	27	4	23	28	7
Northern Ireland	14	19	1	18	19	0
<b>Total</b>	<b>523</b>	<b>728</b>	<b>115</b>	<b>613</b>	<b>701</b>	<b>-27</b>

*\*A large proportion of KSS trainees have clinical posts in London and other regions (mainly London south).*

Table 13 looks at the number of numbered clinical training posts, the number of NTN in a deanery/LETB & the number of these trainees out of program (OOP). Where the number of NTN minus the number OOP equals or exceeds the number of clinical training posts the Deanery is already “weaving” NTN to cover OOP (this appears to be all deaneries/LETBs to a greater or lesser extent). Where the number of NTN minus the number OOP is less than the number of clinical training posts the deanery/LETB is attempting to backfill OOP with LATs and will be prone gaps in the rotation unless the number of NTN are increased, especially when LATS are withdrawn in 2015/16 (Mersey, Severn, Thames Valley, Wessex, Yorkshire & Humber).

## **Consultants**

### **Advertisements**

There were 158 substantive gastroenterology or hepatology consultant jobs advertised between 1<sup>st</sup> Oct 2014 & 30<sup>th</sup> Sep 2015 (144 in England, 6 in Scotland, 2 in Northern Ireland and 6 in Wales) (figure 20). The three regions with the largest number of posts were East of England, West Midlands and North Western. 83 (53%) were new posts, 17 (11%) replacement posts and 58 (37%) were unclassified. 72 (46%) posts have definitely been filled, 33 (21%) are definitely unfilled, the remaining 53 (34%) are either waiting for the closing date and/or interview or the outcome is unknown. 30 of these 86 posts (35%) have been advertised more than once. Therefore of the 105 posts where the outcome is known the fill rate is 72 (69%) and 33 are unfilled (31%).

Figure 21 shows the type of jobs advertised. 97 of the 158 advertised posts (61%) were after a pure gastroenterologist, 26 (16%) a physician & gastroenterologist, 14 (9%) a hepatologist, 1 (1%) an acute physician with an interest in gastroenterology. A sub-specialty interest was specified in 33 job adverts (figure 21) (some specified more than 1 sub-specialty) – hepatology in 13, endoscopy in 9, ERCP in 4, luminal in 2, nutrition in 1, IBD in 1, viral hepatitis in 1, hepatobiliary in 1, pancreas in 1, pancreaticobiliary in 1 and intestinal failure & intestinal transplantation in 1.

Figure 20: Number of substantive consultant advertisements by LETB/deanery 1st Oct 2014-30<sup>th</sup> Sep 2015

