2010 Cardiology curriculum (amendments 2015): Guidance on workplace based assessments

Introduction

The purpose of the assessment system is to:
- enhance learning by providing formative assessment, enabling trainees to receive immediate feedback, measure their own performance and identify areas for development;
- drive learning and enhance the training process by making it clear what is required of trainees and motivating them to ensure they receive suitable training and experience;
- provide robust, summative evidence that trainees are meeting the curriculum standards during the training programme;
- ensure trainees are acquiring competencies within the domains of Good Medical Practice;
- assess trainees' actual performance in the workplace;
- ensure that trainees possess the essential underlying knowledge required for their specialty;
- inform the Annual Review of Competence Progression (ARCP), identifying any requirements for targeted or additional training where necessary and facilitating decisions regarding progression through the training programme;
- identify trainees who should be advised to consider changes of career direction.

The integrated assessment system comprises workplace-based assessments and knowledge-based assessment. Individual assessment methods are described in more detail below.

The assessments will be supported by structured feedback for trainees within the training programme of Cardiology. Assessment tools will be both formative and summative and will be selected on the basis of their fitness for purpose.

Workplace-based assessments will take place throughout the training programme to allow trainees to continually gather evidence of learning and to provide trainees with formative feedback. They are not individually summative but overall outcomes from a number of such assessments provide evidence for summative decision making. The number and range of these will ensure a reliable assessment of the training relevant to their stage of training and achieve coverage of the curriculum.

Assessment Blueprint

In the full syllabus (section 10 of the curriculum) the assessment methods shown are those that are appropriate as possible methods that could be used to assess each competency. It is not expected that all competencies will be assessed and that where they are assessed not every method will be used.

Assessment Methods

The following assessment methods are used in the integrated assessment system:

Examinations and Certificates
- Advanced Life Support Certificate (ALS)
- IRMER
- The Examination or KBA in Cardiovascular medicine
- BSE accreditation in core echocardiography
The SAC in conjunction with the British Cardiovascular Society, the European Cardiac Society and the UEMS-Cardiac Section has developed a Knowledge Based Assessment: the European Examination in General Cardiology (EEGC). The aim of this assessment is to assess a trainee’s understanding of the necessary knowledge components of the core cardiovascular medicine curriculum to a level appropriate for a newly appointed consultant. A satisfactory performance in the examination is expected during core training, usually in ST5, and satisfactory performance is mandatory before attainment of the CCT. Trainees who fail to achieve the required standard in the examination in ST5 will not be prevented from proceeding to ST6 and ST7 provided their other elements of performance are judged adequate at the ARCP. The performance in the examination is only a small component of assessment for the ARCP which will be dominated by the WPBAs. The performance in the examination will not be a key criterion for allocation to sub-specialty modules. The EEGC will be offered on an annual basis so a trainee will, if necessary, have further opportunities to re-sit the examination in ST6 and ST7. The total number of times that a trainee can sit the EEGC will be determined by the length of their training programme which will be determined by their LETB/deanery.

Information about the EEGC including guidance for candidates, is available on the BCS web-site [www.bcs.com](http://www.bcs.com).

BSE accreditation in adult transthoracic echocardiography can be used in place of DOPS assessments. Details of the processes required for BSE accreditation are available at [www.bsecho.org](http://www.bsecho.org).

**Supervised Learning Events (SLEs)**

SLEs are formative and require high level trainer feedback, trainee reflection and action plans. They may be linked to curriculum competencies in the ePortfolio as evidence of engagement with the curriculum but it is not necessary to link with large numbers of competencies. The below tools may be used for SLEs with a maximum of 8 linkages for an ACAT and 2 linkages for CbD and mini-CEX.

- mini-Clinical Evaluation Exercise (mini-CEX)
- Case-Based Discussion (CbD)
- Acute Care Assessment Tool (ACAT)

**Other Workplace-Based Assessment Tools (WPBAs)**

- Multi-Source Feedback (MSF)
- Direct Observation of Procedural Skills (DOPS)
- Patient Survey (PS)
- Audit Assessment (AA)
- Quality Improvement Project Assessment Tool (QIPAT)
- Teaching Observation (TO)
- Multiple Consultant Report (MCR)

These methods are described briefly below. More information about these methods including guidance for trainees and assessors is available in the e-portfolio and on the JRCPTB website [www.jrcptb.org.uk](http://www.jrcptb.org.uk). Workplace-based assessments should be recorded in the trainee’s e-portfolio. The workplace-based assessment methods include feedback opportunities as an integral part of the assessment process, this is explained in the guidance notes provided for the techniques.
SLEs

Mini-Clinical Evaluation Exercise (mini-CEX)
This tool evaluates a clinical encounter with a patient to provide an indication of competence in skills essential for good clinical care such as history taking, examination and clinical reasoning. The trainee receives immediate feedback to aid learning. The mini-CEX can be used at any time and in any setting when there is a trainee and patient interaction and an assessor is available.

