

British Society of Gastroenterology Workforce Report Dr Charlotte Rutter – October 2018

Key points:

- On 1st September 2017 there were 1494 substantive gastroenterologists and hepatologists in the UK, a 1.6% expansion from 2016. Mean expansion is unchanged in the last 10 years.
- 54% of advertised consultant posts in 2016 – 2017 were unfilled suggesting expansion is less than it could be.
- 21% of consultants were female and 13% of all consultants worked LTFT
- It is predicted we need an additional 140 WTE consultants working 11.5PAs a week which could be achieved in 2 years.
- Mean WTE PAs worked per week were 12.13 (contracted 11.22), LTFT 9.23 (contracted 8.60).
- There are 698 Higher Specialty Trainees (609 NTN) in gastroenterology and hepatology in the UK. 106 CCTs were awarded in gastroenterology and/or hepatology between 1st October 2017 and 30th September 2018.
- In 2018 recruitment into ST3 NTN was 100% although competition ratios are falling.
- The numbers of applicants for CMT has increased by 7% in 2018, but this is felt to reflect that this is the last year of CMT training before IM training is rolled out.
- There are 1,937 doctors holding a licence to practice on the General Medical Council Specialist Register in gastroenterology and/or hepatology in the UK on 1st September 2018.

Introduction:

The last BSG Workforce Report was published in 2016. This year's report summarises data collected from the Royal College of Physicians (RCP) census of consultant physicians and higher specialty trainees (2017 – 2018), the BSG Clinical Services and Standards Committee (CSSC) survey (2018), the BSG Trainees Section survey (2018), Gastroenterology and Hepatology Training Programme Directors, the Joint Royal Colleges of Physicians Training Board and the Medical Register of the General Medical Council. The BSG has not collected data since 2016 so trends discussed in this report cannot be directly compared with, or extrapolated from, the last Workforce Report in 2016.

Consultant Gastroenterologists and Hepatologists:

On 1st September 2017 there were 1,494 substantive gastroenterology and hepatology consultants in the UK¹; this was a 1.6 % increase from 30th September 2016 (Tables 1 and 2). 21% of consultants were female, compared to 36% across all medical specialties and 13% of all consultants worked LTFT. Most consultants were aged between 40 and 44 years old.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
England	824 (818)	866 (853)	926 (903)	957 (935)	996 (971)	1054 (1085)	1107 (1098)	1182 (1174)	1222 (1262)	(1290)
Scotland	89 (88)	96 (85)	108 (93)	108 (91)	107 (93)	111 (99)	122 (105)	128 (109)	127 (113)	(106)
Wales	48 (46)	49 (47)	48 (49)	52 (51)	52 (51)	55 (53)	59 (56)	64 (59)	66 (58)	(59)
Northern Ireland	29 (32)	30 (30)	31 (32)	35 (33)	36 (33)	35 (34)	39 (34)	40 (38)	40 (38)	(39)
Total	990 (984)	1041 (1015)	1113 (1077)	1152 (1110)	1191 (1148)	1255 (1271)	1326 (1293)	1414 (1380)	1455 (1471)	(1494)

Table 1: Number of substantive UK consultant gastroenterologists and hepatologists by year

*Numbers not in brackets from previous BSG Workforce Reports. Numbers in brackets from RCP Census 2017 – 2018.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
England	5.6	5.1	6.9	3.5	4.1	5.8	5.0	6.8	3.4	(2.2)
Scotland	3.4	7.9	12.5	0	-0.9	3.7	9.9	4.9	-0.8	(-6.2)
Wales	6.7	2.1	-2	8.3	0	5.8	7.3	8.5	3.1	(1.7)
Northern Ireland	6.9	3.4	3.3	12.9	2.9	-2.8	11.4	2.6	0	(2.6)
Total	5.5 (6.5)	5.2 (3.2)	6.9 (6.1)	3.5 (3.0)	3.4 (3.3)	5.4 (10.7)	5.7 (1.7)	6.6 (6.7)	2.9 (6.6)	(1.6)

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

*Numbers not in brackets from previous BSG Workforce Reports. Numbers in brackets from RCP Census 2017 – 2018.