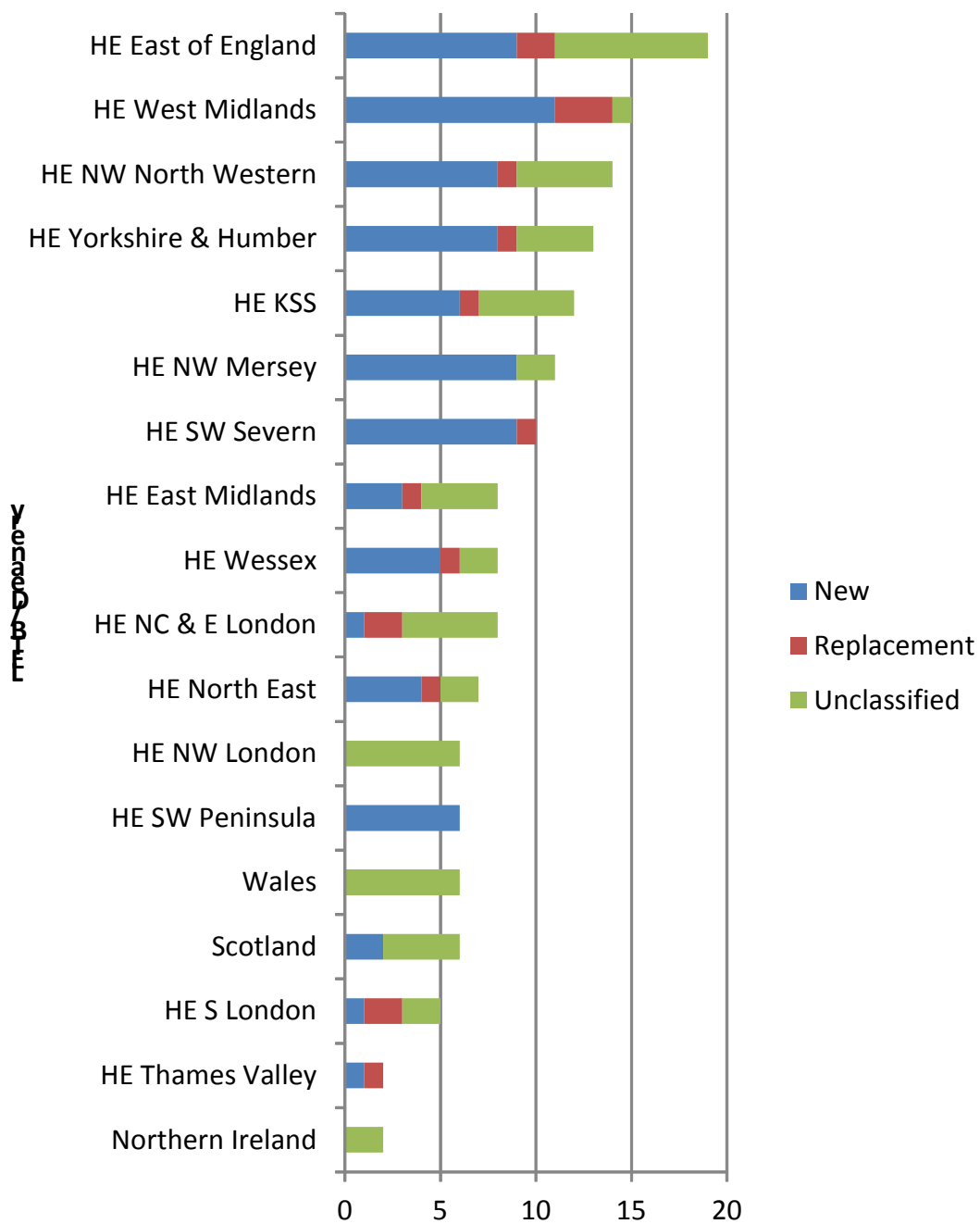




Figure 21: Type of consultant posts advertised

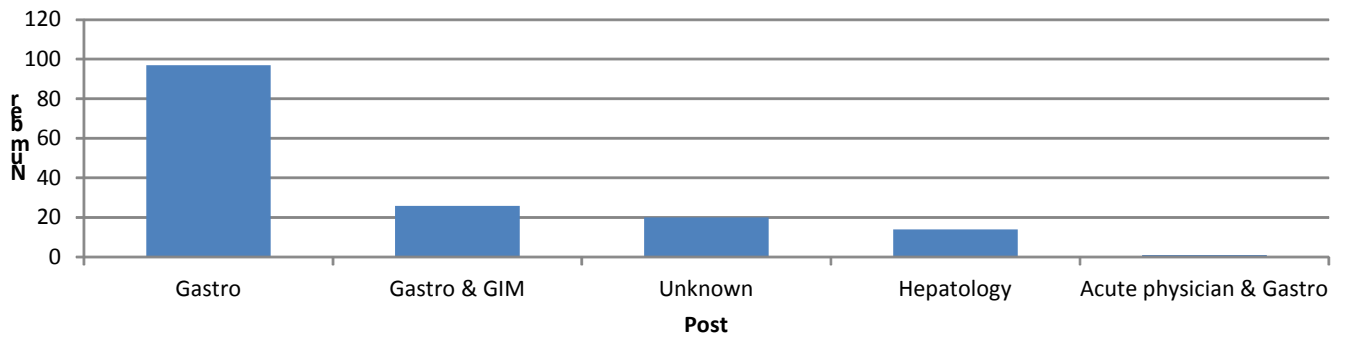
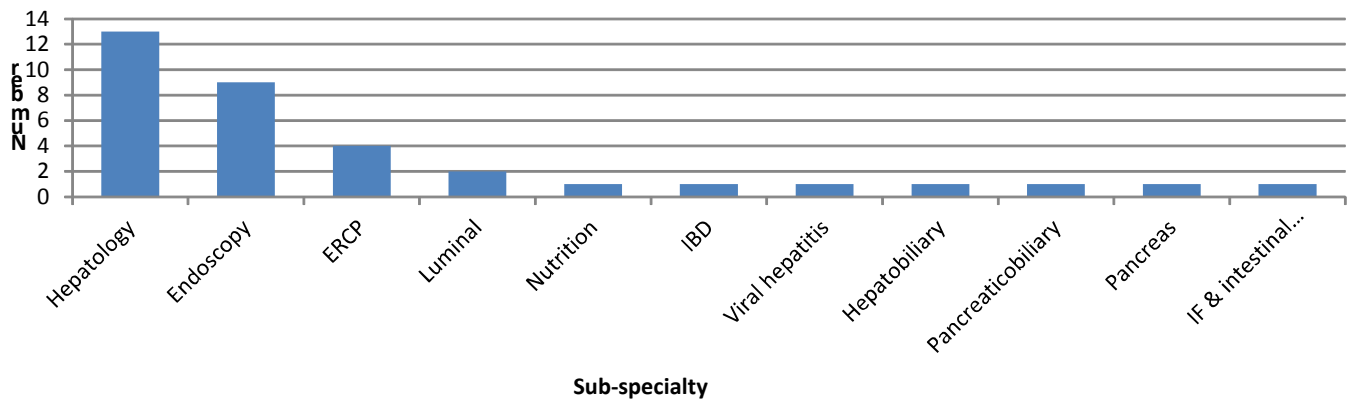


