

HEE Workforce Planning 2014/15 – Call for Evidence

To submit your evidence please complete this form. Please make your submissions relevant to the categories provided in the boxes provided. We have categorised the known drivers of demand and supply under the following headings, and believe this to be a comprehensive description of the variable involved.

You can provide extracts of reports into the free text boxes below, or submit a whole report with this form by clicking on the email at the bottom of this form. Please mark clearly in the email which of the below categories the report/evidence relates to, including any relevant page numbers. Where an extract is provided, please reference the source.

Please use Part 3 to submit any information/evidence that does not fit the below categories. You can also leave any comments/observations in the free text box.

Before completing the form below please submit your contact details here:

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Form submission:

Once completed please submit the form via email to hee.workforceplanning1@nhs.net making sure all supporting documents are also attached to the email.

Please make the subject of the email: HEE Workforce Planning 2014/15 Call for Evidence-[Insert your organisation's name]

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The information you send us may be made available to wider partners, referred to in future published workforce returns or other reports and may be stored on our internal evidence database.

Any information contained in your response may be subject to publication or disclosure if requested under the Freedom of Information Act 2000. By providing personal information for this review it is understood that you consent to its disclosure and publication. If this is not the case, you should limit any personal information provided or remove it completely.

If you want the information in your response to be kept within HEE's executive processes, you should make this clear in your submission, although we cannot guarantee to be able to do this.

PART 1 – Future Service and Workforce Models

1. Drivers of Future Service Demand

- Needs identified by patients and the public
- Activity and epidemiology
- Quality. Innovation, prevention and productivity
- Funding
- Other

2. Future Service Models

3. Future Workforce Models

- Associated knowledge and skills – and assessments of the supply and demand position*
- Associated values and behaviours – and assessments as above*
- Workforce structure, team structure, skill mix, new roles.
- Workforce performance and productivity

*NB: – this may include views on the efficacy and quality of education processes in equipping staff with these skills, knowledge, values and behaviours.

There is a current undersupply of Clinical Pharmacology & Therapeutics (CPT) consultants as demonstrated in Part 2 of this consultation. **There is also a need to significantly increase CPT consultant numbers within the next 10 years to meet the future demands of the NHS.**

CPT consultants meeting future workforce demand

1. Care provision (needs identified by patients and the public)

Most clinical pharmacologists are dual accredited in CPT and General Medicine. As made clear in both the Future Hospital Commission ^[1] and Shape of Training Review ^[2] there is a need to increase the emphasis on **generalist services in the NHS**. CPT consultants are well placed to provide such care, and are often part of the acute on-call rota. In addition to this, CPT consultants' specialist knowledge is crucial to patient safety. In England, reducing the incidence of medication errors has been incorporated as a key improvement area within Domain 5 of the NHS Outcomes Framework. ^[3] CPT consultants are specialists in safe and effective medicines use and therefore can work with specialist colleagues on the safe and

effective use of medicines, and contribute to **reducing errors**.

CPT consultants can provide **continuing care** for patients with long-term conditions where polypharmacy predisposes them to drug-drug interactions and adverse drug reactions (ADRs). ADRs place a significant burden on the NHS – it is estimated that ADR-related admissions and ADRs during hospitalisation can lead to bed days equivalent to the occupancy of ten 800 bed hospitals at any one time with an annual cost in excess of £637million. ^[4] The King's Fund has highlighted the extent of polypharmacy in primary care, secondary care and care homes and has called for the responsibilities of clinical pharmacologists supervising complicated drug treatments to be enhanced. ^[5] It is likely that the need for this expertise will continue to grow as the population ages and the prevalence of complex long-term conditions and co-morbidities increases: the number of older people with a long-term illness or disability will increase from 4 million to 6 million by 2030. ^[6] Clearly, therefore there is a strong future demand for the expertise of CPT consultants.

