British Cardiovascular Society

British Cardiovascular Society: Guidance on appropriate workload for consultant cardiologists

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Introduction:

The British Cardiovascular Society provided extensive and detailed guidance in 2005 on the overall workforce numbers required to provide comprehensive cardiac services in the United Kingdom.[1] This document provides guidance on what might represent a reasonable workload for individual consultant cardiologists. This guidance might be useful when planning the potential workload for new consultant cardiology posts, for annual job planning by individual cardiologists, and as a basis for review when undertaking annual appraisal of individual workload, as well as for personal revalidation. Whilst working patterns and individual workloads may differ between cardiologists, this guidance could be useful as a baseline for workload planning of and by the cardiology workforce.

Job planning:

The 4th Edition of Consultant Physicians Working for Patients published by the Royal College of Physicians in 2008 included details of a typical weekly job plan of consultant cardiologists:[2]

Specimen weekly timetable:

Direct clinical care:	PAs:
• Inpatients (coronary care unit, ward rounds, referrals)	1.5–2
• Outpatients	2
• Laboratory work or other specialised clinical work	2–3
• Meetings of the MDT (PCI, cardiac surgery, imaging, arrhythmia, etc)	0.5
• Clinical administration	1
• On call	0.5–1
Total for direct clinical care	7.5–9.5
Supporting clinical care:	
• Audit, clinical governance, appraisal & revalidation, teaching, assessment of trainees, continuous medical education, continuous professional development, research, advisory appointments committees, etc	2.5
Additional NHS responsibilities:	
• Eg management roles or responsibilities	
External duties:	
• Eg Royal College or national NHS roles or responsibilities	
Total PAs:	**10.0-12.0**

[1] Cardiac workforce requirements in the UK. David Hackett for the British Cardiovasular Society, 2005. http://www.bcs.com/doclibrary/bcs/BCS_cardiac_workforce_2005.pdf
[2] Consultant physicians working with patients. 4th edition. London: Royal College of Physicians, 2008. ISBN: 9781860163258. http://www.rcplondon.ac.uk/pubs/books/CPWP/ConsPhys2.cardio.pdf

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The new consultant contract in England sets out that in a 10 PA job plan there will typically be an average of 7.5 PAs of direct clinical care (DCC) and 2.5 PAs for supporting professional activities (SPA).[3] There is flexibility for agreement between a consultant and their employer to agree a different balance of activities. For example, if a consultant has additional NHS responsibilities to carry out, such as being a clinical governance lead, they may reduce their DCC activities to fit this additional work into a 10 PA job. Alternatively, a consultant may undertake extra PAs in addition to the standard 10 per week if agreed with their employer.

It is reported that consultant cardiologists in England hold contracts (under the new NHS consultant contract of 2003) to work for the NHS for an average of 11 programmed activities (PAs) per week.[4]

It is good practice to specifically state in individual job plans whether each activity of Direct Clinical Care is prospectively covered by colleagues or locums when on leave, or is expected to be cancelled. Usually, arrangements for on-call rotas, in-patient care and emergency care will need to be prospectively covered. Depending on elective demand and available capacity, planned out-patient clinics or elective laboratory work activities may be cancelled, or covered by colleagues or locums. If elective work during leave is required by employers to be prospectively covered by colleagues, this should be specified in individual job plans, and the time required and remuneration acknowledged.

Country	**England**[3]	**Wales**[5]	**Scotland**[6]	**N Ireland**[7]
Annual leave	30 – 32 days	30 days	30 days	30 – 34 days
Public holidays	8 days	8 days	9 days	10 days
Professional & study leave	10 days	10 days	10 days	10 days
Total leave	48 – 50 days	48 days	49 days	50 – 54 days
Usual working hours	40h per week	37.5h per week	40h per week	40h per week
Sessional or PA hours	4h per PA	3.75h average	4h per PA	4h per PA
Direct clinical care	7.5 PAs/week	7 sessions/week	7.5 PAs/week	7.5 PAs/week

Some organisations have introduced an annualised workload equivalent for the number of out-patient clinics or elective laboratory sessions that are expected from an individual consultant cardiologist. The working year would usually comprise 251 – 253 working days (261 weekdays, less 8 public holidays in England, 9 in Scotland and 10 in Northern Ireland). It must be remembered that consultants have paid leave entitlements of 40-42 days in England (30-32 days of annual leave, 8 public holidays and an average of 10 days of professional and study leave), a total of 48-50 days per year. So the actual working year would be 201-205 working days out of a total of 253 possible working days. The equivalent actual working year would be 40-41 weeks out of 52 working weeks of the year. Therefore, an annualised job plan would actually entail 40-41 weeks of work before consideration of prospective cover.