Between 2007 and 2016 the mean annual % expansion of consultants was 4.9% per year². There were peaks of greater than 6.5% in 2010 and 2015 before falling to 2.9% in 2016, though this was felt to be due to the identification and removal of consultants aged >60 who had retired. The RCP census has shown similar peaks in expansion with a drop in 2017 from 6.6 to 1.6% (Table 2 and Figure 1). Mean expansion using this data between 2008 and 2017 is also 4.9%.

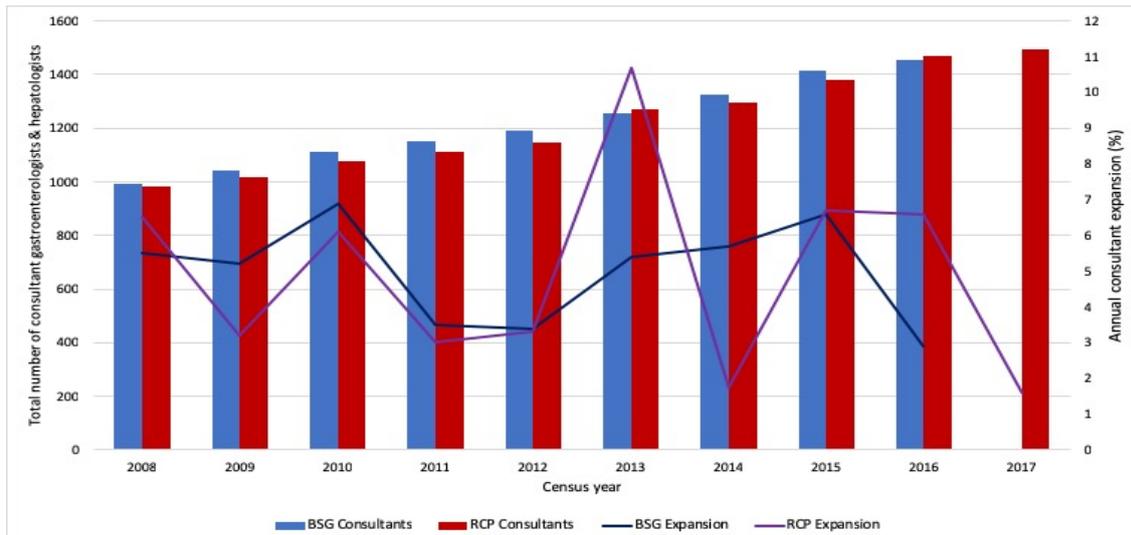


Figure 1: Trends in the number of gastroenterology and hepatology consultants and consultant expansion

The 2013 RCP document *Consultant Physicians Working for Patients* estimated that we need approximately 6 whole-time-equivalent (WTE) consultant gastroenterologists (with GIM) per 250,000 population. For the 2017 ONS population of 66,040,200 this equates to 1,585 WTE, or an additional 91 WTE working 11.5PAs a week. Of the current workforce (1494) there are 1300 WTE and 194 LTFT working 8.6PAs providing a total of 16,618 sessions; this is already a shortfall of 563 sessions. We need 1610 extra sessions in total to cover the current shortfall and required extra sessions, to be delivered by 91 WTEs. This could be provided by an additional 140 WTEs, 187 LTFT (working 8.6PAs) or a combination of the two. Mean consultant expansion for the last 10 years has been 4.9% so this would be achieved in 2 years. However most recent trends suggest consultant expansion is between 1.6% to 3% so these figures will be reached in 3 - 4 years.