Case Based Discussion (CbD)
The CbD assesses the performance of a trainee in their management of a patient to provide an indication of competence in areas such as clinical reasoning, decision-making and application of medical knowledge in relation to patient care. It also serves as a method to document conversations about, and presentations of, cases by trainees. The CbD should include discussion about a written record (such as written case notes, out-patient letter, and discharge summary). A typical encounter might be when presenting newly referred patients in the out-patient department.

Acute Care Assessment Tool (ACAT)
The ACAT is designed to assess and facilitate feedback on a doctor’s performance during their practice on the Acute Medical Take. Any doctor who has been responsible for the supervision of the Acute Medical Take can be the assessor for an ACAT. This tool can also be applied to an acute cardiology take.

Other WPBAs

Multisource Feedback (MSF)
This tool is a method of assessing generic skills such as communication, leadership, team working, reliability etc, across the domains of Good Medical Practice. This provides objective systematic collection and feedback of performance data on a trainee, derived from a number of colleagues. ‘Raters’ are individuals with whom the trainee works, and includes doctors, administration staff, and other allied professionals. The trainee will not see the individual responses by raters, feedback is given to the trainee by the Educational Supervisor.

Direct Observation of Procedural Skills (DOPS)
A DOPS is an assessment tool designed to assess the performance of a trainee in undertaking a practical procedure, against a structured checklist. The trainee receives immediate feedback to identify strengths and areas for development.

Patient Survey (PS)
Patient Survey address issues, including behaviour of the doctor and effectiveness of the consultation, which are important to patients. It is intended to assess the trainee’s performance in areas such as interpersonal skills, communication skills and professionalism by concentrating solely on their performance during one consultation.

Audit Assessment Tool (AA)
The Audit Assessment Tool is designed to assess a trainee’s competence in completing an audit. The Audit Assessment can be based on review of audit documentation OR on a presentation of the audit at a meeting. If possible the trainee should be assessed on the same audit by more than one assessor.

Quality Improvement Project Assessment Tool (QIPAT)
The Quality Improvement Project Assessment tool is designed to assess a trainee’s competence in completing a quality improvement project. The Quality Improvement Project Assessment can be based on review of quality improvement project documentation OR on a presentation of the quality improvement project at a meeting. If possible the trainee should be assessed on the same quality improvement project by more than one assessor.
**Teaching Observation (TO)**
The Teaching Observation form is designed to provide structured, formative feedback to trainees on their competence at teaching. The Teaching Observation can be based on any instance of formalised teaching by the trainee who has been observed by the assessor. The process should be trainee-led (identifying appropriate teaching sessions and assessors).

**Multiple Consultant Report (MCR)**
The Multiple Consultant Report (MCR) captures the views of consultant supervisors on a trainee’s clinical performance. The MCR year summary sheet summarises the feedback received, outcomes for clinical areas and comments which will give valuable insight to how well the trainee is performing, highlighting areas of excellence and areas of support required. MCR feedback will be available to the trainee and included in the educational supervisor’s report.

**Decisions on Progress (ARCP)**

The Annual Review of Competence Progression (ARCP) is the formal method by which a trainee’s progression through her/his training programme is monitored and recorded. ARCP is not an assessment – it is the review of evidence of training and assessment. The ARCP process is described in A Reference Guide for Postgraduate Specialty Training in the UK (the “Gold Guide” – available from www.mmc.nhs.uk). Deaneries are responsible for organising and conducting ARCPs. The evidence to be reviewed by ARCP panels should be collected in the trainee’s e-Portfolio.

As a precursor to ARCPs, JRCPTB strongly recommend that trainees have an informal e-portfolio review either with their educational supervisor or arranged by the local school of medicine. These provide opportunities for early detection of trainees who are failing to gather the required evidence for ARCP.