[3] NHS Employers (England). Consultant Model Contract (2003) version 4 (2008). http://www.nhsemployers.org/SiteCollectionDocuments/Model_contract_010408_aw.doc
[4] Royal College of Physicians. Medical workforce unit survey 2006. London: Royal College of Physicians, 2006.
[5] Amendment to the National Consultant Contract in Wales (2004) Welsh Assembly Government: NHS Wales. http://www.wales.nhs.uk/sites3/docopen.cfm?orgid=433&id=32473&A982CAE1-1143-E756-5CCD072E411B6D60
[6] NHS Scotland: New Consultant Contract (2004). http://www.sehd.scot.nhs.uk/pcs/PCS2004(DD)02.pdf
[7] Department of Health, Social Services and Public Safety, Northern Ireland: Consultants' Contract and Consultant Workforce Reform. http://www.dhsspsni.gov.uk/regional-guidance-on-job-planning-for-medical-and-dental-consultants-in-northern-ireland.pdf

Direct Clinical Care:

Guidance on workload during each Programmed Activity of 4 hours of Direct Clinical Care:

Activity	**Median duration of all types of this procedure (Includes time for patient to come in to & leave examination room or laboratory)**	**Number of patients or procedures per PA of 4 hours**
Outpatients and inpatients:		
General cardiology outpatients[8] • Either new outpts (New) • Or follow-up outpts (F/U) Weighted median (New:F/U ratio of 1:1.4 in 2008-09 in Eng[9])	• 30 mins New • 20 mins F/U	• Either 8 New • Or 12 F/U pts 4 New pts + 6 F/U pts Additional time is required for clinic administration such as dictating letters, completing electronic templates, & arranging investigations & treatments
General cardiology inpatients[8] • Either new inpts (New) • Or review inpts (Review) Weighted median (if New:R/I ratio is 1:1)	• 15 mins New • 10 mins Review	• Either 16 New pts • Or 24 Review pts 9 New pts And 10 R/I pts
Rapid Access Chest Pain Clinics	60 mins Includes both clinical assessment and Exercise ECG testing by clinician 30 mins Consultation and examination, and reporting and discussion of result; with exercise ECG testing performed separately by physiologists, nurses or junior medical staff.	4 patients 8 patients
Imaging procedures:		
ECHO • Transthoracic outpatient (Includes reporting) • Transthoracic inpatient • Transoesophageal • Stress ECHO • Intra-operative ECHO	• 30 mins • 45 mins • 60 mins • 90 mins • 180 mins	• 8 pts • 5 pts • 4 pts • 2-3 pts • 1 pts
Myocardial Perfusion Scintigraphy	45 mins	5 patients

[8] OPD workload per consultant per clinic: 5-6 new patients or 12-15 review follow-up patients in Consultant Physicians Working for Patients. In-patient workload 15 minutes required per patient. The Duties, Responsibilities and Practice of Physicians. 2nd edition, 2001. Royal College of Physicians, London.
[9] HES data: http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=890

Activity	Median duration of all types of this procedure (Includes time for patient to come in to & leave examination room or laboratory)	Number of patients or procedures per PA of 4 hours
Coronary angiography and PCI		
Diagnostic cardiac catheterisation and angiography	40 mins	6 cases Assuming that consultation with the patient and discussion of results is done at a separate time. 4 cases If consultation with the patient and discussion of results is done at the same time.
Percutaneous Coronary Intervention	80 mins	3 cases
Devices and electro-physiology:		
Pacemaker implants: • Dual chamber (80%) • Single chamber (20%) • Reoperations (4%) • Generator change (25%) Weighted median	 • 90 mins • 60 mins • 80 mins • 60 mins 80 mins	 • 2-3 cases • 4 cases • 3 cases • 3 cases 3 cases
Implantable loop recorders	30 mins	8 cases
ICD implants: • New implants • Revisions (4%) • ICD generator change (25%) Weighted median	 • 120 mins • 120 mins • 90 mins 110 mins	 • 2 cases • 2 cases • 2 cases 2 cases
CRT implants: • New implants • Revisions (10%) • ICD generator change (25%) Weighted median	 • 210 mins • 120 mins • 90 mins 180 mins	 • 1case • 2 cases • 2 cases 1 case
Diagnostic & therapeutic cardiac electrophysiological procedures	210 mins	1 case