Figure 2 shows the regional variation of substantive consultant gastroenterologists and hepatologists throughout the UK and population per WTE. The average consultant in the UK serves a population of 46,577 which does not meet the RCP estimate of 1 WTE per 41,667 population. This is achieved in London, the Northern sub-region and parts of Scotland. In England the greatest population per FTE can be found in the Thames Valley and Wessex with 1 WTE per >60,000 population. The mean population per WTE in Scotland, Northern Ireland and Wales is similar but within Scotland, this varies from 18,071 to 114,490.

Nation	NHS region	Sub-region	Female	Male	Total headcount	Total FTEs	Population	Population per FTE
England	London	North East and Central London	30	85	115	108.8	3,463,676	31,844
		North West London	15	43	58	53.3	2,075,696	38,971
		South London	19	72	91	82.8	3,285,629	39,663
	Midlands and East	East Midlands	15	85	100	92.8	4,771,666	51,422
		East of England	26	101	127	115.5	6,168,432	53,418
		West Midlands	30	106	136	131.1	5,860,706	44,699
	North	North West	26	143	169	166.0	7,022,390	42,308
		Northern	16	68	84	80.4	2,971,682	36,968
		Yorkshire and the Humber	32	86	118	114.7	5,359,412	46,707
		Kent, Surrey and Sussex	21	70	91	86.2	4,562,563	52,952
	South	South West	24	85	109	104.2	4,431,584	42,526
		Thames Valley	11	27	38	36.6	2,391,696	65,408
		Wessex	13	41	54	51.7	3,254,298	62,956
	Northern Ireland		Northern Ireland	4	35	39	36.8	1,870,834
Scotland	Scotland	Scotland (East)	2	10	12	12.0	1,373,880	114,490
		Scotland (North)	3	14	17	17.0	307,210	18,071
		Scotland (South)	7	31	38	35.5	1,126,410	31,729
		Scotland (West)	6	33	39	34.6	2,617,300	75,737
Wales	Wales	Wales (North)	1	10	11	11.0	696,284	63,299
		Wales (South)	11	37	48	47.0	2,428,881	51,648

Figure 2: Location of substantive consultant gastroenterologists and hepatologists in the UK with population per FTE consultant

GMC Data Explorer:

On 30th September 2018 there were 1,937 doctors holding a licence to practice on the GMC specialist register in Gastro-enterology, Gastroenterology and Hepatology. 1,508 were male (78%) and 429 were female (22%). 203 of these doctors were aged >60 leaving 1734 aged <60 years. This is considerably higher than census figures of 1494 substantive consultants. Reasons for this may include quality of data collection from the Four Nations (for example in Scotland where consultants are fellows or members of the RCPE or RCPSG rather than RCP and data reporting from the Academy of Medical Royal Colleges and Faculties in Scotland) or loss of workforce out of the UK.

Consultant gastroenterologists and hepatologists workload:

Mean contracted PAs worked per week is 11.22 whilst mean PAs worked per week is 12.13. Full time contracts consist of a mean of 2SPAs with LTFT contracts consisting of more Academic PAs, which is not unexpected (Table 3).

	DCC PAs	SPAs	Academic PAs	Other PAs	Total
Contracted					
Full time	8.73	2.04	0.39	0.39	11.55
LTFT	5.55	1.20	1.66	0.19	8.60
Worked					
Full time	9.37	2.05	0.51	0.57	12.49
LTFT	5.67	1.30	1.75	0.51	9.23

Table 3: Mean workload of consultant gastroenterologists and hepatologists

13% of consultants work LTFT. With an increasing number of female trainees this figure is likely to increase in the future once they secure substantive consultant posts. More doctors may choose to “retire and return” as the pensionable age increases which will also increase the LTFT consultant workforce. Greater flexibility in working patterns is needed to allow for this as well as enabling retention of the workforce in more desirable roles in later years.

Consultant gastroenterologist and hepatologist appointments:

The RCP Appointments Advisory Committee (AAC) attempted to appoint 158 consultants in gastroenterology and hepatology between January and December 2017 with 46% posts filled, compared to 52% the previous year (there is no data for Scotland). 54% were unfilled which is higher than the average for all consultant physician posts (45%). There is regional variation in the success of filling advertised posts, with the Northern region not filling 4 posts (100%) and the most successful in South London.

