



British Cardiovascular Society

Revalidation of cardiologists: Standards and Content of a portfolio for revalidation

David Hackett
Vice-President, Clinical Standards Division
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Introduction:

The British Cardiovascular Society has extensively reviewed various potential standards and ways and means for cardiologists to undertake revalidation in the United Kingdom. Initial proposals were drafted in November 2007. Extensive discussions about Revalidation of Cardiologists have taken place at BCS Executive meetings since December 2007, at all three BCS Council meetings in 2008, and at BCS Board meetings in May and October 2008. A BCS Workshop was held in July 2008 to discuss principles and possible mechanisms for Revalidation of Cardiologist. Revised proposals were produced in February 2008 and again in May 2008, and final recommendations published in November 2008. The membership of BCS was formally consulted in Nov-Dec 2008: http://www.bcs.com/pages/page_about.asp?pageID=523 Formal feedback from this consultation indicated general agreement that:

- Revalidation should include the three educational domains of a cardiologist;
- There should be formative knowledge assessment based on the cardiology curriculum;
- For general and acute cardiologists, there should be a formative assessment of a breadth of general cardiology across the cardiology curriculum;
- There should be a formative assessment of specific knowledge in those who undertake exclusive subspecialty practice;
- Use of audit data (with patient anonymity) or evidence from local quality improvement program, should be submitted.

A further BCS Workshop in April 2009 agreed the potential content of a portfolio for Revalidation of Cardiologists, and these proposals were discussed at BCS Council in May 2009. This document contains the proposed details of the standards and content of such a portfolio. It is intended that this content can be easily and continuously updated on a web-based electronic system, which would also provide the content for annual appraisal, and revalidation every five years.

Principles for Revalidation of Cardiologists in the United Kingdom:

The GMC has stated that the process of revalidation for doctors should be supportive rather than punitive, there should be patient & carer involvement, the result should be to raise standards, and remediation and rehabilitation should be included. Revalidation should be a continuing process, not a 5-yearly event, should ensure consistent standards across practices, be based on evidence from local practice, and depend on the quality of appraisal. Furthermore, the GMC has agreed that the standards for remaining on the Specialist Register and the GP Register will be the same as the standards currently required for entry to those registers. However, the range of competencies and evidence to be demonstrated for recertification will relate to the doctor's actual practice, rather than their original training.

There has been general agreement throughout BCS discussions that cardiologists should undertake revalidation in the three domains of knowledge, skills and professional behaviour. Some advantages of this educational (rather than regulatory) approach adopted by the BCS as the basis for revalidation,



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include a foundation based on the core and subspecialty curriculum in cardiology, the linking of knowledge based assessment with assessment of competency in procedures, and the linking of demonstration of good clinical practice with a personal job plan.

The three domains for Revalidation of Cardiologists, related to the personal job plan, include:

1. Knowledge
2. Skills
3. Professional

If a cardiologist undertakes general adult cardiology, then demonstration of general knowledge base in cardiology would be required (see below). If a cardiologist undertook exclusively sub-specialist practice, then demonstration of the relevant sub-specialty knowledge base would be required. If a cardiologist undertook no procedures, then there would be no need to demonstrate competency in skills. The fundamental principle should be the alignment of demonstration of general or specific knowledge and skills according to the job plan. This will allow credentialing of individual clinicians in procedures, and in healthcare organisations, related to their practice.

There should be electronic web-based systems for individual cardiologists to easily record and download all the data required for their revalidation. Obviously such systems should be as simple as possible, yet maintain the appropriate security and confidentiality. Obviously other individual parties such as the appraiser, and the Local Responsible Officer, will require read-only access to review the revalidation portfolio, on the express and specific electronic permission of the clinician. In certain cases, other individual parties might require read-only access to review the revalidation portfolio, such as the Clinical Director, the BCS-RCP Network Service Advisor, the GMC regional affiliates, or even the a national GMC officer. Again, this should only be allowed on the express and specific electronic permission of the clinician. It is intended that such electronic web-based systems will be developed for cardiologists to use for their appraisals and revalidation.

1. Knowledge domain

BCS proposes that general cardiologists undertaking broad-based clinical duties such as unselected acute on-call cardiology, general in-patient cardiology ward rounds or unselected cardiology out-patient clinics, should demonstrate that they have maintained a broad general knowledge of cardiology.

