Education and Training Committee – 25 March 2009

Clinical Scientists – Reconfirmation of approval of routes to registration

Executive summary and recommendations

Introduction

As part of the Education Department Workplan 2008-2009, the Education and Training Committee agreed that an adapted model of the approval process would be proposed to the Committee to reconfirm approval of Clinical Scientist routes to registration. This paper asks the Committee to make a decision on whether or not to accept the proposed model for the amended approval process.

The Committee received an information paper at the meeting held on 2 December 2008 stating the current routes to registration for Clinical Scientists. This information paper has been provided as appendix one.

This paper will consider the following areas related to the approval and monitoring processes to illustrate the reasons behind amendments to the approval process:

- The standards of education and training
- The standards of proficiency
- The approval process
- The monitoring processes
- The timeline for activity

Considerations for the standards of education and training

The Association of Clinical Scientists (ACS) routes to registration will be expected to continue to meet all the standards of education and training and continue to ensure that those who complete the programme meet the standards of proficiency for their part of the Register. However, the complexity of the route to registration will necessitate interpretation of the standards of education and training.

Route one to registration as a Clinical Scientist encompasses accredited study by the relevant modality specific professional body, clinical experience in an accredited laboratory and completion of a portfolio and assessment by ACS assessors. This route takes four years to complete. Successful completion leads to the award of the ACS Certificate of Attainment which leads to eligibility to apply to the HPC Register.

Route two to registration as a Clinical Scientist encompasses six years in total made up of three years of clinical experience in an accredited laboratory, three years of other relevant experience and completion of a portfolio and assessment by ACS assessors. Successful completion leads to the award of the ACS Certificate of Attainment which leads to eligibility to apply to the HPC Register.

Traditionally, the ACS conducts the assessment of the portfolio through an interview and does not extend management of quality assurance beyond this final "gateway assessment". Quality assurance related to clinical experience and education programmes is conducted by the Clinical Pathology Accreditation (UK) Ltd (CPA) and the modality specific professional body respectively.

As the standards of education and training require the education provider to take responsibility for all areas of the programme, it is likely that ACS will need to consider how to illustrate management processes which extend across all three elements of the programme (academic, clinical and the gateway assessment). These management processes will need to be appropriate to show how ACS takes responsibility for all elements of the programme, but will likely devolve actions to the organisations already carrying them out.

Some of the standards will need to be considered across the three elements of the programme. For example, assessment standards will need to be directly reviewed for the ACS portfolio and interview process. Additionally though, visitors will require information to show how management processes extend from ACS into the academic and practice environments to ensure that assessments in these areas are also appropriate.

Considerations for the standards of proficiency

The standards of proficiency for Clinical Scientists are written to be appropriate to all the modalities of the profession. However, some standards such as the one below make reference to modality specific knowledge or skills:

> 3a.1 know the basic science underpinning the modality in which the registrant practises, understand relevant basic clinical medicine and be aware of the fundamental principles of clinical practice.

Given the differences in modality specific knowledge and skills it appears necessary to conduct a modality specific review of the standards of proficiency. There are 13 modalities listed on the ACS website, which may require as many as 13 visitors to each review the standards of proficiency.

Two challenges arise from this consideration. Firstly, enacting the approval process with as many as 13 visitors may result in a cumbersome and burdensome experience for the visiting panel and the education provider. Secondly, recruitment will need to be conducted to ensure that there are appropriate visitors for each modality as there are currently seven modalities for

which there is no visitor. Additionally, all the visitors will require training in the approval process.

To address the first issue, it is suggested that the review of standards of proficiency be conducted by correspondence and be directed only at the ACS portfolio and associated assessment processes. In this way, the visiting panel will remain at an appropriate number and can be allowed to focus on the standards of education and training. The documentary assessment may be conducted in a similar fashion to the annual monitoring assessment day, by allowing visitors to work alongside each other at a single venue. Any areas for questions arising from this review of the standards of proficiency will be notified to the education provider in writing and addressed at the visit or as part of the response to conditions after the visit.

In response to the second issue, it may be possible to temporarily extend partner contracts for Clinical Scientists engaged in other areas of the business such as Fitness to Practise or Registrations to conduct the documentary assessment. These individuals can then be supported with the experience of visitors from other professions who have undertaken the approval process repeatedly. Training for Clinical Scientist visitors will be conducted at the same time as refresher training for existing visitors or training for visitors from new professions.

Considerations for the approval process

The first consideration for the approval process is the method through which we communicate with the ACS. There will be no change to formal publications relating to the standards of education and training or supplementary information documents. However, correspondence and key operational documents, such as the “visit request form” will be amended to ensure that the language is appropriate to the particular pathway to registration.

As a result of the standards of proficiency being reviewed via correspondence, the visit itself will focus on the standards of education and training and the visiting panel will be made up of two profession specific visitors and an Education Officer. Depending on the experience of the visitors from the profession, it may be appropriate to also invite a visitor from another profession who has experience of enacting the approval process to support the Clinical Scientist visitors. Additionally, it is likely that the majority of available visitors for Clinical Science will also be ACS assessors. This may result in perceived conflicts of interest similar to those in small professions. It may be necessary to clarify in advance which kinds of relationships are classed as conflicts of interests.

Given the complex relationship between academic and clinical components and the gateway qualification, the documentation submitted prior to the visit will vary from the usual requirements for the approval process. For example, module descriptors are a normal requirement of the approval process; however, there will be no equivalent available from the ACS. Instead, modules will be reviewed by the modality specific professional body at the time of accreditation of the academic component of the route to registration. Therefore, the ACS will most likely submit information to demonstrate how the accreditation mechanisms used

by the modality specific professional body are appropriate to the standards of education and training. Some documentation will be submitted specifically in reference the ACS portfolio and associated assessment processes and this should include information relating to entry requirements, programme management, curriculum, clinical experience and assessment.