Figure 22: Sub-specialty interest specified in consultant posts advertised

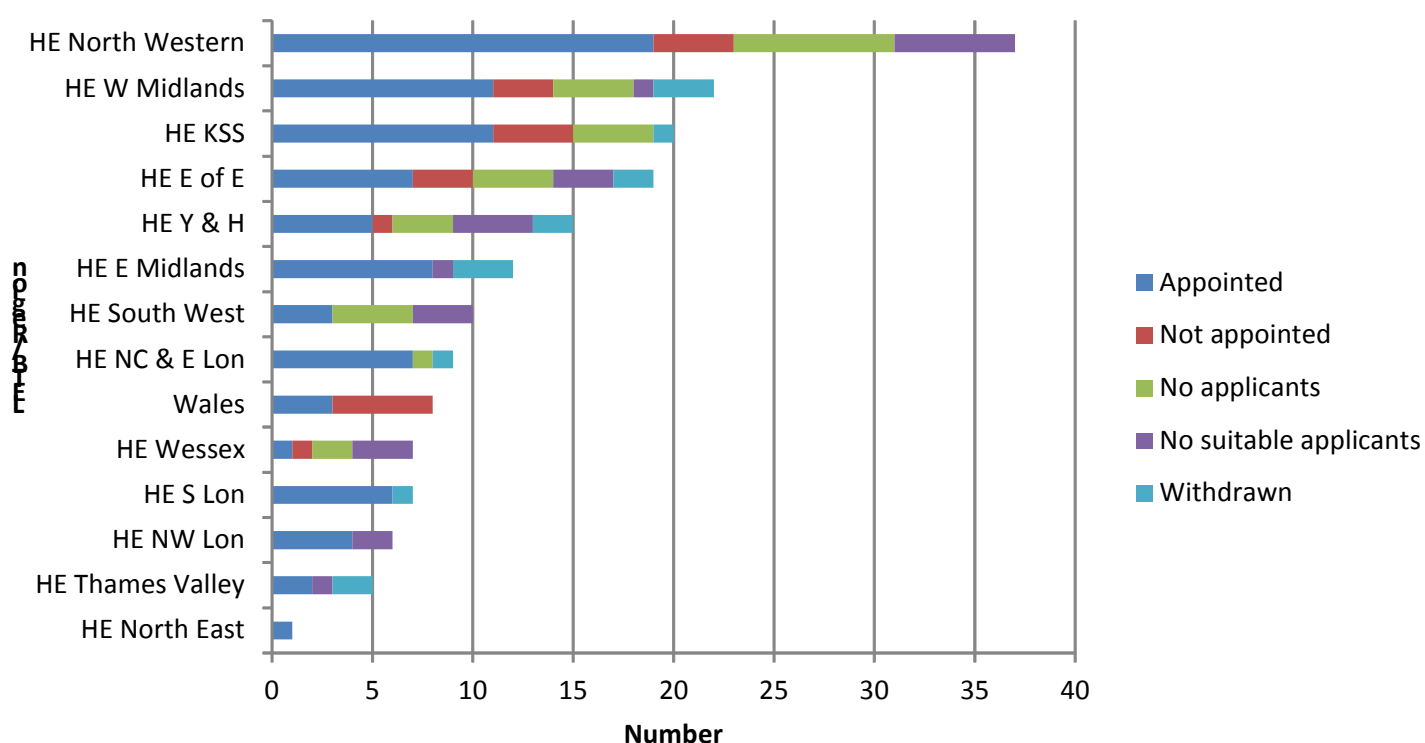


## Appointments

Table 14: Outcome of substantive gastroenterology & hepatology consultant appointment advisory committees (AACs) by LETB Oct 2014- Sep 2015 AAC data