It is recommended that all *general* out-patient clinics in a cardiology department should usually follow a similar template of duration of appointment times for new patients, and for follow-up cases. But some specialist out-patient clinics will require longer appointment times, such as paediatric clinics, adult congenital heart disease clinics, and various others. Additional time over and above that used for patient contact in the out-patient clinic is required for clinic administration such as dictating letters, completing electronic templates, & arranging relevant investigations & treatments; it would be expected that this would require about one hour of time for a 4 hour out-patient clinic. This time should be defined, either as part of the clinic timing within the programmed activity, or specifically and separately from it, in addition to time required for general clinical administration (see below).

Many post-discharge follow-up appointments after admission & discharge from another specialty are new-patient appointments to the clinician in the out-patient clinic (although administratively booked and counted as a “follow-up”); these appointments should be regarded as new-patients in their timings. With restriction of out-patient follow-up appointments in cardiology to specific defined conditions, many increasingly involve review & discussion of complex conditions which take at least as long as a new-patient consultation. Furthermore, some conditions require long-term cardiology

monitoring and follow-up, and should not be included in the general new to follow-up out-patient ratios specified by some commissioners of services. For example, pacemaker and device follow-up, some structural and congenital heart disease, severe valve disease should have their own specific pathways of care commissioned.

These indicative workloads are recommendations for consultant cardiologists, including cardiology in-patient workload, but not necessarily for in-patient cardiology consultations; allowances should be made for the time required to undertake consultations by cardiologists requested on in-patients not under their care. If there is also an acute medical component to the individual job plan, then allowance should be made for the time required for this workload as well.

For training procedures, the clinical workload should be reduced; it is recommended that workload should be reduced by approximately 25% for those programmed activities where training a trainee is undertaken.[1] Therefore when undertaken by trainees or when a trainee is being trained, the time required for these activities such as assessment of outpatients and inpatients, and for undertaking procedures, should be increased by approximately 25%.

Clinicians also require specific time for clinical administration directly related to patient care as part of their programmed activities of Direct Clinical Care. This time is required for administration of clinical referrals, reviews of medical records, clinical correspondence, reviewing, analysing and acting on clinical reports and results of investigations, multi-disciplinary and multi-professional meetings dealing with specific patients, dealing with enquiries from clinical colleagues, general practitioners as well as from patients and their families, clinical complaints, etc. This list is not exhaustive. Typically, one PA of Direct Clinical Care will be required for such clinical administration duties.

On-call arrangements:

The job plan should specify on-call arrangements. Where the consultant cardiologist is predictably on-call for Primary Percutaneous Coronary Intervention (PPCI) with the expectation of probably undertaking acute invasive procedures out-of-hours during that time, there should be specified arrangements for appropriate rest periods on the following day.

Supporting Professional Activities:

Supporting Professional Activities are required for essential activities of a clinician:

- Appraisal (including multi-source feedback from colleagues and patients)
- Revalidation – relicensing and recertification
- Continued Medical Education
- Continuing Professional Development
- Formal teaching of other staff
- Audits, including National Audits and quality improvement programs
- Organisational, departmental and personal Clinical Governance
- Reviews of complaints and critical incidents
- Education, teaching and training where part of agreed job plan
- Research and development where part of agreed job plan
- Job planning and appraisal
- Clinical management roles
- Service development
- General non-clinical administration, eg form-filling (travel expenses, leave, clinical excellence awards), management meetings, etc.

This list is not exhaustive.

All Supporting Professional Activities in a job plan, and the time required to undertake them, should be justified by individual consultant cardiologists.

England (2003):[3]
"Subject to the provisions for recognising emergency work arising from on-call rotas below, the schedule in your Job Plan will typically include an average of [7½] * Programmed Activities for Direct Clinical Care duties and[2½] * Programmed Activities for Supporting Professional Activities."