Number of advertised and successful consultant appointments in gastroenterology (2017)				
NHS region	Sub-region	Advertised posts	Successful	% successful
London.....	North East and Central London	9	7	78%
London.....	North West London	5	3	60%
London.....	South London	13	12	92%
Midlands and East.....	East Midlands	14	6	43%
Midlands and East.....	East of England	7	2	29%
Midlands and East.....	West Midlands	16	2	13%
North.....	North West	33	7	21%
North.....	Northern	4	0	0%
North.....	Yorkshire and the Humber	14	8	57%
South.....	Kent, Surrey and Sussex	12	8	67%
South.....	South West	12	6	50%
South.....	Thames Valley	3	1	33%
South.....	Wessex	4	2	50%
Northern Ireland and Wales.....	Northern Ireland	5	4	80%
Northern Ireland and Wales.....	Wales (North)	4	2	50%
Northern Ireland and Wales.....	Wales (South)	3	2	67%
Total		158	72	46%

Table 4: Advertised and successful consultant AACs

There were 268 substantive consultant posts in gastroenterology and 12 in hepatology advertised in the BMJ between 1st September 2017 and 31st August 2018. It is not known how many of these were re-advertisements due to unfilled posts or the region in the UK. 21 acute medicine jobs with gastroenterology as an additional keyword qualifier were advertised. At the time of writing the number of advertisements on NHSJobs was not available.

In order to identify “unmet need” ie Trusts holding back advertising for vacant posts until suitable trainees attain their CCT, the 2018 CSSC survey of regional representatives asked for the number of consultant vacancies in the last 12 months. The survey received responses from 92 Trusts; 29 University Hospitals and 63 District General Hospitals (as of 31st May 2018). Overall 48/86 (41%) Trusts had no vacancies with a mean of 0.7 vacancies (SD 1 with range 0 – 5). There was a significant difference between no vacancies at University Hospital Trusts (mean 0.2 +0.4) versus District General Hospitals (mean 0.9 +1.1; p <0.001). Therefore, 33% of Trusts had experienced vacant posts in the last 12 months at the time of the survey. It is likely that this figure is an under-estimate due to incomplete data capture.

The 2018 BSG Trainees Section survey indicates that 58.9% of trainees are keen to pursue a consultant post in the geographical area in which they have trained. It is important that future Workforce discussions highlight the areas where there are consultant vacancies and

NTNs are redistributed to support future consultant recruitment. 49% of trainees achieve full JAG accreditation for colonoscopy by the end of their training and 76.1% would consider a post-CCT fellowship to enhance their skills and increase the chance of securing their desired consultant job.

Consultant age:

Figure 3 shows the age range of consultant gastroenterologists and hepatologists with most aged between 40 and 44y. This number is relatively stable up to 59y, with 7% over 60 years of age (5% aged 60 to 65, 2% over 60 and 1% unknown).

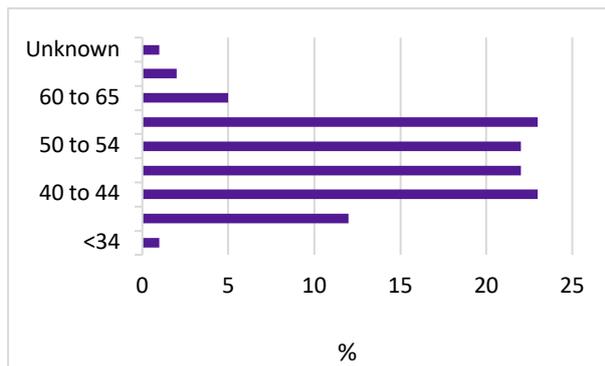


Figure 3: The consultant gastroenterology and hepatology workforce: by age-group

Retirements:

The RCP census states mean intended retirement age for consultant gastroenterologists and hepatologists is 62.1 years with 41% reaching this age over the next decade. The 2016 Workforce survey asked respondents whether changes to the pension rules would affect the age at which they would retire; 20% reported yes, 64% no and 16% unchanged. Increasing pensionable age, change to pension rules and difficulty in flexible working may push some consultants to take retirement earlier than planned, which has not been factored into workforce planning.