LETB / deanery	No. appointments attempted	Appointed N (%)	Not appointed	No applicants	No suitable applicants	Withdrawn	Total no. unfilled
Scotland							
Northern Ireland							
Wales	8	3 (38%)	5 (63%)	0 (0%)	0 (0%)	0 (0%)	5 (63%)
HE North East	1	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
HE North Western	37	19 (51%)	4 (11%)	8 (22%)	6 (16%)	0 (0%)	18 (49%)
HE Y & H	15	5 (33%)	1 (7%)	3 (20%)	4 (27%)	2 (13%)	10 (67%)
HE E Midlands	12	8 (67%)	0 (0%)	0 (0%)	1 (8%)	3 (25%)	4 (33%)
HE W Midlands	22	11 (50%)	3 (14%)	4 (18%)	1 (5%)	3 (14%)	11 (50%)
HE E of E	19	7 (37%)	3 (16%)	4 (21%)	3 (16%)	2 (11%)	12 (63%)
HE NW Lon	6	4 (67%)	0 (0%)	0 (0%)	2 (33%)	0 (0%)	2 (33%)
HE NC & E Lon	9	7 (78%)	0 (0%)	1 (11%)	0 (0%)	1 (11%)	2 (22%)
HE S Lon	7	6 (86%)	0 (0%)	0 (0%)	0 (0%)	1 (14%)	1 (14%)
HE KSS	20	11 (55%)	4 (20%)	4 (20%)	0 (0%)	1 (5%)	9 (45%)
HE Thames Valley	5	2 (40%)	0 (0%)	0 (0%)	1 (20%)	2 (40%)	3 (60%)
HE Wessex	7	1 (14%)	1 (14%)	2 (29%)	3 (43%)	0 (0%)	6 (86%)
HE South West	10	3 (30%)	0 (0%)	4 (40%)	3 (30%)	0 (0%)	7 (70%)
<b>Total</b>	<b>178</b>	<b>88 (49%)</b>	<b>21 (12%)</b>	<b>30 (17%)</b>	<b>24 (14%)</b>	<b>15 (8%)</b>	<b>90 (51%)</b>

Figure 23: Outcome of substantive gastroenterology & hepatology consultant AACs by LETB or region Oct 2014- Sep 2015 AAC data (does not include Scotland or Northern Ireland)



We have data from the RCP Appointments Advisory Committee (AAC) from Oct 2014 to Sep 2015 for 178 attempted appointments in gastroenterology & hepatology combined (table 14 & figure 23). Of these posts 88 (49%) were filled but 90 (51%) were unfilled. There were no applicants for 30 appointments (17%) and no suitable applicants for 24 appointments (14%). No appointments were made in 21 cases (12%). The largest number of attempted appointments was made by North Western, West Midlands and KSS. The largest number of unfilled posts was in North Western, East of England and the West Midlands. In addition to this I am aware that some Trusts are not advertising posts as they are waiting for a suitable trainee to get CCT prior to advertisement. The Scottish & Northern Ireland appointments data for 2015 compiled by the RCP Edinburgh is still awaited.

The fact that we have 62 CCT holders >6 months post CCT but are unable to fill substantive consultant posts suggests that trainees are prepared to wait for the right job for them (be it job plan, sub-specialty or location) rather than move for any job.

Figure 24 shows the trend in successful, no appointment, cancelled and total number of AACs for gastroenterology & hepatology from 2008 to 2014 calendar years in the UK (excluding Scotland). The number of attempted appointments started to increase in 2012 from an average of 88 (2008-2011) to 156 in 2014 (77% increase). This has not been matched by the 21% increase in successful appointments in the same time frame, therefore the number of unfilled posts has risen dramatically from an average of 17 (2008-2011) to 70 in 2014 (312% increase). This trend has been seen in the other specialties that dual accredit with GIM.

Figure 24: Trend in successful, no appointment & cancelled AACs 2008-2014 (no data for Scotland)

