



SCST Best Practice for Work-based Training of Undergraduate Cardiac Physiologists

From the experiences gained during the implementation and subsequent development of the current degree programme, it has become clear that guidance on planning work-based training is required.

In order that students are supported appropriately in the workplace Registration Council for Clinical Physiology (RCCP) produced a set of training guidelines which have proved helpful to some departments. However, experience has shown that these need to be supplemented with recommendations on the planning of the undergraduate experience and the student's role whilst training. This document sets out the Society for Cardiological Science and Technology (SCST) recommendations for progression of training during the current 4-year academic programme.

It is hard to put definitive times to the process as service commitment and individual student learning style will influence this. Instead, the start and end points have been given for each year.

Year 1

General hospital induction

Departmental induction

Observation of ALL¹ investigations

Out-patient electrocardiogram (ECG) with direct supervision^{2 3}

Out-patient ECG with indirect supervision⁴

Collect evidence related to first year specialist module⁵

Resting blood pressure using manual equipment

ECG in-patients with direct supervision⁶

Supervised ambulatory electrocardiography (AECG) & ambulatory blood pressure (ABP) set-up and removal

Indirectly supervised AECG & ABP set-up and removal

Observe exercise tolerance testing (ETT)⁶

Observe cardiac catheterisation OR pacing⁷

Start observations of non-assessed investigations (Head Up Tilt Testing etc)

Assessment Activity:

Completion of Professional Practice Portfolio

4 x assessments of non-invasive resting blood pressure

Presentation of ECG evidence related to first year specialist module

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Year 2

ECG on both in and out patients indirectly supervised
Indirectly supervised AECG & ABP set-up and removal
Direct supervision of ambulatory ECG analysis
Collect evidence related to second year specialist module
Supervised cardiac catheterisation OR pacing
Observation of pacing OR cardiac catheterisation⁷
Assisting role in ETT (Non-lead role)⁸

Start to collect evidence for ambulatory ECG & ABP and ETT
Continue observations of non-assessed investigations (Head Up Tilt Testing etc)

Back to supervised resting ECG for at least 2 weeks at the end to check practical skills before the SCST undergraduate Assessment Part I

Assessment Activity:

SCST Undergraduate Assessment Part I

NB Need to ensure student has time to collect and analyse 150 ECGs and for these to be checked by WBA

Year 3

Indirect supervision of AECG analysis
Supervised cardiac cath or pacing
Observation of pacing or cardiac cath
Collect evidence for AECG & ABP, ETT and cardiac cath or pacemaker follow-up
Assisting role in ETT⁹
Complete ambulatory ECG & BP assessments
Indirect supervision of cardiac cath or pacing
Observe echo¹⁰

Assessment Activity:

Ambulatory ECG & BP assessments
ETT assessments
Cardiac cath or pacing assessments
Reflective activity

Year 4

Indirect supervision of pacemaker or cardiac cath
Pacing or cardiac cath assessments
Directly supervised of echo
Consolidation of all investigations/service provision
Complete collection of evidence for pacing, cardiac cath and echo

Assessment Activity:

Echo assessments
SCST Undergraduate Assessment Part II

1. At an early stage in his/her career, the student should be given the opportunity to observe ALL cardiac investigations covered by the Record of Clinical Practice. If required, arrangements to other centres should be arranged if and where necessary
2. Those involved in training in electrocardiographic technique must hold a relevant qualification (SCST Certificate in ECG or ASCST) and have had their competency checked regularly
3. DIRECT supervision means that the student works with a qualified member of staff at all times
4. INDIRECT supervision is interpreted to mean that the student works alone with a qualified member of staff IMMEDIATELY available if needed
5. The knowledge underpinning electrocardiography is delivered over years 1 & 2 of the degree programme. Collection and judgement of evidence should relate to this delivery
6. A student in the first year of the programme is unlikely to have much life experience dealing with the sick. It is important that some sensitivity and support is shown when he/she first visits wards
7. The order and choice of delivery of cardiac catheterisation training should fit in with service need
8. The student's presence during ETT would initially be in addition to the two qualified members of staff running the test. When deemed able, the student would perform the test as assistant to the practitioner leading the test
9. The Record of Clinical Practice requires the student to be assessed leading ETTs in the presence of a practitioner who is qualified to lead the test
10. Cardiac ultrasound as delivered within the degree programme represents an introduction to the investigation. It is expected that direct supervision in this technique will be maintained throughout the undergraduate programme