The RCP census reports 15,727 consultant physicians in the UK with gastroenterology and hepatology being the 3rd largest specialty (9%) equal to respiratory medicine. Cardiology and geriatric medicine were the largest medical specialties with 10% of the workforce each (Figure 4).

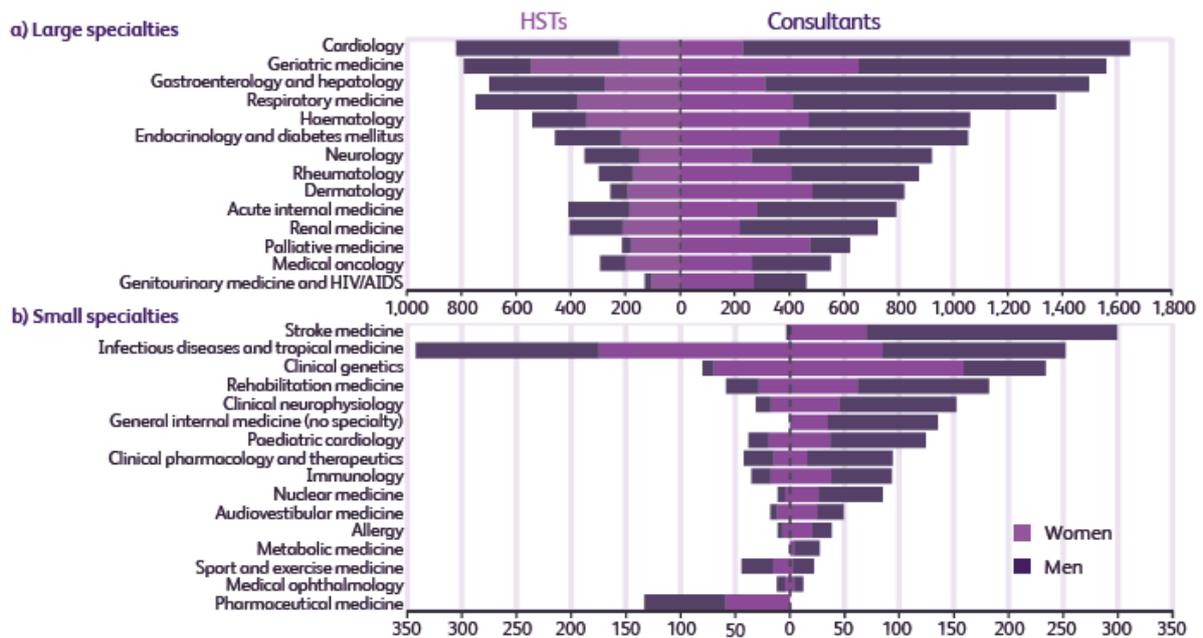


Figure 4: The consultant and Higher Specialty trainee workforce: By gender and specialty

Trainees in gastroenterology and hepatology:

On 1st September 2017 there were 698 Higher Specialty Trainees in gastroenterology and hepatology in the UK. There are 40% female and 60% male trainees in gastroenterology and hepatology in the UK. A total of 106 CCTs were awarded between 1st October 2017 and 30th September 2018 (Table 5).