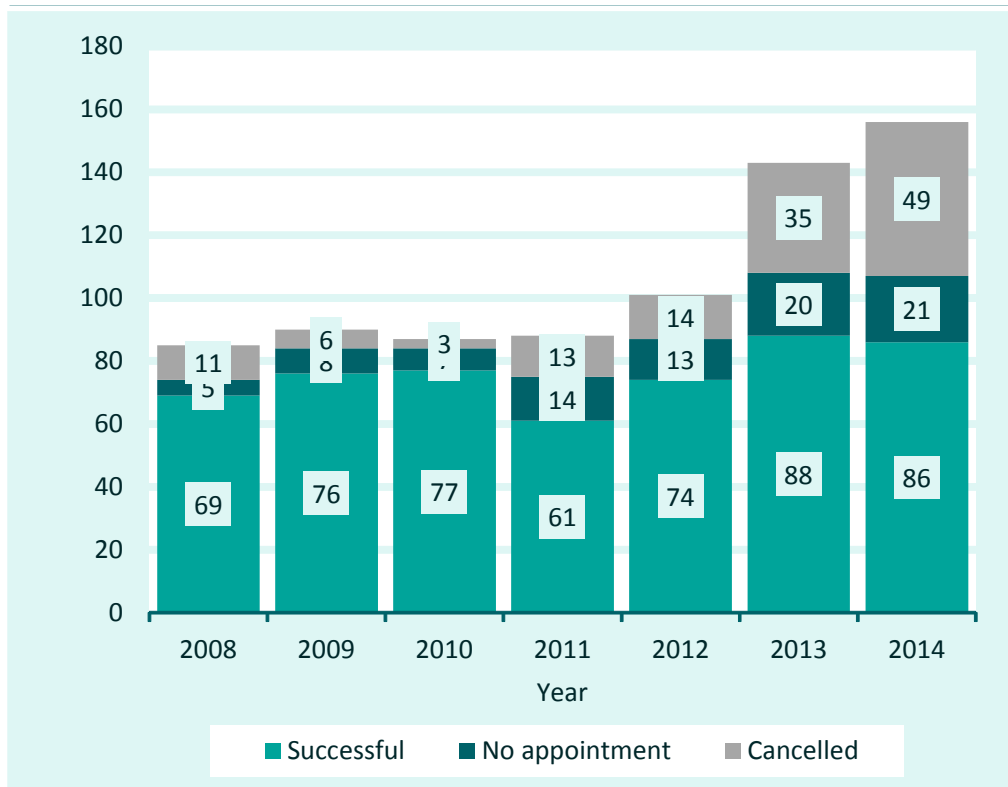


Figure 25: Mix adjusted average house price: UK, country, region August 2015: (ONS statistical bulletin 13 Oct 2015)



It is perhaps a little surprising that it is so difficult to fill substantive posts outside of London when you consider London house prices are so high (figure 25) and we have a national contract. However the majority of trainees are trained in London and we know that only a third will move regions for their substantive post. We should therefore consider moving NTN posts away from areas that have reached recommended consultant numbers to areas which have a shortage of consultants and / or recruitment difficulties.

118 substantive gastroenterology consultants started their posts between 1<sup>st</sup> Oct 2014 & 30<sup>th</sup> Sept 2015 (104 in England, 5 in Scotland, 2 in Northern Ireland and 7 in Wales). 16 (14%) were locum consultants prior to appointment to the substantive post, 74 (63%) were trainees prior to appointment to the substantive post (57 specialist registrars, 3 acting up as a consultant, 3 research registrars and 11 post CCT fellows). 24 (20%) were substantive consultants who moved to a new post (and will have left a vacancy) which represents 1.7% of the consultant workforce. There were 2 (1.7%) who appear not to have trained in the UK and 2 (1.7%) are unknown. Excluding substantive consultants, I have information on whether 86 appointees moved regions for their substantive consultant post; 26 (30%) moved region for their post this is lower than the 43% that moved in 2014.

Tables 15 & 16 show the distribution of substantive consultant gastroenterology job seekers according to region as well as the potential posts available & the number of consultants who are 59 or more years of age and who might retire. The regions where the number of trainees is less than the number of posts are Scotland, Wales, the North West, East Midlands and the South West which are therefore likely to have consultant recruitment difficulties. The regions where the number of trainees significantly outweighs the number of jobs are London, the North East, the West Midlands, and East of England which will therefore be net exporters of trainees.

Table 15: Distribution of substantive consultant job seekers (according to current post rather than original LETB) in next year by region

SHA	Locum consultants	Post-CCT trainees	Trainees obtaining CCT in next year	Total
Scotland	0	8	4	12
Northern Ireland	1	3	1	5
Wales	0	2	3	5
North West	4	6	15	25
North East	10	5	7	22
Yorkshire & the Humber	6	4	11	21
West Midlands	3	11	11	25
East Midlands	2	8	1	11
East of England	3	10	15	28
London	3	35	38	76
South West	1	3	7	11
South East Coast / South Central	9	5	9	23
<b>Total</b>	<b>42</b>	<b>100</b>	<b>122</b>	<b>264</b>

Table 16: Distribution of unfilled substantive consultant posts & retirees by region

SHA	Unfilled posts	≥60 yrs.	59 yrs.	Total
Scotland	11	8	6	25
Northern Ireland	2	1	0	3
Wales	5	6	0	11
North West	11	20	2	33
North East	3	4	0	7
Yorkshire & the Humber	7	9	2	18
West Midlands	7	10	0	17
East Midlands	3	8	2	13
East of England	12	6	1	19
London	1	22	2	25
South West	7	6	2	15
South East Coast / South Central	7	12	1	20
<b>Total</b>	<b>76</b>	<b>112</b>	<b>18</b>	<b>206</b>