Wales (2004):[5]
"For a full time Consultant, there will typically be 7 sessions for 'direct clinical care' and 3 for 'supporting professional activities'."

Scotland (2004):[6]
"Unless otherwise agreed, a full-time consultant will devote 7.5 programmed activities per week to direct clinical care, and 2.5 programmed activities to supporting professional activities."

Northern Ireland (2004):[7]
"SPAs will typically average 2.5 PAs across the job plan year for each consultant. The schedule in a consultant's job plan will typically include an average of 7.5 PAs for DCC and 2.5 PAs for SPA."

The Academy of Medical Royal Colleges states that SPAs should not include major additional NHS responsibilities such as those of a Medical Director or Clinical Director, training programme director or Postgraduate Dean.[10] SPAs should also not include agreed external duties such as acting as an examiner, peer assessor, Royal College/Department of Health/General Medical Council work, etc.

The Royal College of Physicians states that the balance of 7½ PAs of Direct Clinical Care and 2½ PAs for Supporting Professional Activities, while the 'norm', will vary according to circumstances. Only in the most exceptional circumstances could the College envisage the important supporting professional activities (that include audit, teaching, research, appraisal, continuing professional development, clinical governance and service development) being contained within less than 2½ programmed sessions, but frequently it will take more.[11] The British Cardiovascular Society agrees that there should be an average of at least 2.5 SPAs per consultant cardiologist in a cardiology department. In this context it is important to note that those with heavy managerial workloads should regard their managerial work as 'additional NHS duties', not as SPAs.

[10] Academy of Medical Royal Colleges. Advice on Supporting Professional Activities in consultant job planning (2010). http://www.aomrc.org.uk/aomrc/admin/news/docs/Academy%20SPA080210.pdf
[11] Guidance on the new consultant contract, and its implications for Job Plans (Programmed Activities). http://www.rcplondon.ac.uk/professional/consultantcontract/index.asp

New job plans:
There appears to be a trend for employing NHS Trusts to reduce the SPA component of job plans. This has been reported specifically in job descriptions for new and replacement consultant cardiologist posts. The British Cardiovascular Society believes and advises that the minimum acceptable number of Supporting Professional Activities for a full time consultant cardiologist post should be 2.0. If any new or replacement consultant cardiologist posts are proposed with less than 2.0 SPAs specified in the job description, the Network Service Advisors of the British Cardiovascular Society should give very serious consideration whether to approve them.

Before the introduction of medical revalidation, some Colleges have estimated the minimum time required solely for a consultant to keep up to date might be 1 SPA or 1.5 SPAs. This does not include the agreed annual study leave allowance. The Academy of Medical Royal Colleges proposes that the minimum number of SPAs allowed for this purpose should be 1.5 per week, not including annual study leave.[10] However, a contract that includes only 1.5 SPAs and 8.5 Programmed Activities would have no time at all for other SPA work such as teaching, training, research, service development, clinical governance, contribution to management etc. It is unthinkable that a consultant could be employed with absolutely no involvement in management, if only attendance at departmental meetings, reading and responding to messages from management etc. Similarly it is difficult to envisage a post that never involves any teaching or training of any sort; most NHS employers receive funding for undergraduate and postgraduate teaching and should be able to explain how this is used. A post that does not permit any involvement in service development or clinical governance would be contrary to our concept of the consultant role. From this it follows that 1.5 SPAs in total would be inadequate and that the original recommendation in the Consultant Contract of 2.5 SPAs as typical seems reasonable.[10]

The Academy of Medical Royal Colleges recommends that new consultant posts should continue to be advertised with a job plan which typically includes 2.5 SPAs, with an expectation of annual review.[10] If a consultant is employed with 2 or fewer SPAs, any problems with revalidation should lead to an urgent review of the SPA allocation.

Part-time consultants:
It is recognised that part-time consultants need to devote proportionately more of their time to supporting professional activities, for example due to the need to participate in continuing professional development to the same extent as their full-time colleagues.

