Clinical Genetics Society
Clinical Genetics Workforce Snapshot from July 2022

Report date: 12th August 2022

Background

The Clinical Genetics Society (CGS) has been aware of an accumulating consultant workforce deficit over the past decade. This has been exacerbated recently by the unprecedented advances in genomic medicine, especially the launch of genomic medicine services across England and the devolved nations. This has brought new opportunities and advancements, but expansion of the specialised workforce required for delivery has not occurred in parallel. It is clear from feedback from Clinical Geneticists across the UK, via CGS and the Royal College of Physicians (RCP), that colleagues in mainstream medicine require a great deal of support in delivering genomic medicine within their specialty. Increasing amounts of time from Clinical Geneticists are required for input into the testing strategy based on phenotype, variant interpretation and there is huge demand from other specialties for advice and guidance.[1] Patients need more support to understand the consent process and results and implications that genomic medicine brings. These factors have contributed towards increased demands on consultant time, at a period when we have the new phenomenon of unfilled posts, leading to grave concerns over an insufficient and unsustainable senior medical workforce in Clinical Genetics.

In response to these concerns, CGS has formed a workforce group, co-opted to the Council. This survey was produced by the group as an immediate one-off data collection tool to obtain a snapshot of staffing in Clinical Genetics. This autumn, and on an annual basis, CGS will work with the Royal College of Physicians Workforce Unit and incorporate specialty specific questions into the Census to produce high quality workforce data and related information that will inform the imminent trends and the longer-term future requirements of the Clinical Genetics workforce.

Methodology

A survey was produced on Google Forms and reviewed by members of the CGS workforce group. The survey was circulated to all Clinical Leads via email at the end of June 2022, with a deadline of completion of 31st July 2022. Centres were asked to submit data representative of their workforce in July 2022. Individual reminder emails were sent where necessary.

Results

The workforce group rapidly achieved data collection and analysis, indicating the importance of this issue to our workforce. All 17 centres in England[2] completed the snapshot by 4th August 2022, using data from July

[1] Clinical Genetics Society. The evolving role of the Clinical Geneticist. 2015. Available from: https://www.clingensoc.org/media/11296/theevolvingroleoftheclinicalgeneticist-290715.pdf

[2] St George's, Nottingham, Oxford, Liverpool, Birmingham, Leicester, Cambridge, Peninsula (Exeter), Manchester, Leeds, Great Ormond St Hospital, Sheffield, Northwest Thames, Newcastle, Wessex, Guy's and St Thomas' RGS, Bristol

2022. Although all 17 centres responded, some fields in the survey were not complete for all centres.

Data was submitted in either Whole Time Equivalent (WTE) or Programmed Activity (PA). To allow analysis of results, 10 PAs were equated to 1 WTE. Unless otherwise stated, data throughout this report is presented as WTE.