## **Future changes to consultant numbers**

### **Increased need for gastroenterologists:**

- **National screening programmes.** The national flexible sigmoidoscopy screening programme for the population between 55-64 years of age – “Bowel Scope” was piloted in March 2013 and is being rolled out nationally from 2014 to 2016 with £60 million pounds investment from the Department of Health. The BSG has estimated that the extra work for FSig will require 93 WTE individuals, not necessarily doctors, divided across the 59 screening centres. This additional requirement has not been included in the RCP workforce estimates. There are plans to replace FOB testing with faecal immunochemical testing (FIT). Initially the sensitivity will be set to generate 2% positive tests (the same as FOBt) to avoid placing too much demand on the endoscopy service, but there are plans to gradually increase the sensitivity of FIT with time & hence the number of colonoscopies that will be required.
- **Increasing endoscopy demand.** Results of a detailed modelling exercise by the Department of Health has suggested that the demand for colonoscopy, flexible sigmoidoscopy and gastroscopy needs to rise by 27%, 127% and 15% per month on average respectively by 2019 to meet the 6-week wait standard and meet the projected demand for screening tests using historical trends since 2008 to predict future demand. This is equivalent to a need to deliver an extra 400,000 colonoscopies, 1 million flexible sigmoidoscopies and 300,000 gastroscopies over next 5 years. Even if capacity continues to increase at the rate it has been doing so since 2008, there will still be a major shortfall. Already, endoscopy activity in the UK is less than in comparable nations and there is significant variation, in particular relating to % of patients waiting more than 6 weeks for a procedure. The document includes an action plan calling for national workforce planning for endoscopy (already underway), improving productivity of existing workforce & endoscopy units and a major expansion of Non-Medical Endoscopist (NME) posts. As we already have nurse endoscopists and there is also a limited supply of these, a pilot of training other NMEs such as allied health professionals and Physicians Associates to endoscope is underway.

- **Recent BSG Barrett's oesophagus guidelines (Oct 2013)** have recommended considering endoscopic screening in patients with chronic GORD symptoms and multiple risk factors (at least three of age 50 years or older, white race, male sex, obesity), with a lower threshold in the presence of a family history.
- **Hepatology.** Increased hepatology requirements from a change in population behaviour, i.e. increase in obesity, diabetes and alcohol misuse. The National Liver Plan asks for a trained Hepatologist in every trust.
- **The future hospital commission proposals (March 2012):** continuous 7-day care, holistic inpatient care by a single team with specialist input, specialist medical care in the community
- **Management of UGI bleeding.** NICE (June 2012) and NCEPOD (July 2015) recommend that unstable patients should have an OGD immediately after or within 2 hours of resuscitation and everyone else within 24 hours. Units seeing more than 330 cases per year should offer daily endoscopy lists.
- **7 day consultant present care (Dec 2012).** Increasing requirement for 7 day consultant present care, necessitating increased consultant gastroenterologist time at weekends in most acute settings. Estimating that weekend working comprises a ward round and an endoscopy list on each weekend day/ bank holiday, then in 52 weeks there will need to be 104 weekend days work, plus 8 bank holidays, making 112 days per year. These could be taken as 'days in lieu', often targeting Mondays/Tuesdays after a weekend, or taken as annual leave (Wirral model currently used successfully). If taken as annual leave then 112 days equates to 22 weeks leave, or almost 0.5 WTE. With approximately 220 Trusts across the UK, this would need about 110 new consultants. Other services may choose to take Gastroenterologists off GIM on call to compensate for specialty work at the weekend and increase the number of acute physicians and geriatricians instead to cope with the larger number of acute medical admissions over the age of 65 years.
- **Be clear on cancer symptom awareness campaigns.** These started in 2010 and are activity to promote diagnosis of symptomatic cancers. For GI cancers there have been campaigns for symptoms of dyspepsia, dysphagia, change in bowel habit & PR bleeding. These have resulted in large increases in 2 week



wait, outpatient & endoscopy demand.