Reducing hospital admissions by **moving the care of people with (and at risk of developing) long-term conditions into the community is an increasing priority for both patients and the NHS**. Clinical pharmacologists play a key role in bridging the gap between primary and secondary care, and are well positioned to oversee transitions and ensure that drug therapy, adverse reactions, drug interactions, and evidence of efficacy are monitored effectively. ^[7] In primary care, clinical pharmacologists may also be involved in community-based medicines use reviews and the provision of hypertension or vascular risk clinics. ^[8] This role will become increasingly important as the proportion of care provided in the community increases.

2. Toxicology (needs identified by patients and the public)

Poisoning is one of the most common causes of hospital admissions. The number of admissions to A&E departments with suspected poisoning in England has increased from 127, 240 in 2009/10 to 153, 621 in 2012/13. ^[9] A substantial proportion of all poisoning cases relate to the use of prescribed medicines, therefore CPT consultants, with expertise in clinical toxicology, are well placed to lead **specialist poison centres** and advise clinicians from other disciplines on treatments. ^[10] This contributes to NHS cost-effectiveness by preventing avoidable hospital admissions, reducing unnecessary investigations and treatments, and facilitating shorter hospital stays for those who are admitted. The **improvement to patient outcomes and cost-savings to the NHS are estimated to be**

substantial. ^[11]

3. Medicines policy and management (quality and funding)

The NHS is under significant financial pressure so there is a need to **ensure clinical and cost-effective use of medicines**. Medicines expenditure currently accounts for 10% of the NHS budget and is predicted to continue to grow. ^[12,13] The mission of the specialty is to improve the care of patients by promoting safe and effective use of medicines and to evaluate and introduce new therapeutics. CPT consultants contribute to the NHS clinical service at a local and national level.

At a local level this may include:

- Leading a drugs and therapeutics committee
- Advising on non-medical prescribing policy
- Developing and maintaining a drug formulary
- Assessing new products
- Creating prescribing guidelines
- Reviewing adverse drug reaction events
- Promoting evidence-based therapeutics
- Leading a 'medicines' information service' for local prescribers, with the support of a clinical pharmacist. ^[14]

CPT consultants also play leading roles at national level in holding key positions in bodies such as: National Institute for Health and Care Excellence (NICE), the Medicines and Healthcare products Regulatory Agency (MHRA), the Commission on Human Medicines (CHM), the joint formulary committees that oversee publication of the British National Formulary (BNF) and the BNF for children (BNFC), and adverse drug reaction monitoring

(pharmacovigilance) schemes.

4. Education and training (quality)

CPT consultants report spending 10% of their time on **teaching medical students** the basic principles of clinical pharmacology and practical therapeutics, as well as teaching junior doctors and other healthcare professionals. ^[15]

A report for the GMC published in 2008, found that medical graduates demonstrated ‘under-preparedness for prescribing’. ^[16] In response, BPS and MSC have piloted the Prescribing Safety Assessment ^[17] to allow medical students to demonstrate their competencies in relation to safe and effective use of medicines. CPT consultants have been crucial to the development of this Assessment.

In terms of the quality of care in the future NHS – CPT consultants play an important role in training future prescribers, and in **creating a better skilled workforce**.

5. Working with industry

Clinical pharmacologists are at the centre of the drug development process and are essential for the **continued success of the UK’s life sciences industry**. Cultivating this specialist knowledge in the life sciences industry will be vital in improving the success rate of early phase trials, contributing both to the economic success of the industry and, in the longer term, the availability of new medicines to treat patients.

6. Experimental Medicine (innovation)

CPT consultants can **trained in research activity** and can facilitate other clinicians taking part in research within the NHS. The Health & Social Care Bill ^[18] has made it a duty for the Secretary of State to promote research, and a parallel duty is in place for the Board and clinical commissioning groups. CPT consultants are vital to increasing the volume of early stage clinical trials in the UK. CPT consultants’ expertise allows them to lead in establishing NHS clinical research facilities, developing standard operating procedures, responding to regulation and engaging with colleagues in industry.