The assessment strategy outlined in the [ARCP decision aid](#) will be trainee driven and below is a guideline to the number and types of assessment required for each year of core cardiovascular medicine training followed by that for each module of specialist area training. Assessment for core training (ST3 to ST5) applies to ALL trainees, whereas the assessment strategies for specialist area training (ST6-ST7) will vary according to the chosen specialist area modules.

For core syllabus objectives, the trainee should arrange the assessments (SLEs) to ensure that the syllabus is sampled over the whole programme. It is preferable that the majority of the core cardiovascular medicine topics be assessed during ST3-5, but if incomplete, the remainder can be sampled in ST6/7.

Assessors should be agreed with the Educational Supervisor in advance of the commencement of WPBA. Examples of suitable assessors would include consultants, senior StRs, Clinical Nurse Specialists, Senior Cardiac Physiologists or Radiographers. A wide range or assessors with appropriate qualifications should be sampled e.g. for Echo DOPS, a Cardiac Physiologist or Consultant with BSE.

The SLEs are formative and designed to provide feedback on progression through the curriculum. They are not summative and although documented in the e-portfolio, will not count to the ARCP. They do however reflect engagement with the assessment process.

Procedural skills however are assessed by DOPS, which are formative in the early stages of training and so provide feedback, but must later become summative in order to document full competence in perceived “life threatening procedures”. This is essential to secure patient safety. A series of “anchor statements” are provided to act as a formative guide to both trainee and trainer. For the procedural skills assessments, they are:
Level 1 – able to perform the procedure under direct supervision/assistance
Level 2 – able to perform the procedure with limited supervision/assistance
Level 3 – competent to perform the procedure unsupervised and deal with complications

For DOPS assessment, there is a basic requirement that assessment is reliable when a minimum of 6 DOPS by 2 different assessors is performed. For most cardiological procedures, this is readily achievable. For example, 2 echo or catheter lists with a mixture of cases (minimum 3 cases per session) would complete the DOPS requirements for these procedures. Some trainees may achieve Level 3 competency in some practical procedures (e.g. echo or angiography) before the end of ST5 if they have had specific focused training, and once Level 3 is obtained, no further assessments are required, but ongoing participation in such procedures should be continued as part of general cardiology training. It should be noted that trainees who opt for the BSE adult accreditation will be exempt from Echo DOPS.

Assessment during ST3 (Core Training)

The WPBAs are for the purposes of assessing not only the core cardiovascular medicine curricular competencies, but must also include assessment of the General (Internal) Medicine and common competencies. Mini-CEX and CbD should be used as appropriate as indicated in the syllabus.

SLE (mini-CEX or CbD or ACAT):
A minimum of 3 ACATs (covering the Acute Medical Take)
AND 5 CbD-mini-CEX

DOPS
Echocardiography - a minimum of 2 by at least 2 different assessors (from 2 lists)
Angiography - a minimum of 2 by at least 2 different assessors (from 2 lists)

These will be formative and used to provide feedback on a trainee’s progress in the early stages of training.

Pericardiocentesis, Temporary Pacing and Cardioversion - try to complete a DOPS assessment each time you do one of these procedures, again recording them as formative assessments, but asking the trainer to indicate the level of competence.

Permanent Pacing - None required this year

NB. Some trainees may well become Level 3 competent in Cardioversion and/or Temporary Pacing by the end of ST3 (6 DOPS with a minimum of 2 different assessors indicates reliability) in which case no further DOPS will be required in these procedures – Guidance will come from the ARCP panel at the end of ST3

MSF
Not required this year.

Teaching Observation
Assessments of teaching skills should be made in this year using the TO tool
Assessment during ST4 (Core training)

The WPBAs are for the purposes of assessing not only the core cardiovascular medicine clinical competencies, but must also include assessment of the General (Internal) Medicine and common competencies. Mini-CEX and CbD should be used as appropriate as indicated in the syllabus.

SLE (mini-CEX or CbD or ACAT)
A minimum of 3 ACATs (covering the Acute Medical Take)
AND 5 CbD/mini-CEX

DOPS
Echocardiography - a minimum of 2 by at least 2 different assessors (from 2 lists)
Angiography - a minimum of 2 by at least 2 different assessors (from 2 lists)
These will be formative and used to provide feedback on a trainee’s progress in the early stages of training

Pericardiocentesis, Temporary Pacing and Cardioversion - try to complete a DOPS assessment each time you do one of these procedures, again recording them as formative assessments, but asking the trainer to indicate the level of competence.