- **The launch of a major early-diagnosis programme.** Part of the vision set out in the NHS Five Year Forward View (Oct 2014), which calls for action on three fronts: better prevention; swifter diagnosis; and better treatment, care and aftercare for all those diagnosed with cancer. Several new approaches have been suggested by the independent cancer taskforce report “achieving world-class cancer outcomes a strategy for England 2015-2020”. The aim is to identify cancer more quickly and the suggestions are currently being evaluated and may be implemented from 2016/17. Initiatives include: offering patients the option to self-refer for diagnostic tests; lowering referral thresholds for GPs; and multi-disciplinary diagnostic centres where patients can have several tests in the same place on the same day. All of these would create more endoscopy demand.
- **Increase in the number of consultants working LTWT** due to larger number of female gastroenterologists and retirements brought forward by the lower pension lifetime allowance (LTA).
- **Changes to the NHS pension.** The pension LTA fell from 1.8 million to 1.5 million on 06.04.12 and to 1.25 million on 06.04.2014. This resulted in some consultants taking their pensions and coming back to work on a LTWT contract on their terms (often no ward commitment or on call). This does increase new appointments but probably at a lower rate than predicted. The pension LTA will reduce further to 1 million from 06.04.16.
- **An expanding and aging population.** The ONS predicts that the UK population will grow by 1% per year to reach 68 million by 2020 however the elderly population, who are high users of Gastroenterology services, will grow more than this, by approximately 3% per year.
- **Consultant contract negotiations** (in progress). A truly seven day service without a reduction in output Mon to Fri can only be achieved with more staff which will presumably only be possible if the existing staff are paid less (achieved with a lower starting salary & a lower top point of scale, redefining unsocial hours and the removal of all local clinical excellence awards (which are pensionable) and their replacement with a local performance award scheme (which is likely to be non-pensionable). Final contract proposals are

expected in 2016. The outcome could result in mass early retirement or a two tier pay system.

The current consultant workforce is contracted for a median of 11 PAs, although the majority is contracted for 12 or more PAs, and most work more than this. There would appear to be saturation of available resources to enact the increased demands, necessitating an increase in the number of WTE gastroenterologists to meet needs.

#### **Reduced need for gastroenterologists:**

- **If gastroenterologists withdraw from GIM rotas** (although not if this is to compensate for 7 day gastroenterology services).
- **If others take on traditional gastroenterology roles**, e.g. radiology replaces endoscopy (e.g. prepless x-ray imaging capsule for colon cancer screening).
- **If curative treatments are found**, e.g. new treatments for hepatitis C.
- **Changes to commissioning to a “1 year of care” model rather than payment by results.** This would drive secondary care to be more efficient to preserve profit, for example by screening out unnecessary referrals.
- **Changes to the NHS pension.** Changes to the NHS pension scheme in April 2015 linked usual retirement age (currently 60 for most) to State Pension age (increasing to 66 in 2018-2020). This may result in a 6 year retirement vacuum leading to an excess of CCT holders over jobs in April 2026 when protection arrangements cease.

#### **Future changes in trainee numbers**

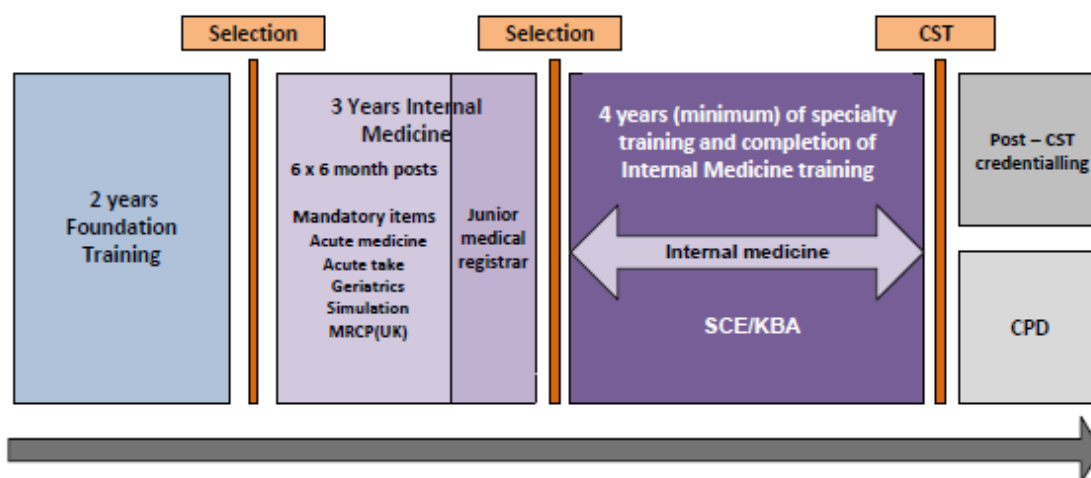
- **Removal of LAT posts.** Health Education England (HEE) abolished LATs on 1<sup>st</sup> Jan 2016. They are felt to be wasteful use of the training budget as most do not go on to get an NTN (although in gastroenterology >50% do go on to get a gastroenterology NTN but often choose not to count their LAT post towards training). LATs have not been abolished in the devolved nations. The money saved by HEE is to be used to fund additional GP training posts. At the moment there will be no additional NTNs to compensate for this loss. The suggested alternatives to LAT posts are locally recruited Trust grade posts or