PART 2 – Forecast of future supply and demand – volumes

If you want to input evidence into the forecasting of future numbers you can report your perspectives on either;

- i) the high level indicators; supply, demand, and any forecast under / over supply, or if available - Part 2.1
- ii) the more granular components of these three components e.g. retirement rates, output from education relative to attrition – Part 2.2

2.1 Summary forecasts

- Forecast Workforce Demand
- Forecast Workforce Supply and Turnover
- Forecast Under / Over Supply

The Royal College of Physicians of London has recommended that there should be a whole-time equivalent of 440 CPT consultants, one in each large district general hospital serving a population of 250,000 and one per 180 medical students in training. ^[19] In 2012, there were only 77 CPT consultants. ^[20] While 440 consultants is an aspiration, an increase to 150 whole-time equivalents is achievable in the next decade. ^[22]

CPT consultants report spending a third of their time (over 16 hours per week) on clinical work and demand for their services has increased significantly in England and Wales over the last decade. ^[23] In England the number of outpatient CPT appointments increased from almost 28,000 in 2003/04 to almost 49,000 in 2012/13. ^[24] This information is in fact likely to underestimate the amount of clinical work undertaken by CPT consultants as the activity is often attributed to GIM. ^[25] The existing workforce is substantially overburdened. CPT consultants are known to contribute to a higher proportion of supporting professional activity to the NHS than any other specialty, and conduct significantly more clinical work than they are contracted for. ^[26]

35% of the current CPT consultant workforce is expected to retire in the next decade. ^[27] In 2013 there were only 34 registrars (compared to 54 in 2010). ^[28] There is a risk of a provision gap due to difficulties in replacing current expertise.

There is an increasing demand for CPT consultants in the NHS, but there is also an undersupply of consultant and registrar places. The increase in demand is driven by a number of factors:

- Increasing need to contain the medicines budget by assessing the clinical and cost-effectiveness of new and expensive drugs
- The rising number of acute general medical admissions
- The growing number of medical students and the associated increased in teaching and training responsibility for consultants
- The reduction in junior doctors' working hours and associated increase in the consultant workload
- Limited availability of clinicians running specialty services to provide acute medical cover.
- To provide advice to the wider NHS through regulatory bodies/committees such as the Commission on Human Medicine, MHRA, NICE and ACMD.
- To increase interactions between the NHS and Industry partners so that our patients are getting innovative treatments as soon as possible (improving health), while at the same time we are creating wealth. ^[29]

To summarise, in addition to the need to increase registrar and consultant posts to meet the strategic needs of the NHS. There is a current, and pressing, need to increase CPT consultant numbers in the very short term in order to meet the current levels of demand.

2.2 Detailed / Component forecasts

Forecast Workforce Demand

- Service Demand drivers
- Change in use of temporary staff
- Addressing historic vacancies
- Skill Mix / New Roles
- Workforce Productivity



Forecast Supply from HEE commissioned education

- Assumed training levels
- Under recruitment
- Attrition
- Employment on completion of training

In 2014, there were only 5 NTN (substantive national training number) posts and 1 LAT (locum appointment for training) posts nationwide. ^[30]

In 2011 there were 34 applicants for 10 ST3 positions ^[31]

As noted, there has been a decline from 2009 – 2013 in the total number of CPT registrars, which is a worrying trend given: the current demand, the threat of a gap in provision due to retirements, and the need to attract the best into the specialty. A specialty with few positions or less visible career progression will result in fewer applicants, irrespective of the value of the current consultants. Many trainees are also deterred from applying for CPT positions because they have not seen an expansion in CPT Consultant posts – a clear career pathway with adequate numbers of CPT Consultant posts would start attracting some of the brightest trainees into this specialty.