Permanent Pacing - a minimum of 2 by different assessors

NB. Some trainees may well become Level 3 competent in Cardioversion and/or Temporary Pacing and/or echocardiography by the end of ST4 (6 DOPS with a minimum of 2 different assessors indicates reliability) in which case no further DOPS will be required in these procedures – Guidance will come from the ARCP panel at the end of ST4

MSF
Satisfactory completion for presentation to the ARCP panel at the end of ST4

Assessment during ST5 (Core training)

The WPBAs are for the purposes of assessing not only the core curricular competencies, but must also include assessment of the General (Internal) Medicine and common competencies. Mini-CEX and CbD should be used as appropriate as indicated in the syllabus

SLE (mini-CEX or CbD or ACAT)
A minimum of 3 ACATs (covering the Acute Medical Take)
AND 5 CbD/mini-CEX

DOPS
Echocardiography - a minimum of 6 summative DOPS by at least 2 different assessors (from 3 lists) or BSE accreditation
Angiography - a minimum of 2 by at least 2 different assessors (from 2 lists). These will be formative and used to provide feedback on a trainee’s progress in the early stages of training. NB. Trainees who wish to train in interventional cardiology during ST6/7 will be expected to achieve Level 3 competency in angiography by the end of ST5, and should accumulate the recommended number of summative DOPS assessments (a minimum of 6 by at least 2 different assessors (from 3 lists) for presentation to the ARCP panel at the end of ST5.
Trainees who have reached Level 3 competence by this stage may undergo summative assessment at this time (as per above). Once summative sign off is achieved, no further DOPs in angiography will be required.

Pericardiocentesis, Temporary Pacing and Cardioversion - trainees should be Level 3 competent in Cardioversion and Temporary Pacing by the end of ST5 (6 DOPS with a minimum of 2 different assessors indicates reliability). Try to complete a DOPS assessment each time you do a pericardiocentesis, again recording them as a formative assessment, but asking the trainer to indicate the level of competence.

Permanent Pacing - a minimum of 6 summative DOPS by 2 different assessors confirming Level 2 competency (2 of the 6 DOPS should be in Pacemaker programming indicating competence in simple brady pacing)

MSF
Not required if satisfactory completion from ST4

Patient Survey
A patient survey should be conducted in the year e.g. after an outpatient clinic

Audit or QIP
An audit or quality improvement project should be completed by the end of ST5 and preferably re-audited and presented. Assessment of the process will use the Audit Assessment or QIPAT.

Assessment during specialist area training

The specialist area syllabi have been designed on a modular basis that allows diversity of training with the ultimate objective of obtaining a CCT that is suitable for a consultant post. Given that the different specialist area modules require different time commitments and that trainees will want the flexibility to train in a variety of combinations of modules, the ‘units’ system aids the planning of compatible combinations.

Trainees should agree with the Training Programme Director their planned combination of modules as well as the order of the programme, such that the expected WPBAs for each year of specialist area training can be planned. As an example, a trainee wishing to train in Devices and Heart Failure may wish to mix the programmes over 2 years rather than specialize in one during ST6 and the other during ST7. In this situation, a combination of WPBAs outlined in the respective modules should be tailored to meet the individual requirements.

The WPBA schedule for the 2 years of specialist area training is outlined below in order:-
- Adult Congenital Heart Disease including Heart Disease in Pregnancy
- Advanced Rhythm Management Electrophysiology + Devices
- Advanced Rhythm Management Device therapy
- Heart Failure
- Interventional Cardiology (PCI)
- Cardiac Imaging
  a. Echocardiography
  b. Nuclear Cardiology
  c. Cardiac Magnetic Resonance
  d. Cardiac CT
- Inherited Cardiovascular Conditions
Guideline for Work Place Based Assessment during ACHD Training (4 Units)

ACHD ST6
MSF
Satisfactory completion for presentation to the ARCP panel at the end of ST6.

DOPS
Echocardiography- minimum of 4 formative (2 TTE, 2 TOE) by 2 different assessors.
Cardiac catheterisation - minimum of 2 by at least 2 different assessors (from 2 lists) if Level 3 not yet achieved. These will be formative and used to provide feedback on a trainee’s progress in this stage of training. Level 2-3 competence is expected in this year.

Pericardiocentesis - try to complete a DOPS assessment each time you do this procedure and Level 3 competence is expected at the end of ST7.