CCT Specialty	Number
Gastroenterology & GIM	78
Gastroenterology & Hepatology	4
Gastroenterology & GIM & Hepatology	24
	106

Table 5: Number of CCTs awarded

The number of NTN in gastroenterology and hepatology available in Round 1 of recruitment since 2015 has reduced from 94 to 84 in 2018. Fill rates are stable between 99 – 100% but competition ratios have declined in recent years. The loss of LATs in England in 2016 has made it more difficult for Training Programme Directors to fill the NTN gaps of those trainees going OOP. The option to “mortgage” or “weave” NTN is available but is only possible if trainees coming back into programme have an NTN to come back into. This leaves regions with gaps on the rotation which may impact on the training of those trainees who remain in programme. The RCP census showed this also impacts on consultants by having to act down and forego other activities (7% regularly and 23% as a one-off), including informal teaching, management or committee work, formal teaching sessions and research.

With increasing numbers of female trainees, the impact of maternity leave and presumed return to LTFT reinforces the importance of developing more flexible ways of training. The society continues to promote gastroenterology to medical students and junior trainees with the Taster Course run by the Trainees Section. The successful Supporting Women in

Gastroenterology (SWiG) pilot has been extended for all BSG members and the new BSG Mentoring programme was launched at the 2018 BSG Annual Meeting. All mentor/mentee places have been filled for 2018.

The BSG Trainees Section survey reports that overall satisfaction with gastroenterology training remains high with 79.7% of trainees feeling positive about their training, but there is ongoing dissatisfaction with training in General Internal Medicine with few trainees seeking to pursue a consultant job with GIM commitments. 76.1% of trainees would consider post CCT-fellowships to further their skills before applying for consultant posts. The majority of trainees surveyed feel the implementation of Shape of Training will be of detriment to their training due to the reduction in specialty training time to 4 years.

The mean duration of UK training in 2016 was 6.8 years which included time out for research. Anecdotally dual accreditation gastroenterology and hepatology training programmes deliver roughly 50% time in specialty training and 50% in GIM. Therefore, in a 5 year training programme this accounts for 2.5 years of specialty training. The proposed 4 year training programme will restrict GIM to 1 year only, leaving 3 years of dedicated gastroenterology and hepatology training. Trainees will undertake 2 years of core gastroenterology and hepatology training, after which those wishing to pursue specialist hepatology training will have the opportunity to follow a hepatology stream. At present, the curricula aim is for all trainees to attain JAG full certification in colonoscopy by the time of CCT. It is unclear how the 1 year of GIM training will be delivered within the 4 year programme and is likely to vary across the UK.

The number of medical registrars has not changed in the last 10 years despite increasing workload, the impact of the EWTD on hours and greater requirements for training. Whilst there has been an agreement to increase medical school places by 2020 this will not impact on the workforce for another 10 - 15 years and the numbers calculated do not account for attrition seen during medical student and training years (~25%). The RCP Double of quits document estimates we need an additional 7,500 medical students per year at the very least⁶.

At its peak in 2014, CT1 recruitment into medicine was 3,180 applicants with a competition ratio of 2.06. There followed a decline in the number of applicants which troughed in 2017 at 2,757 with a competition ratio of 1.61. This rose by 7% in 2018 with 2,958 applicants and a competition ratio of 1.71. Fill rates have improved to 96.5% (from ~90%) which represents an increase of 136 new trainees over 2017. It is felt this may be due to 2018 being the final year of Core Medical Training prior to the implementation of Shape of Training.

Physician Associates:

The RCP holds a register of Physician Associates and a recent Government consultation has agreed to provide a regulatory body for this group of Allied Health Professionals. Across the medical specialties 12% of consultants reported physician associates with a mean number of 2.2, most often found supporting inpatient work (66%). 50% worked in AMU and 21% in outpatients. 13% were reported in England, 11% in Scotland, 5% in Wales and 6% in Northern Ireland. 19% of gastroenterology and hepatology consultants reported a PA

working in their hospital, with a mean number of 2.1 and they were most commonly working in Scotland (27%).