Forecast Supply – Other Supply and Turnover

- From other education supply
- To/from the devolved administrations
- To/from private and LA health and social care employers
- To/from the international labour market
- To/from other sectors / career breaks and 'return to practice'
- To/from other professions (e.g. to HV or to management)
- Increased / decreased participation rates (more or less part time working)
- Retirement

A major upcoming issue is the rate of retirement and the age of the current workforce with 35% of the workforce due to retire in the next ten years and the risk here of loss of knowledge and experience. Emphasising the need to bring through more specialists to replace these individuals as soon as possible.

PART 3 – General / Other Evidence not included elsewhere

Our key recommendations are:

- 1) Ensure that NHS organisations across the UK have equitable access to CPT consultants' expertise
- 2) Commit to increase the size of the CPT consultant workforce to 150 whole-time equivalents by 2025 , accompanied by an increase in the number of specialist registrar training posts
- 3) Develop a joint strategy to achieve this increase, including the provision of enhanced undergraduate and postgraduate education and training
- 4) Provide a clear career route for clinical pharmacologists, with associated career support and development

The British Pharmacological Society is working to produce a full report demonstrating the value of CPT to the NHS. We will share this report with HEE, and would be happy to contribute further input to the workforce process.

References

1. Future Hospital Commission, *Future hospital: Caring for medical patients*, 2013. Available at <https://www.rcplondon.ac.uk/sites/default/files/future-hospital-commission-report.pdf>
2. Shape of Training Review, *Securing the future of excellent patient care*, 2013. Available at http://www.shapeoftraining.co.uk/static/documents/content/Shape_of_training_FINAL_Report.pdf_53977887.pdf
3. Department of Health. *The NHS outcomes framework 2014/15*, 2013. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/256456/NHS_outcomes.pdf
4. Davies EC, Green CF, Taylor S, Williamson PR, Mottram DR, Piromohamed M. 'Adverse drug reactions in hospital in-patients: A prospective analysis of 3695 patient episodes'. *PLoS One* 2009; 4:e4439
5. The King's Fund. *Polypharmacy and medicines optimisation: Making it safe and sound*. 2013. Available at http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/polypharmacy-and-medicines-optimisation-kingsfund-nov13.pdf.
6. Age UK, *Later life in the United Kingdom*, 2014. Available at http://www.ageuk.org.uk/Documents/EN-GB/Factsheets/Later_Life_UK_factsheet.pdf?dtrk=true
7. Reynolds JM and Barker C. The roles of clinical pharmacologists in formulating medicines policy locally. *Br J Clin Pharmacol* 2012; 73:6, 931-933
8. Royal College of Physicians of London. *Consultant physicians working with patients: The duties, responsibilities, and practice of physicians in medicine* 2013. Available at http://www.rcplondon.ac.uk/sites/default/files/consultant_physicians_revised_5th_ed_full_text_final.pdf
9. Health and Social Care Information Centre. Data on Accident and Emergency attendances from 2009/10 – 2012/13. Available at <http://www.hscic.gov.uk/home>
10. Simon H. L. et. al. Developing and delivering clinical toxicology in the UK National Health Service. *British Journal of Clinical Pharmacology* 2012; 73:6, 878-883
11. Simon H. L. et. al. Developing and delivering clinical toxicology in the UK National Health Service. *British Journal of Clinical Pharmacology* 2012; 73:6, 878-883
12. Office of Health Economics. *Guide to UK health and healthcare statistics* 2011. Available at <http://www.ohe.org/publications/article/ohe-guide-to-uk-health-and-health-care-statistics-2.cfm>.
13. ¹ Office of Health Economics. *Projecting expenditure on medicines in the NHS* 2013. Available at <http://www.ohe.org/publications/article/projecting-expenditure-on-medicines-in-the-nhs-128.cfm>.
14. Royal College of Physicians of London. *Clinical Pharmacology and Therapeutics*. Available at http://www.rcplondon.ac.uk/sites/default/files/clinical_pharmacology_and_therapeutics.pdf
15. Aronson JK. What do clinical pharmacologists do? A questionnaire survey of senior UK clinical pharmacologists. *Br J Clin Pharmacol* 2012; 73(2): 161-169
16. General Medical Council. *How prepared are medical graduates to begin practice? A comparison of three diverse UK medical schools*. 2008. Available at http://www.gmc-uk.org/FINAL_How_prepared_are_medical_graduates_to_begin_practice_September_08.pdf_29697834.pdf
17. Prescribing Safety Assessment. Available at <http://www.prescribe.ac.uk/psa/>
18. *Embedding research as a core function of the health service – the Health and Social Care Act*. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/138273/C8.-Research-270412.pdf
19. Royal College of Physicians of London. *Consultant physicians working with patients: The duties, responsibilities, and practice of physicians in medicine*. 2013. Available at