ACHD ST7
SLE (mini-CEX or CbD)
A minimum of 5 CbD &/or mini-CEX by at least 2 different assessors from the specialist area curriculum (and core curriculum if not previously covered) and 2 ACATs in relation to the Acute Cardiology take (see ARCP grid).

MSF
Not required if satisfactory completion from ST6

DOPS
Echocardiography - minimum of 6 summative (4 TTE, 2 TOE) by 2 different assessors
Cardiac catheterisation - minimum of 6 summative assessments by at least 2 different assessors (from 3 lists) confirming Level 3 competence if not already achieved. These are summative in the final year and used to indicate competence at the end of training.

Pericardiocentesis - try to complete a DOPS assessment each time you do this procedure and Level 3 competence is expected at the end of ST7

Please note: PFO closure to Level 3 competence is not required for CCT

Audit or QIP
A second project should be completed by the end of ST7 and for audit, preferably re-audited and presented. Assessment of the process will use the Audit Assessment or QIPAT.

Teaching Observation
Assessments of teaching skills should be made in ST7 using the TO tool.

Patient Survey
A patient survey should be conducted in the year e.g. after an outpatient clinic

Assessment for ACHD Training (2 units) or Pregnancy in Heart Disease Training (1 unit) should be discussed with the Advanced Modular Programme Director.
Guideline for Work Place Based Assessment during Training in Advanced Rhythm Management – Electrophysiology + Devices (4 units) - Modules 1 to 4, and Options from Modules 5 to 12

The following are to be completed over the two year period ST6 and ST7, with the timing of individual WPBAs being determined by the order of the training programme.

SLEs (mini-CEX &/or CbD)
A minimum of 10 (covering Modules 1 to 12) by at least 2 different assessors. This must include assessment in Pacemaker Programming to include CRT and ICD and 4 ACATs related to the Acute Cardiology take (see ARCP grid)

MSF
Satisfactory completion for presentation to the ARCP panel at the end of ST6

DOPS
6 advanced pacing DOPS (covering all the Device modules) AND 6 advanced electrophysiology DOPS (covering all the electrophysiology modules) by at least 2 different assessors. DOPS should be formative during ST6 where Level 2 competency is expected and summative in ST7 where Level 3 competence is required for CCT.

Cardiac catheterisation - minimum of 2 by at least 2 different assessors (from 2 lists) in ST6 if Level 3 not yet achieved. These are still formative and used to provide feedback on a trainee’s progress. Level 2-3 competence is expected in this year.

A minimum of 6 summative assessments by 2 different assessors (from 3 lists) in ST7 if Level 3 not already achieved. These are summative in the final year and used to indicate competence at the end of training. Level 3 competence is expected by this year.

Pericardiocentesis - try to complete a DOPS assessment each time you do this procedure and Level 3 competence is expected at the end of ST7

Patient Survey
A survey should be conducted in ST7 e.g. after an outpatient clinic.

Teaching Observation
Assessments of teaching skills should be made in ST7 using the TO tool

Audit or QIP
A second project should be completed by the end of ST7 and for audit, preferably re-audited and presented. Assessment of the process will use the Audit Assessment or QIPAT.

Guideline to the use of Work Place Based Assessment during Advanced Heart Rhythm Management – Device Therapy (2 units) – Modules 1, 2 and 3 and Options from Modules 5 and 6

SLEs (mini-CEX &/or CbD)
A minimum of 5 covering modules 1-6 by at least 2 different assessors. Must include assessment in Pacemaker Programming to include CRT and ICD and 2 ACATs related to the Acute Cardiology take (see ARCP grid)
MSF
Satisfactory completion for presentation to the ARCP panel at the end of ST6

DOPS
Devices - 6 advanced pacing DOPS (covering all the above modules) by at least 2 different assessors. DOPS should be formative during ST6 where Level 2 competency is expected and summative in ST7 where Level 3 competence is required for CCT

Cardiac catheterisation - minimum of 2 by at least 2 different assessors (from 2 lists) in ST6 if Level 3 not yet achieved. These are still formative and used to provide feedback on a trainee’s progress. Level 2-3 competence is expected in this year.