Such a broad range of general knowledge of cardiology would equate to the knowledge contained in the 38 chapters of the European Society of Cardiology Textbook of Cardiovascular Medicine: <http://www.escardio.org/education/store/books/Pages/textbook.aspx>. This textbook follows the learning framework defined by the ESC Core Syllabus in Cardiovascular Medicine which is broadly similar to the core cardiology component of the UK Higher Specialist Training Curriculum for Cardiovascular Medicine. The ESC Textbook has the advantage of being supported by a variety of multimedia resources. In particular there is an automated on-line MCQ assessment at the end of each chapter; the minimum pass mark is 60%, but tests may be taken again if this is not achieved. Over the five year revalidation period it would be appropriate to demonstrate maintenance of knowledge across 25 of the 38 chapters (i.e. 5 per year).

For those cardiologists that undertake exclusively subspecialty practice according to their job plan, then they should demonstrate specific subspecialty knowledge from the relevant chapters of the European Society of Cardiology Textbook of Cardiovascular Medicine.

Alternatively, cardiologists could demonstrate knowledge from other sources accredited by the European Board for Accreditation in Cardiology (EBAC). EBAC has defined and introduced a simple and permanent accreditation system for cardiology-related CME activities based on the European Accreditation Council for Continuing Medical Education (EACCME) quality standards. Accreditation by EBAC assures the quality and independence of a particular CME activity. Credits are awarded by



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EBAC according to a points system. Alternative sources of knowledge assessment could include answering MCQs from sources such as Education in Heart series, ESC Guidelines, CD-ROMs, web courses, journal articles, conference web casts and case discussions, etc.

Whatever the source of knowledge assessment is used, a similar quantum would be required in terms of EBAC or CME credits as that provided by credits awarded over five years from successful assessment of 25 chapters of the ESC Textbook of Cardiovascular Medicine.

There should be cross-referencing of activities and credits between the EBAC and the Federation of Royal College's (FRC) Continuing Professional Development accreditation systems. It is understood that RCP or BCS approved Continuous Professional Development activities are automatically approved by EBAC. A personal record of on-line learning and assessment activities and credits achieved should be maintained, for example in a personal account of the FRC Continuing Professional Development web-based dairy system, or in the EBSC personal and secured space CME credit management system. These credits should be downloaded to the personal Revalidation Portfolio.

<http://cpd.rcplondon.ac.uk/Login.aspx>

<http://www.cardiology-accreditation.org/accreditation/information.php>

2. Skills domain:

Individual job plans or procedural activities undertaken by cardiologists should be linked to the demonstration of competency in clinical skills. Cardiologists should provide evidence of competency in their clinical skills by using one of four potential levels in the hierarchy of assessment. This data must not include any individual or identifiable patient records.

- A. National Quality & Outcomes
- B. National accreditation systems
- C. Local Quality Improvement Program
- D. Personal reflective logbook of procedures

A. National Quality & Outcomes

The Central Cardiac Audit Database provides national secure and encrypted data collection systems with national audits of procedures and conditions. These include (and are professionally led by):

- Adult Cardiac Surgery incorporating the UK Heart Valve Register (Society of Cardiovascular & Thoracic Surgeons);
- Adult Percutaneous Cardiac Interventions (British Cardiovascular Intervention Society);
- National Infarct Angioplasty Project (Dept of Health & British Cardiovascular Society);
- Myocardial Infarction National Audit Project (MINAP – Royal College of Physicians);
- Cardiac Rhythm Management – Devices and Intervention (Heart Rhythm UK);
- Heart Failure (British Society of Heart Failure);
- Cardiac Rehabilitation (British Association for Cardiac Rehabilitation & British Heart Foundation)
- Rehabilitation for Survivors of Major Arrhythmia or Sudden Cardiac Death (British Heart Foundation);
- Congenital Heart Disease Surgery and Intervention (Society of Cardiovascular & Thoracic Surgeons & British Congenital Cardiac Association);
- Sudden Arrhythmic Death Syndrome (Dept of Health);
- Pulmonary Hypertension (Pulmonary Hypertension Association).