- http://www.rcplondon.ac.uk/sites/default/files/consultant_physicians_revised_5th_ed_full_text_final.pdf.
20. Federation of the Royal Colleges of Physicians. *Census of consultant physicians and medical registrars in the UK 2012: Full report*. 2014. Available at http://www.rcplondon.ac.uk/sites/default/files/2012_full_text_census_of_consultant_physicians_and_medical_registrars.pdf.
 21. Royal College of Physicians of London. *Clinical Pharmacology and Therapeutics*. Available at http://www.rcplondon.ac.uk/sites/default/files/clinical_pharmacology_and_therapeutics.pdf
 22. Royal College of Physicians of London. *Consultant physicians working with patients: The duties, responsibilities, and practice of physicians in medicine* 2013. Available at http://www.rcplondon.ac.uk/sites/default/files/consultant_physicians_revised_5th_ed_full_text_final.pdf
 23. Aronson JK. "What do clinical pharmacologists do? A questionnaire survey of senior UK clinical pharmacologists", *Br J Clin Pharmacol* 2012; 73(2): 161-169
 24. Health and Social Care Information Centre, Hospital outpatient activity data from 2003/04 – 2012/13. Available at <http://www.hscic.gov.uk>
 25. Centre for Workforce Intelligence. *Clinical pharmacology and therapeutics*. 2011. Available at <http://www.cfwl.org.uk/publications/clinical-pharmacology-and-therapeutics-cfwl-medical-fact-sheet-and-summary-sheet-august-2011/attachment.pdf>
 26. Federation of the Royal Colleges of Physicians. *Census of consultant physicians and medical registrars in the UK 2012: Full report* 2014. Available at http://www.rcplondon.ac.uk/sites/default/files/2012_full_text_census_of_consultant_physicians_and_medical_registrars.pdf.
 27. Federation of the Royal Colleges of Physicians. *Census of consultant physicians and medical registrars in the UK 2012: Full report* 2014. Available at http://www.rcplondon.ac.uk/sites/default/files/2012_full_text_census_of_consultant_physicians_and_medical_registrars.pdf.
 28. Federation of the Royal Colleges of Physicians. *Census of medical registrars in the UK: Data, figures, and tables R1a – R24e* 2014. Available at http://www.rcplondon.ac.uk/sites/default/files/census_of_medical_registrars_-_census_of_consultant_physicians_and_medical_registrars_in_the_uk_2012.pdf
 29. Royal College of Physicians of London. *Consultant physicians working with patients: The duties, responsibilities, and practice of physicians in medicine* 2013. Available at http://www.rcplondon.ac.uk/sites/default/files/consultant_physicians_revised_5th_ed_full_text_final.pdf
 30. Royal College of Physicians of London. ST3 recruitment information, available here: <http://www.st3recruitment.org.uk/dates-posts/post-numbers.html>
 31. Centre for Workforce Intelligence. *Clinical pharmacology and therapeutics*. 2011. Available at <http://www.cfwl.org.uk/publications/clinical-pharmacology-and-therapeutics-cfwl-medical-fact-sheet-and-summary-sheet-august-2011/attachment.pdf>