A minimum of 6 summative assessments by 2 different assessors (from 3 lists) in ST7 if Level 3 not already achieved. These are summative in the final year and used to indicate competence at the end of training. Level 3 competence is expected by this year

Pericardiocentesis - try to complete a DOPS assessment each time you do this procedure and Level 3 competence is expected at the end of ST7

Patient Survey
A survey should be conducted in ST7 e.g. after an outpatient clinic or after an pacing list

Teaching Observation
Assessments of teaching skills should be made in ST7 using the TO tool

Audit or QIP
A second project should be completed by the end of ST7 and for audit, preferably re-audited and presented. Assessment of the process will use the Audit Assessment Tool or QIPAT

Guideline to the use of Work Place Based Assessment during Heart Failure Training (2 units)

SLE (mini-CEX or CbD or ACAT)
A minimum 5 CbD or mini-CEX by at least 2 different assessors from the specialist area curriculum (and core curriculum if not previously covered) and 2 ACATs (in relation to the acute cardiology take).

MSF
Satisfactory completion for presentation to the ARCP panel at the end of ST6

DOPS
Cardiac catheterisation - minimum of 2 by at least 2 different assessors (from 2 lists) in ST6 if Level 3 not yet achieved. These are still formative and used to provide feedback on a trainee’s progress. Level 2-3 competence is expected in this year.

A minimum of 6 summative assessments by 2 different assessors (from 3 lists) in ST7 if Level 3 not already achieved. These are summative in the final year and used to indicate competence at the end of training. Level 3 competence is expected by this year
Right Heart Cardiac Catheterisation to include Haemodynamics - a minimum of 6 summative assessments by 2 different assessors. Level 3 competence is expected at the end of ST7.

Pericardiocentesis - try to complete a DOPS assessment each time you do this procedure and Level 3 competence is expected at the end of ST7.

Patient Survey
A survey should be conducted in ST7 e.g. after an outpatient clinic

Teaching Observation
Assessments of teaching skills should be made in ST7 using the TO tool

Audit or QIP
A second project should be completed by the end of ST7 and for audit, preferably re-audited and presented. Assessment of the process will use the Audit Assessment Tool or QIPAT.

Guideline for the use of Work Place Based Assessment during Interventional Cardiology Training (4 units)
Trainees must have achieved level 3 angiography before entering advanced modular training in Interventional Cardiology.

PCI ST6
SLEs (mini-CEX &/or CbD)
A minimum of 5 CbD or mini-CEX by at least 2 different assessors from the specialist area curriculum (and core curriculum if not previously covered) and 2 ACATs related to the Acute Cardiology Take (see ARCP grid)

MSF
Satisfactory completion for presentation to the ARCP panel at the end of ST6

DOPS
Advanced PCI DOPS - minimum of 6 by at least 3 different assessors. These are formative by definition and used to provide feedback on a trainee’s progress in the early stages of training. Level 2 competence is expected in this year

Pericardiocentesis - try to complete a DOPS assessment each time you do this procedure and Level 3 competence is expected at the end of ST7.

PCI ST7
SLEs (mini-CEX &/or CbD)
A minimum of 5 CbD or mini-CEX by at least 2 different assessors from the specialist area curriculum (and core curriculum if not previously covered) and 2 ACATs related to the Acute Cardiology Take (see ARCP grid)

MSF
Not required if satisfactory completion from ST6

DOPS
Advanced PCI DOPS - minimum of 6 summative assessments by 3 different assessors. These are summative in the final year and used to indicate competence at the end of training. Level 3 competence is expected in this year.
Pericardiocentesis - try to complete a DOPS assessment each time you do this procedure and Level 3 competence is expected at the end of ST7

Please note: Level 3 competency in PFO closure, Mitral Balloon Valvuloplasty and Alcohol Septal Ablation for HOCM is not required for CCT.

Audit or QIP
A second project should be completed by the end of ST7 and for audit, preferably re-audited and presented. Assessment of the process will use the Audit Assessment Tool or QIPAT

Teaching Observation
Assessments of teaching skills should be made in ST7 using the TO tool.

Patient Survey
A survey should be conducted in ST7 e.g. after an outpatient clinic

Guideline for the use of Work Place Based Assessment during Advanced Echo Training (2 units)

SLEs (mini-CEX &/or CbD)
A minimum of 5 CbD or mini-CEX by at least 2 different assessors from the specialist area curriculum (and core curriculum if not previously covered) and 2 ACATs related to the Acute Cardiology Take (see ARCP grid)

MSF
Satisfactory completion for presentation to the ARCP panel at the end of ST6

DOPS
Echo - 6 advanced echo (2 TTE, 2 TOE, 2 Stress echo) by 2 different assessors. DOPS should be formative during ST6 where Level 2 competency is expected and summative in ST7 where Level 3 competence is required for CCT

Cardiac catheterisation - minimum of 2 by at least 2 different assessors (from 2 lists) in ST6 if Level 3 not yet achieved. These are still formative and used to provide feedback on a trainee’s progress. Level 2-3 competence is expected in this year.