Individual audits and subspecialty professional organizations should agree the appropriate data items to include in a summary of an individual clinician's activity and outcomes. Individual clinicians should download a summary of their personal caseload and procedures, with agreed and relevant quality and outcomes measures. This summary for each year, and for the five year revalidation cycle, should be



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downloaded into their personal revalidation portfolio. Ideally, this summary data should be electronically transmitted by secure means directly into their personal revalidation portfolio.

For example, for Adult Percutaneous Cardiac Interventions the British Cardiovascular Intervention Society proposes that a funnel plot of the procedures performed by an individual cardiologist should be downloaded to their personal revalidation portfolio; the Affiliated Groups should review whether it might be appropriate for team-based rather than individual operator outcomes for specific procedures to be downloaded to a personal revalidation portfolio. With annual review for appraisal with data from the previous three years of procedures, and five yearly review for revalidation with the previous five years of data.

B. European or National accreditation systems

Personal accreditation systems:

The British Society of Echocardiography (BSE) provides accreditation of individuals in specific echocardiographic techniques using written and practical assessments. This is renewable every five years. Cardiologists should demonstrate accreditation in the specific echocardiographic procedures they undertake according to their job plan.

Departmental accreditation systems:

If a specific service (for example a hospital echocardiography service) has received formal departmental accreditation through a professionally led accreditation exercise within the last five years, then all those cardiologists undertaking the specific procedures in that service could receive accreditation of their procedural skills for revalidation purposes.

C. Local Quality Improvement Program

Specific cardiology services should have or develop a regular quality improvement process.

For example, recommendations in the British Society of Echocardiography departmental accreditation guidelines include weekly review meetings, at least four specific and formal quality control meetings per year, all staff should have independent documentation of their attendance at least 50% of the meetings, and there should be a written or electronic documented record of these formal quality control meetings.

For example, the Sussex Cardiac Centre has a formal system of peer review when every month 1 in 10 cases chosen at random are reviewed by a committee of three independent clinicians, and a systematic review is undertaken. All interventionists will have at least one case discussed per month. Feedback is provided and a report is presented at each Cardiac Network meeting.

A documented record of these formal quality improvement programs must be electronically available to individuals to download for their revalidation portfolios, and to the Local Responsible Officer of the healthcare organisation. The lack of a local Quality Improvement Program should not disadvantage individual clinicians in demonstrating their continuing competence in clinical skills.

D. Personal reflective logbook of procedures

For specific procedures, a logbook of cases performed by, or under the direct charge and responsibility of, the individual cardiologist should be maintained. Evidence of reflective practice should be provided. Summary data for each year, and for the five year revalidation cycle, should be entered into the individual clinician revalidation portfolio.

This logbook should be maintained in an electronic record with the appropriate security and confidentiality requirements, usually on systems within the healthcare organisation. The data should ideally be derived and extrapolated from existing databases and using existing data collection systems. For revalidation, the summary data would have to be made anonymous by removing any patient identification data, and must not include any individual or identifiable patient records.

3. Professional domain:

Essential professional requirements for revalidation:

(Mainly required for appraisal and relicensing.)

A. Details of current medical practice

- Personal details:
 - Registered name;
 - Main professional contact address;
 - Main professional contact telephone number;
 - Main professional email contact details;
 - Date of and name of institution granting primary medical qualification;
 - GMC registration number; date of first registration; date on specialist register;
 - Specialties registered; subspecialties registered;
 - Date(s) of previous appraisals;
 - Date(s) of previous revalidation(s);
 - Registration with GP;
 - Immunization record.

- Employment details:
 - Main employer, main place of work;
 - Other employer(s), all other places of work;
 - Date appointed to current post; title of current post;
 - Dates, employers and titles of previous non-training posts.

- Practice details:
 - Specialties currently practiced; sub-specialist practices;
 - Job plan or weekly timetable of clinical work;
 - Emergency, out-of-hours and on-call commitments; rota;
 - Out-patient clinics;
 - Theatre or laboratory based practice;
 - In-patient work;
 - Other clinical care;
 - Other regular clinical commitments (for example multidisciplinary revascularisation team meetings, imaging review meetings, etc).

B. Continuing Professional Development

The Academy of Royal Medical Colleges has published principles for Continual Professional Development schemes.

Categories of CPD:

- Clinical or non-clinical
- External, internal or personal

Certificates from the Federation of Royal Colleges of Physicians, or from the EBSC CME credit management system, or similar annual and five yearly CPD records should be provided.