Summary of Clinical Genetics workforce findings in July 2022

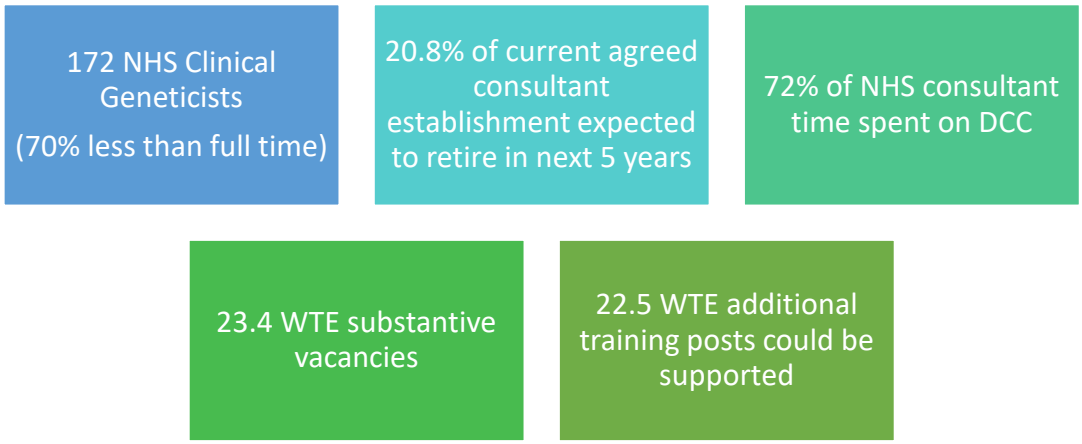

Figure 1 Key findings from the report

Consultant workforce and working patterns

In July 2022, there were a total of 172 individuals who were employed as NHS Consultant Clinical Geneticists across England. A further 22 individuals (total = 194) are employed through university or locum posts.

Direct clinical care

The total consultant time spent on direct clinical care (DCC) is 1111.1 PAs per week. This averages at 5.7 PAs of DCC per consultant per week. The total consultant time spent on non-DCC[3] was 438.7 PAs per week. This averages at 2.3 PAs of non-DCC time per consultant per week.

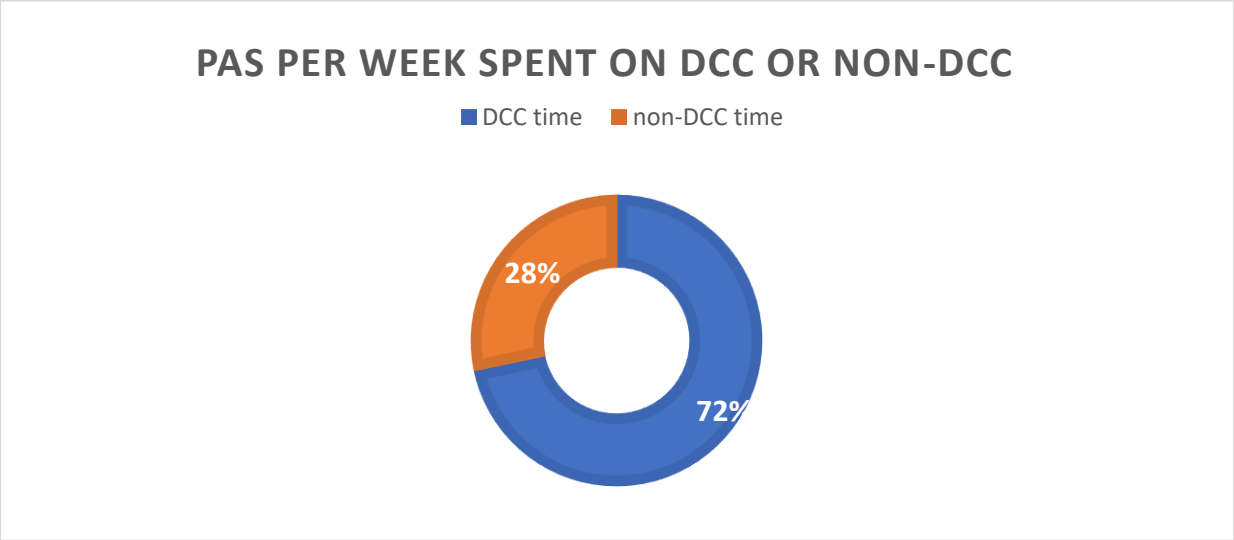

Figure 2 Allocation of PAs per week

[3] Including all supporting professional activities (SPA)/ Additional NHS Responsibility (AR)/ and External Responsibility (ER) time

Working patterns of NHS consultants

29.7% (n=51/172) of NHS consultants work 10 or more PAs per week (which we have here classed as full time). 70.3% (n=121/172) work less than 10 PAs per week. See Figure 3.