A minimum of 6 summative assessments by 2 different assessors (from 3 lists) in ST7 if Level 3 not already achieved. These are summative in the final year and used to indicate competence at the end of training. Level 3 competence is expected by this year

Pericardiocentesis - try to complete a DOPS assessment each time you do this procedure and Level 3 competence is expected at the end of ST7

Patient Survey
A survey should be conducted in ST7 e.g. after an outpatient clinic

Teaching Observation
Assessments of teaching skills should be made in ST7 using the TO tool
Audit or QIP
A second project should be completed by the end of ST7 and for audit, preferably re-audited and presented. Assessment of the process will use the Audit Assessment Tool or QIPAT.

Guideline for the use of Work Place Based Assessment during Advanced Echo Training (4 units)

The following are to be completed over the two year period ST6 and ST7, with the timing of individual WPBAs being determined by the order of the training programme.

SLEs (mini-CEX &/or CbD)
A minimum of 10 CbD or mini-CEX by at least 2 different assessors from the specialist area curriculum (and core curriculum if not previously covered) and 4 ACATs (2 per year) related to the Acute Cardiology Take (see ARCP grid)

MSF
Satisfactory completion for presentation to the ARCP panel at the end of ST6

DOPS
Echo - 12 advanced echo (4TTE, 4 TOE, 4 Stress echo) by 2 different assessors. DOPS should be formative during ST6 where Level 2 competency is expected and summative in ST7 where Level 3 competence is required for CCT

Cardiac catheterisation - minimum of 2 by at least 2 different assessors (from 2 lists) in ST6 if Level 3 not yet achieved. These are still formative and used to provide feedback on a trainee’s progress. Level 2-3 competence is expected in this year.

A minimum of 6 summative assessments by 2 different assessors (from 3 lists) in ST7 if Level 3 not already achieved. These are summative in the final year and used to indicate competence at the end of training. Level 3 competence is expected by this year

Pericardiocentesis - try to complete a DOPS assessment each time you do this procedure and Level 3 competence is expected at the end of ST7

Patient Survey
A survey should be conducted in ST7 e.g. after an outpatient clinic or after an angio list

Teaching Observation
Assessments of teaching skills should be made in ST7 using the TO tool

Audit or QIP
A second project should be completed by the end of ST7 and for audit, preferably re-audited and presented. Assessment of the process will use the Audit Assessment Tool or QIPAT.

Guideline to the use of Work Place Based Assessment Tools during Advanced Nuclear Training (2 units)

SLEs (mini-CEX &/or CbD)
A minimum of 5 CbD or mini-CEX by at least 2 different assessors from the specialist area curriculum (and core curriculum if not previously covered) and 2 ACATs related to the Acute Cardiology take (see ARCP grid)
MSF
Satisfactory completion for presentation to the ARCP panel at the end of ST6

DOPS
Nuclear imaging - 6 cases on dosing acquisition and reporting by 2 different assessors (e.g. clinician and technician) across the spectrum of disorders DOPS should be formative during ST6 where Level 2 competency is expected and summative in ST7 where Level 3 competence is required for CCT

Cardiac catheterisation - minimum of 2 by at least 2 different assessors (from 2 lists) in ST6 if Level 3 not yet achieved. These are still formative and used to provide feedback on a trainee’s progress. Level 2-3 competence is expected in this year.

A minimum of 6 summative assessments by 2 different assessors (from 3 lists) in ST7 if Level 3 not already achieved. These are summative in the final year and used to indicate competence at the end of training. Level 3 competence is expected by this year

Pericardiocentesis - try to complete a DOPS assessment each time you do this procedure and Level 3 competence is expected at the end of ST7

Patient Survey
A survey should be conducted in ST7 e.g. after an outpatient clinic

Teaching Observation
Assessments of teaching skills should be made in ST7 using the TO tool

Audit or QIP
A second project should be completed by the end of ST7 and for audit, preferably re-audited and presented. Assessment of the process will use the Audit Assessment Tool or QIPAT

Guideline for the use of Work Place Based Assessment Tools during Advanced CMR Training (2 units)