C. Involvement in clinical teams:

- Multi-source feedback (360° process) - it is understood that the General Medical Council is developing specifications and criteria for multi-source feedback systems.
- Multi-source feedback could be tailored for specific cardiac subspecialties or disease-based clinicians:
 - Specific questions (for example on consent processes for intervention);
 - Specific individuals or team members could be used as raters (for example for cardiac interventionists, feedback raters could be specified to include a cardiac surgeon, and



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one or more interventional cath lab staff such as a nurse, a radiographer or a physiologist, etc);

- A specific MSF tool for revalidation of cardiologists could be developed which would satisfy the criteria being developed by the General Medical Council;
- Affiliated Groups should consider areas of questions to include, or team members to be involved, for a cardiac subspecialty specific MSF.
- Patient feedback (for example patient satisfaction surveys, etc).

D. National audit and quality improvement:

- All cardiologists should provide evidence of:
 - Participation in national audits applicable to their practice;
 - Participation in national quality control and improvement programs, applicable to their practice.

E. Evidence of equality and diversity training

Voluntary professional components for revalidation:

F. Management

- *Medical Management*
 - Evaluation of service need
 - Maintenance of quality
 - Target delivery
 - Compliance with IR(ME)R and regulatory frameworks
 - Budgetary responsibility and business planning
 - Business Planning
 - Secondment to the DH; SHA etc
 - Trust chief exec, civil servant, MP
- *Clinical Management*
 - Appraisal
 - Service Development and Delivery
 - Commissioning
 - Clinical Governance
 - Organising rotas- consultants / trainees
 - Clinical director roles / Lead clinician roles
 - Staff meetings
 - Hospital committees - e.g. IT, Drug & Therapeutic, Theatre users
 - Medical governance
- *Research Management – e.g. R&D directors;*

G. Clinical Governance

- Local Responsibility Officer
- Patient Safety
- Ethics
- Complaints and Critical Incidents
- Mentoring (e.g. colleague)

H. Quality Improvement

- *Clinical Audit*
 - Local
 - Regional
 - National
- *Clinical Guideline Development*
 - NICE
 - SIGN
 - Specialist Associations
 - Local Guideline development (e.g. with GP's)



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Regional Guideline development(e.g. cancer networks)

I. Education

• *Teaching*

Lectures / Tutorials -undergraduate & postgraduate (local/regional/national/international)
Speciality Courses e.g. Basic Surgical Skills, ATLS, Safer Operative Surgery
Training in operating theatre (results in procedures taking longer)
Curriculum development

• *Examining*

Undergraduate & postgraduate examinations
Administrative roles e.g. organising exams
Developing exams e.g. contribution to question banks etc

• *Administration*

Educational and Clinical Supervisor duties (e.g. Learning agreements, WBA's)
Writing references etc

• Postgraduate Deanery

• Schools – medical, postgraduate and specialties

• Strategic Input to national education including programme boards, PMETB

• SAC Activity

• Mentoring (e.g. training)

J. Intellectual participation and development:

- Research – abstracts, presentations, publications; Clinical Trials (e.g. Phase I studies; Observational Studies; Laboratory Research;
- Ethical reviews, participation in ethics committees;
- Systematic reviews of literature, Review articles, editorials;
- Formal lectures;
- Guidelines – creation, development, delivery, implementation;
- Audits – undertaken, completed, planned quality improvement, repeated;
- Formal teaching activities.

K. Academic leadership:

- Research programmes – administration or management of academic departments, program grants, strategic research projects
- Scholarship activities
- Direct supervision of postgraduate students & degrees
- External examining of students, courses, post-graduate degrees, etc
- Membership of grant giving bodies – peer review & assessment of grant applications

L. Professional Activity

- Colleges and Faculties (National panellist – checking or revising job plans, shortlisting, interviewing)
- Specialist Societies
- BMA
- NCAS
- GMC
- Healthcare Commission / Care Quality Commission
- NHS Quality Improvement Scotland
- Work with Patient Bodies / Support Groups/ Charities

M. Specialist Expertise

- Regulation
- Professional Witness
- Expert Witness
- Policy
- Pharmaco vigilance



- Risk management
- Editorial Work
- Broadcasting
- Reports
- Editorials
- Grant giving bodies