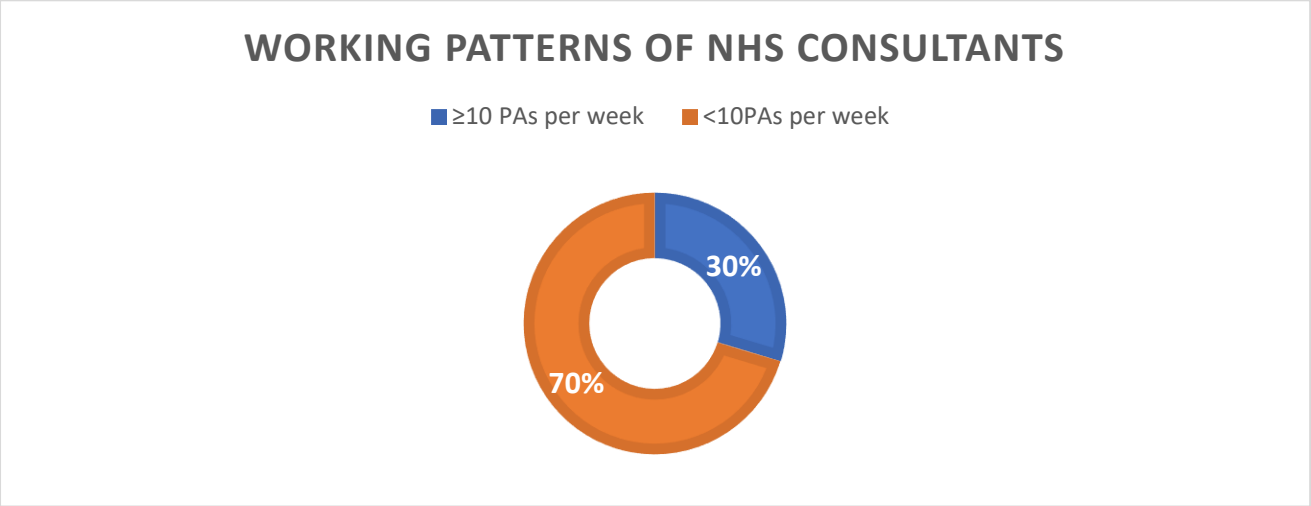

Figure 3 Working patterns of NHS consultants

Vacancies

There are currently 23.42 WTE substantive vacancies (data missing from three centres). All but one centre had vacancies. The maximum vacancies were 3.3 WTE in one centre.

The current agreed consultant establishment is 140.0 WTE across 15 centres, although their ideal establishment (as determined by clinical lead) is 178.1 WTE, and their current consultant workforce is estimated as 119.2 WTE (using a proxy of current vacancies subtracted from agreed consultant establishment). See Figures 4 & 5.