additional consultants, although both of these groups are difficult to recruit. This may mean that LETBs & TPDs are less likely to release trainees to go OOP, or if they do allow trainees to go OOP they will have gaps that will affect the training of other trainees at that Trust. This is likely to shorten the average training time although the number of trainees seeking post-CCT experience would probably increase. It is also likely to push trainees to accept NTN posts in less popular specialties rather than a LAT post in a devolved nation as geography & lifestyle are the most important factors when trainees choose post. HEE have stated that Postgraduate Schools may increase their NTN appointments within their existing, funded establishment, but only when there is evidence to justify the increase in output of CCT holders (not likely to be applicable in London). There has to be sufficient applicants & training capacity. This seems to support formally using the “NTN weave model” in areas of consultant shortage & recruitment difficulty. If this occurs the devolved nations will have to use a similar model in order to avoid being disadvantaged when it comes to ST3 recruitment.

- **Shape of training review (Oct 2013).** The latest interpretation of this review is illustrated in figure 26. To increase the number of general medical registrars it has been suggested that there be an additional year (two 6 month jobs) after completion of 2 years of CMT and passing MRCP (termed the “junior medical registrar” year) prior to selection for ST3 specialty training. Specialty training has been reduced from 5 to 4 years. For gastroenterology to be able to train a trainee in this time at least one year would have to be without GIM. The first year would probably be the best time for this to allow maximum exposure to endoscopy training (SPRINT endoscopy training is a good model). A small proportion would also go on to credential in sub-specialty areas in gastroenterology post CCT, driven by workforce & patient needs. It has been proposed that funding for national credentialing would come from the removal of funding for the 6 months period of grace post CCT although as there are gaps in rotations due to inadequate numbers of CMTs to fill posts & trainees OOP there should be adequate employment opportunities for post CCT trainees while looking for a

substantive consultant post.

Figure 26: Shape of training cartoon



- **Junior doctor contract negotiations** (in progress). The imposition of a new contract on junior doctors in England from Aug 2016 may lead to a further drop in CMT & ST3 recruitment in England in 2016 with some trainees choosing to apply for posts in devolved nations or abroad, take a non-training post or leave the NHS altogether, at least in the short term.

#### **Surrogate markers for pressure on jobs:**

The number of trainees >6 months post-CCT without a substantive consultant appointment remains high compared to ten years ago but has fallen again from a peak of 83 in 2012 to 64 on 30.09.2015. Despite this, 90 (51%) of advertised substantive gastroenterology consultant posts were not filled in 2015 and 17% had no applicants. There appears to be regional variation in consultant recruitment success. London & adjacent regions are usually able to successfully recruit, although even in London, there are posts that do not appear to be popular.

#### **Conclusions**

5% consultant expansion over the next 2-3 years would achieve the 1610 gastroenterologists estimated that the UK required in 2013 (with 14% LTWT).

Consultant expansion, while larger than planned for, is lower than it could be as 51% of advertised consultant posts have not been filled, with regional variation

throughout the UK. In addition, Trusts are holding back posts until there is a suitable applicant available. Gastroenterology is predicted to have an excess of substantive consultant jobs compared to CCT output in the next five years, due to unplanned demand for gastroenterology services (especially endoscopy). However, trainees should not be complacent, as competition for popular posts remains high.

The number of CCT holders >6 months post CCT without a substantive consultant posts is falling. They remain working in gastroenterology. There are a large number of gaps in training rotations due to a deficit of 300 CMT posts and the perceived unattractiveness of a specialty combined with GIM for the increasingly female trainee population. Therefore there is no push, by training programme directors, of CCT holders to get a consultant job. This situation may be exacerbated by the abolition of LATs by HEE unless LETBs are allowed to weave NTN posts to cover rotation gaps due to OOP activity.

It is likely that the need for gastroenterologists will increase dramatically in the coming few years due to expansion of screening programmes, population demographic changes, out of hours bleed rotas, the requirement for the service to cover evenings, weekends & bank holidays and the Governments strategy to improve outcomes the NHS delivers for people affected by cancer. This should provide more employment for CCT holders as increased income from tariffs (not applicable everywhere) should fund the posts.

The number of gastroenterology NTN posts should increase in some regions to compensate for the abolition of LATs. The number of NTNs in a region/LETB should be approximately 34% higher than the number of clinical training posts to allow for trainees going out of program (“the NTN weave”). The exact number at any one time should be determined by the training programme director in consultation with the LETB as small rotations have less flexibility than large rotations. Some LETBs have already taken this approach. NTN posts should be moved from areas of CCT overproduction to areas with consultant under-provision & recruitment difficulty.