SLEs (mini-CEX &/or CbD)
A minimum of 5 CbD or mini-CEX by at least 2 different assessors from the specialist area curriculum (and core curriculum if not previously covered) and 2 ACATs related to the Acute Cardiology take (see ARCP grid)

MSF
Satisfactory completion for presentation to the ARCP panel at the end of ST6

DOPS
CMR imaging - 6 cases on CMR acquisition and reporting by 2 different assessors (e.g. clinician and technician) across the spectrum of disorders DOPS should be formative during ST6 where Level 2 competency is expected and summative in ST7 where Level 3 competence is required for CCT

Cardiac catheterisation - minimum of 2 by at least 2 different assessors (from 2 lists) in ST6 if Level 3 not yet achieved. These are still formative and used to provide feedback on a trainee’s progress. Level 2-3 competence is expected in this year.
A minimum of 6 summative assessments by 2 different assessors (from 3 lists) in ST7 if Level 3 not already achieved. These are summative in the final year and used to indicate competence at the end of training. Level 3 competence is expected by this year.

Pericardiocentesis - try to complete a DOPS assessment each time you do this procedure and Level 3 competence is expected at the end of ST7.

Patient Survey
A survey should be conducted in ST7 e.g. after an outpatient clinic.

Teaching Observation
Assessments of teaching skills should be made in ST7 using the TO tool.

Audit or QIP
A second project should be completed by the end of ST7 and for audit, preferably re-audited and presented. Assessment of the process will use the Audit Assessment Tool or QIPAT.

**Guideline for the use of Work Place Based Assessment Tools during Advanced Cardiac CT (2 units)**

SLEs (mini-CEX &/or CbD)
A minimum of 5 CbD or mini-CEX by at least 2 different assessors from the specialist area curriculum (and core curriculum if not previously covered) and 2 ACATs related to the Acute Cardiology Take (see ARCP grid).

MSF
Satisfactory completion for presentation to the ARCP panel at the end of ST6.

DOPS
CT imaging - 6 cases on CT acquisition and reporting by 2 different assessors (e.g. clinician and technician) across the spectrum of disorders. DOPS should be formative during ST6 where Level 2 competency is expected and summative in ST7 where Level 3 competence is required for CCT.

Cardiac catheterisation - minimum of 2 by at least 2 different assessors (from 2 lists) in ST6 if Level 3 not yet achieved. These are still formative and used to provide feedback on a trainee’s progress. Level 2-3 competence is expected in this year.

A minimum of 6 summative assessments by 2 different assessors (from 3 lists) in ST7 if Level 3 not already achieved. These are summative in the final year and used to indicate competence at the end of training. Level 3 competence is expected by this year.

Pericardiocentesis - try to complete a DOPS assessment each time you do this procedure and Level 3 competence is expected at the end of ST7.

Patient Survey
A survey should be conducted in ST7 e.g. after an outpatient clinic.
Teaching Observation
Assessments of teaching skills should be made in ST7 using the TO tool

Audit or QIPAT
A second project should be completed by the end of ST7 and for audit, preferably re-audited and presented. Assessment of the process will use the Audit Assessment Tool or QIPAT.

Guideline for the use of Work Place Based Assessment Tools during Inherited Cardiovascular Conditions Training (1 unit)

The assessment programme should be discussed in advance with the ICC Trainer and agreed with the TPD for incorporation into the on-going assessment strategy, depending on Advanced Modular Choice, for ST6/7.

This will be achieved through existing workplace-based assessments (WPBAs), mini-Clinical Evaluation Exercise (mini-CEX), Direct Observation of Procedural Skills (DOPS), Case-Based Discussion (CbD), Patient Survey (PS) as part of the ongoing Advanced Modules with the ICC component incorporated within.

Logbook: Trainees will maintain a continuous log to record patient interactions (inpatient or outpatient, including screening, invasive/non invasive assessment) and a short description of the case and the trainee’s reflection for a variety of ICCs. The log should also capture reports of the echocardiograms, advanced imaging (CTs, CMRs and TOEs), advanced arrhythmia testing (pharmacological provocation, invasive EP, signal averaged ECGs) performed on patients with known or suspected ICC by the trainee. The log will be reviewed on a regular basis by the supervisor and must be signed off by the Training Director. The logbook should be placed in the Personal Folder of the e-portfolio.

Core Module – Patient Interactions: 70 patients with a minimum of 10 in each of the three ICC domains. Imaging: 50 cases reflecting the spectrum of imaging modalities (Echo, CT, CMR).

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