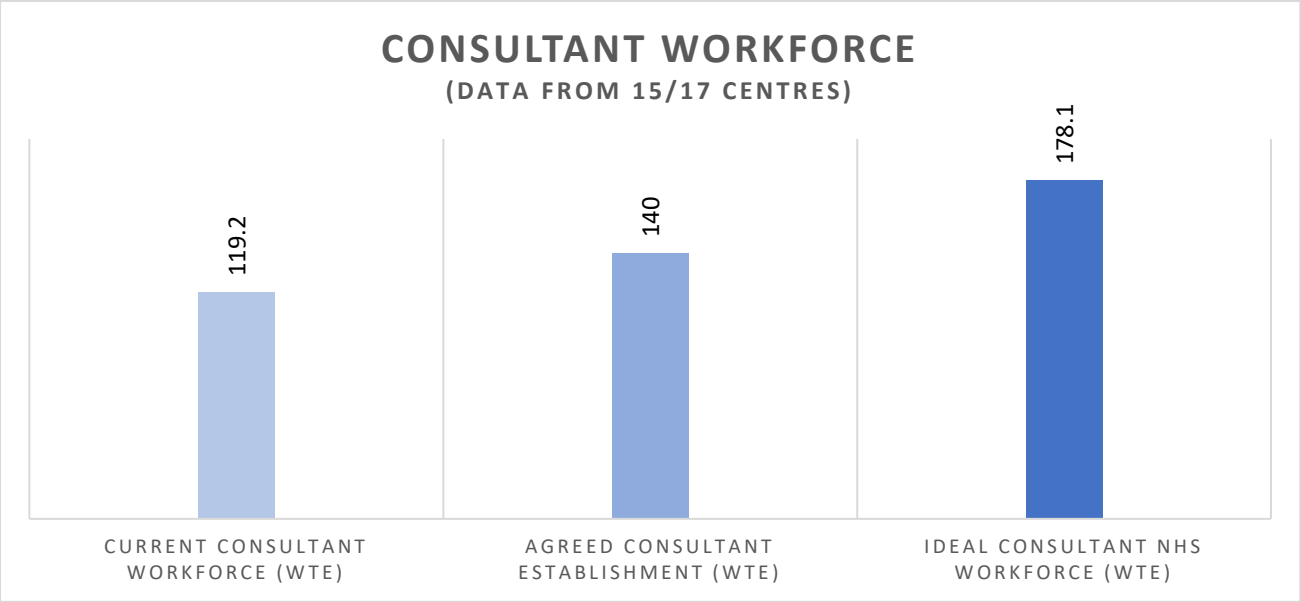

Figure 4 Current consultant workforce, agreed consultant establishment and ideal consultant workforce (data from 15 out of 17 centres)