Amendment to the National Consultant Contract in Wales (2004) sets out the arrangement for allocation of Support Activities for part-time consultants in Wales:[5]

Total Sessions	Direct Patient Care	Support Activities
10	7	3
9	6	3
8	5	3
7	5	2
6	4	2
5	3	2
4	2	2
3	2	1

The new consultant contract in Scotland (2004) sets out the arrangement for allocation of SPAs for part-time consultants in Scotalnd:[6]

Total Number of programmed activities	Number of SPAs
2 or less	0.5
2.5 – 3.5	1
4 – 5.5	1.5
6 – 7.5	2
8 or more	2.5

Departmental SPAs:
Some Trusts apply departmental SPAs for defined activities, such as teaching and training. For example, the employing trust might define the amount of time and therefore the number of SPAs required for formal teaching and training of junior medical staff. But not all consultants might undertake these formal teaching and training activities; and so the total number of SPAs for these duties would be agreed to be apportioned to specific consultants. The same principles could apply to any general departmental responsibilities (rather than for individual responsibilities such as Continuous Professional Development).

External duties:
These duties are defined in the consultant contract as those which might include reasonable quantities of work for the Royal Colleges and other national bodies e.g. the Department of Health or the General Medical Council in the interests of the wider NHS.
When consultants propose to undertake regular External Duties as part of their Job Plan, they should notify their clinical manager in advance; scheduling of such duties will be by agreement with clinical management. The British Cardiovascular Society would expect that individuals seeking to undertake external duties for the Society would discuss these potential roles with their Medical Director of their organisation and with their colleagues, and obtain support in advance. In cases where local agreement cannot be reached, then it is recommended that individual cardiologists should approach the President of the British Cardiovascular Society to discuss potential roles with the Medical Director of the Trust. It is hoped that the Society and Trusts will be able to continue their close working relationship in the future for the benefit of patients, the wider NHS and both organisations. Any informal discussion cannot interfere with the agreed disputes process. If there is still no resolution, the issue should be raised with the Director of Public Health at the Strategic Health Authority.

Time required for formal Training Roles:

Consultant cardiologists with formal specialty training roles require additional defined time in their Supporting Professional Activities to undertake these non-clinical responsibilities.[12] Time will also be needed for trainers, clinical supervisors and educational supervisors to attend relevant courses to document their continuing competence and develop new skills.

The Postgraduate Medical Education and Training Board Generic Standards for Training indicate that trainers must be supported in their role by a postgraduate medical education team, and have a suitable job plan with an appropriate workload and time to develop trainees:[13]

- Organisations providing postgraduate medical education must ensure that trainers have adequate support and resources to undertake their training role;
- Deaneries must have structures and processes to support and develop trainers;
- Trainers with additional educational roles must be selected and demonstrate ability as an effective trainer.

Educational Supervisor:
Each specialty trainee has a formal Educational Supervisor who is accountable for the overall supervision and management of a specified trainee's educational progress during a placement or series of placements. The Educational Supervisor is also responsible for the trainee's Educational Agreement. The Educational Supervisor is required to undertake regular formative appraisals, provide support to help the trainee develop their learning portfolio, and ensure that appropriate workplace assessments take place. Educational Supervisors require adequate time to undertake and perform these roles.

Clinical Supervisor:
Each trainee has a formal Clinical Supervisor who is responsible for overseeing a specified trainee's clinical work and providing constructive feedback during a training placement. The roles of the Clinical

[12] A Reference Guide for Postgraduate Specialty Training in the UK ("The Gold Guide"). 3rd Ed June 2009. Modernising Medical Careers. http://www.mmc.nhs.uk/pdf/Gold%20Guide%20--2009.pdf
[13] Postgraduate Medical Education and Training Board: Generic standards for training (Version 1.1, September 2009) http://www.pmetb.org.uk/fileadmin/user/Standards_Requirements/PMETB_Gst_Sept2009.pdf

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Supervisor include direct observation of the trainees clinical work, provide feedback, provide regular written feedback to the Educational Supervisor, to perform workplace based assessments, and to ensure that supervision of the trainee occurs at all times and is appropriate to the trainee's level, confidence and competence. These roles will require formal induction meetings, end of placement meetings, completion of assessments, providing feedback, producing reports and communicating with the Educational Supervisor. Clinical Supervisors require adequate time to undertake and perform these roles.

Many NHS deaneries and trusts have provided guidance on the amount of time required in Supporting Professional Activities provided for Educational Supervisors and Clinical Supervisors to undertake these roles. Typically the time provided for each of these roles amounts to 0.25 – 0.5 PAs of Supporting Professional Activities per week per trainee.