Although there are plans for expansion in medical school places this will not impact on the consultant workforce for at least 15 years. The consultant workforce is unlikely to expand as it should to meet the service demands in gastroenterology and hepatology and the specialty has historically recruited AHPs to undertake some of the work traditionally delivered by doctors, including nurse endoscopists, nurse specialists and advanced nurse practitioners. It is noted however that by doing this, the ward nursing workforce is often put under pressure as nurses leave the wards to explore alternative career development pathways.

Physician associates come from a related medical background, for example biomedical science graduates or radiographers, and are another source of AHPs who can provide both continuity of care as well as taking over some of the roles of the doctor. However, it should be noted that the BSG Trainees survey reported 46.4% of trainees feel that the increasing prevalence of nurse endoscopists has been detrimental to their endoscopy training, though this is anecdotal and varies across the UK. The perception that the “doctor” role is being diminished or threatened by these AHP groups should be cautioned and alternatively, seen as an opportunity to make clearer the definitions of the role of the trainee and consultant in the future workforce. There is a workforce crisis in gastroenterology and hepatology and as it has done in the past with nurse endoscopists, the specialty should support the training of AHPs to augment the medical workforce in providing high quality patient care. The specialty could learn from other specialties who have embraced these roles, such as anaesthetists with operating department practitioners and radiologists with vascular access nurses.

Conclusions:

Consultant expansion in gastroenterology and hepatology appears to be on a downward trend and there remains a workforce crisis in substantive consultant numbers and appointments. There continues to be competition for jobs advertised in popular areas; those hospital Trusts in less popular regions continue to struggle with recruitment, particularly in the Northern part of the UK. Expansion may be less than was thought in recent years due to unfilled advertised posts or posts being held back and not advertised until a suitable candidate attains their CCT. The number of CCTs awarded remains static and makes required consultant expansion achievable in 2 years time. However if you take into account current and future LTFT working this is achievable in 4 years time. There continues to be unmet need and data on consultant vacancies is lacking, likely under-estimating true consultant expansion.

Shape of Training will reduce training time to 4 years with 1 year of GIM. This leaves 3 years of dedicated specialty training which is an improvement to the previous 50% specialty training delivered in 5 years. Most trainees anticipate undertaking post CCT jobs to further their skills before taking up consultant posts and with the exception of sub-specialty hepatology training, all other specialist interests will most likely become post CCT credentials.

Future work by the BSG to support the Workforce Report:

The BSG acknowledges that the Society must develop a more rigorous method of collecting and validating workforce data, ideally in real-time across the Four Nations and is an important piece of work. Information is needed on workforce numbers as well as working patterns/flexible working, workload and retirements. It will also be important to include other allied health professionals in future data collection and the BSG hopes to work closely with its members to achieve this. There are restrictions to data sharing following the implementation of the General Data Protection Regulation (GDPR) in 2018 which need careful consideration. The CSSC survey and regional representatives will continue to collate data to inform future Workforce Reports and the society would like to encourage all members to engage with any requests to complete future Workforce surveys. The BSG is collaborating with other societies and the Royal Colleges to streamline data collection in order to provide its members with accurate and useful data on current and the future workforce numbers.

Data Sources:

1. Royal College of Physicians census of consultant physicians and higher specialty trainees 2017 – 2017. <https://www.rcplondon.ac.uk/projects/outputs/focus-physicians-2017-18-census-uk-consultants-and-higher-specialty-trainees> accessed on 1st September 2018
2. British Society of Gastroenterology Workforce Report 2016 <https://www.bsg.org.uk/resource/workforce-2016.html> accessed on 1st September 2018
3. GMC Data Explorer. <https://data.gmc-uk.org/gmcddata/home/#/> accessed on 1st September 2018
4. BSG Trainees Section – Training Survey 2018
5. Clinical Services and Standards Committee survey 2018
6. Royal College of Physicians briefing paper Double or quits – calculating how many more medical students we need. <https://www.rcplondon.ac.uk/news/double-or-quits-calculating-how-many-more-medical-students-we-need> accessed on 1st September 2018