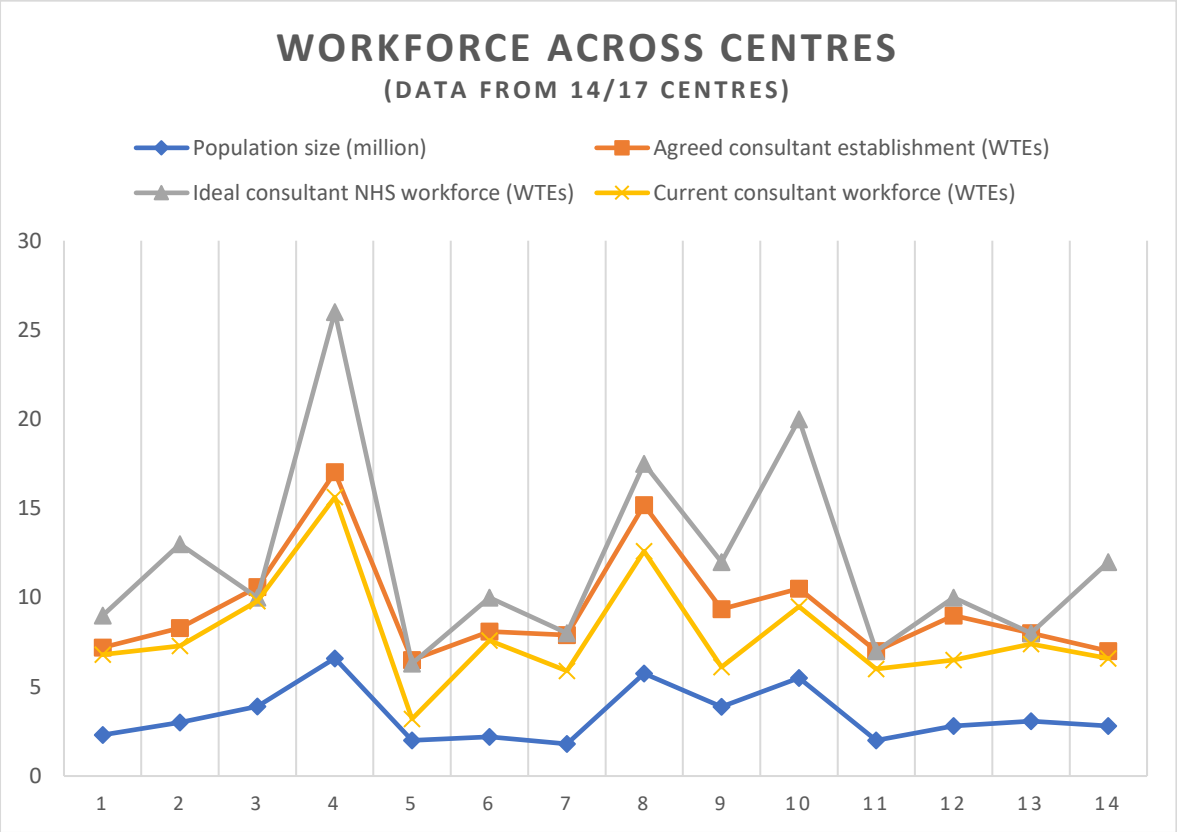

Figure 5 Consultant workforce across 14 out of 17 different genetic centres

Retirement

Over the last 5 years, 26.4 WTE consultants have retired. Over the next 5 years, 29.1 WTE consultants (20.8% of the current agreed consultant establishment) are expected to retire.

Registrars

There are currently 64.2 training numbers across 16 sites. 14.7 (22.9%) of these are academic posts. There are 2.2 unfilled posts.

Centres feel they could support 22.5 additional training posts (data missing from one centre).

Comparing data available from 14 centres, 45.5% (n=25 out of 55) registrars are Out of Programme or on parental leave. Of those that are in programme at these 14 centres, 63.6% (n=21 out of 33) are less than full time.

Supporting roles

Clinical fellow roles are used by some centres to support the workforce. There is one position (sometimes unfilled) for an academic FY2 post, and there are two (0.25 WTE) GPs with a special interest in Clinical Genetics (both based at one centre). There are 2.4 WTE Specialty doctors. See Figure 6.

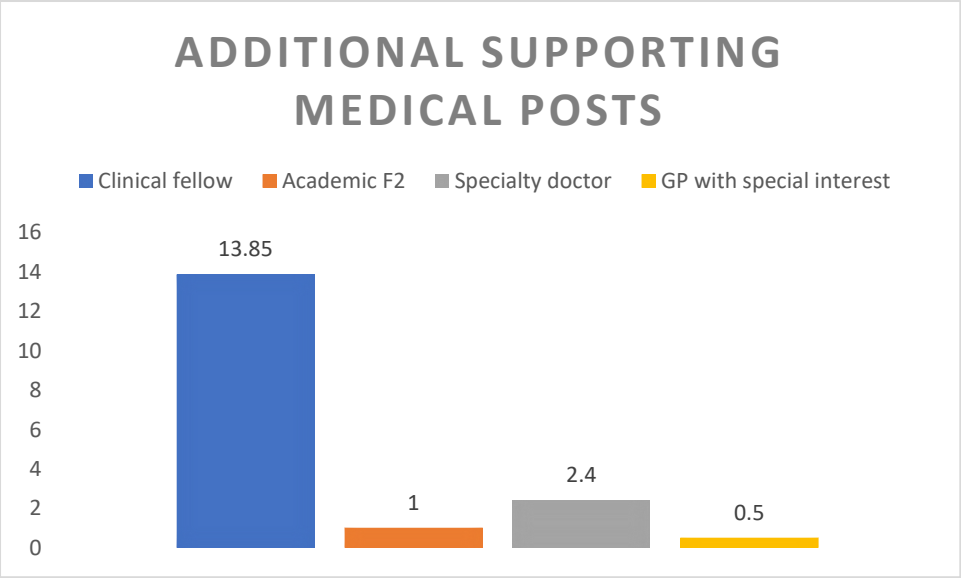

Figure 6 Additional supporting medical posts in genetic centres

Comments

A summary of key comments provided by respondents:

- Breakdown of non-DCC is important. Some of consultant time is specifically funded for non-DCC work such as research projects.
- Joint paediatric clinic with a paediatrician who has 6 months of experience with Clinical Genetics.
- Difficulties recruiting new consultants or getting mat leave cover.
- Use of clinical fellows as not given enough NTNs.
- Taking more trainees will increase SPA and decrease DCC.
- Several consultants reducing working hours.
- Deanery said a centre could have another training post but hospital would not fund.
- Some non-geneticists involved in NF1/NF2/HD services.
- Different regional services funded in different ways (e.g. PBR vs block contracts) which may affect total budgets and staffing.
- Important to consider wider staffing such as genetic counsellors, genomic associates.
- …we have 2 new training numbers from HEE but they are 100% funded by the department for the duration of their training. No central HEE funding! We can only do as so short of consultants and funding from consultant budget.
- Establishment of the GMSAs has taken a significant number of senior consultants out of the clinical workforce into leadership roles.

Discussion

These data present a helpful insight into the Clinical Genetics workforce, although there are some limitations. Firstly, they only represent a snapshot in time. Some proxy measures were used. For example, the use of both PAs and WTE meant that assumptions were made about the data (namely, that 10 PA = 1WTE). Some questions were not answered by some centres. Data were submitted by clinical leads in all but one centre (in one centre this responsibility was delegated). Averages have been included but may not

reflect the variability in individual working patterns. The data do not fully reflect some of the nuanced comments made by the respondents. The geographical size covered by each centre is different and the ethnic and socioeconomic spectrums also vary. This may need to be a consideration when ultimately determining consultant numbers for individual centres.

Previous modelling by the Royal College of Physicians estimated in 2013 a requirement of 0.75 WTE consultants per 250,000 population[4]. Given a current England population of 56.5 million[5], this would indicate a need for 168 WTE consultants. However, the significant advances in genomics, increased need for Clinical Genetics to support mainstreaming, and escalating service pressures mean that this modelling is now outdated and a very conservative estimate. The pressure on Clinical Genetics is increasing, as the NHS seeks to deliver the commitments in the NHS Long Term Plan.[6] Each centre must be appropriately staffed in order to ensure "consistent and equitable care to for the country's 55 million people"[7]. Furthermore, it is clear from feedback from Clinical Geneticists across the UK, via CGS and the RCP, that colleagues in mainstream medicine require a great deal of support in delivering genomic medicine within their specialty field.

These data clarify current workforce shortages, as well as helping to predict future retirements and the need to accommodate flexible working patterns.

Recommendations:

1. Increase training numbers as per what centres feel able to support.
2. Ensure training posts are funded jointly between employing trust and HEE.
3. Provide short-term support for current vacancies through use of supplementary roles such as clinical fellows, genomic associates, etc.
4. Urgently assess the factors that induce retirement and create incentives for experienced consultants to stay in the workforce, such as suitable retire and return contracts.
5. Obtain data on average time taken to complete training in Clinical Genetics to allow further workforce modelling.
6. Obtain breakdown of DCC time, such as time spent preparing for multi-disciplinary team meetings.as this informs trends and is useful in workforce modelling.

Acknowledgements:

Thank you to CGS specialty registrar representative on workforce (Dr Melody Redman), the CGS Workforce Lead (Dr Emma Hobson), those who contributed to the design and dissemination of the survey (Professor Kate Tatton-Brown, Dr Kay Metcalfe, Dr Jennifer Campbell, Dr Joanna Jarvis, Dr Alex Murray) and CGS President (Professor Sarah Smithson). Thank you to all clinical leads who submitted data.

[4] Royal College of Physicians. Consultant physicians working with patients, revised 5th edition (online update). London: RCP, 2013. p.63

[5] England population mid-year estimate June 2021. https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates

[6] https://www.england.nhs.uk/genomics/nhs-genomic-med-service/

[7] Ibid