Normally, an approval visit takes place at the site of delivery for the programme. The complex nature of the delivery necessitates a pragmatic approach and therefore it is likely that the visit will take place at the ACS offices. This location will be appropriate to review the required standards of education and training. The visit itself will not be comprised of all the normal meetings required. For example, the tour of facilities will not need to be conducted as these will be reviewed via documentation relating to the academic and clinical components of the programme. However, meetings with individuals in senior positions at ACS, individuals conducting assessments and supporting clinical experience and individuals currently engaged in the route to registration will all be required.

Considerations for the monitoring processes

Upon reconfirmation of approval, the ACS route to registration will move into open-ended approval and be subject to the two monitoring processes. Therefore the programme will need to submit an annual submission (declaration or audit) to confirm continued adherence to the standards of education and training and also report significant changes to us via the Major Change process. Consideration will need to be given to the modality specific review of changes to the route to registration. This may result in the temporary extensions of contracts for modality specific visitors being revisited as and when annual monitoring audits occur and when significant changes occur to the programme.

Amended timeline for activity

- December 2008 – paper to note to Education and Training Committee
- March 2009 – decision paper to Education and Training Committee to determine how best to measure the continued ability of the ACS and the Certificate of Attainment to meet HPC standards.
- March 2009 to date of visit – recruitment and training of visitors for appropriate modalities.
- October 2009 – to conduct an approval visit we require at least six months notice and this will be the earliest possible time that we could conduct a visit.
- January 2010 – because we estimate the post-visit process to take three months, this is the earliest possible time to conclude the approval process.

Summary

In summary, the following areas of the approval process are recommended for amendment in order to reconfirm approval of the ACS Certificate of Attainment.

- All standards of education and training must be met, but interpretation of the standards will be required to take into account the extended management processes for academic and clinical components of the programme as well as the gateway qualification itself.

- The ways in which the standards of proficiency are delivered and assessed must be subject to modality specific scrutiny assessed using a documentary method to prevent a burdensome review process.
- Visitors will need to appointed on a temporary basis through contract extensions of current Partners working for other Departments
- Visitors will require specific training to prepare them for the review of the standards of proficiency via correspondence and the approval visit.
- Clinical Scientist visitors may be supported by visitors from other professions who have significant relevant experience of the approval process.
- Formal HPC publications will not be amended but correspondence and operational documents will be amended to facilitate the approval process through use of appropriate terminology related to the ACS Certificate of Attainment.
- Documentary requirements will be reviewed to take into account the extended management processes for academic and clinical components of the programme as well as the gateway qualification itself.
- The visit will take place at the ACS offices rather than at a delivery site for academic or clinical education.
- The approval visit agenda will be reviewed to ensure that it is appropriate to the particular demands of this type of qualification.

Decision

The Committee is asked to agree the following:

- To accept the proposed model for reconfirmation of approval and the amended timeline for activity.

- To amend the proposed model for reconfirmation of approval or the timeline for activity.

Background information
- Education Department Workplan 2008-2009
- Draft Education Department Workplan 2009-2010

Resource implications
Resource implications in terms of staff time have been accounted for in the Draft Education Department Workplan 2009-2010. Resource requirements include: time required to recruit and train Clinical Scientist visitors, specific amendment of key operational documents and negotiation with ACS of visit date and agenda.

Financial implications
Financial implications for this work have been accounted for in the Education Department Budget 2009-2010. Areas of expenditure will include: visitor attendance fees for the visit and the correspondence exercise related to the standards of proficiency and any travel and accommodation related to the visit.

Appendices
Appendix 1 – "Information Paper - Routes to registration for Clinical Science", Education and Training Paper, December 2008, enclosure 17.

Date of paper
10 March 2009

Appendix One

Education and Training Committee – 2 December 2008

Information Paper - Routes to registration for Clinical Science

Executive summary and recommendations

Introduction

As part of the Education Department Workplan 2008-2009, information has been sought to outline the various routes to registration available to Clinical Scientists. This paper provides a summary and analysis of the routes to registration as information for the Committee.

The Committee is asked to review the information and note that at the next meeting of the Education and Training Committee a decision will be made to determine how best to measure the continued ability of the clinical science routes to registration to meet the relevant standards.

Summary of the routes to registration

The information presented in this paper is a summary of the information taken from *My Route to Registration* published by the Association of Clinical Science (ACS).

The ACS awards the Certificate of Attainment which the Health Professions Council has approved as a qualification which leads to eligibility to apply for registration. We therefore regard the ACS as an education provider/validating body. There are a variety of routes available for individuals to obtain the Certificate of Attainment which depend on the modality of clinical science and the experience of the individual.

The two over-arching routes defined by the ACS are called Route One and Route Two.

Route One requires an individual with an appropriate undergraduate degree to undertake a scheme of education and training accredited by the relevant professional body for each modality. Each professional body scheme of education and training is different and may involve the requirement for the attainment of a postgraduate qualification. All schemes are four years in duration but made up of differing durations of practical experience under supervision and academic teaching and learning. The table on page three provides details of each professional body accredited programme

Route Two recognises the experience of individuals who have been in the workplace and in education. Individuals must have an appropriate undergraduate degree and have undertaken three years of appropriate practical experience in the relevant modality under

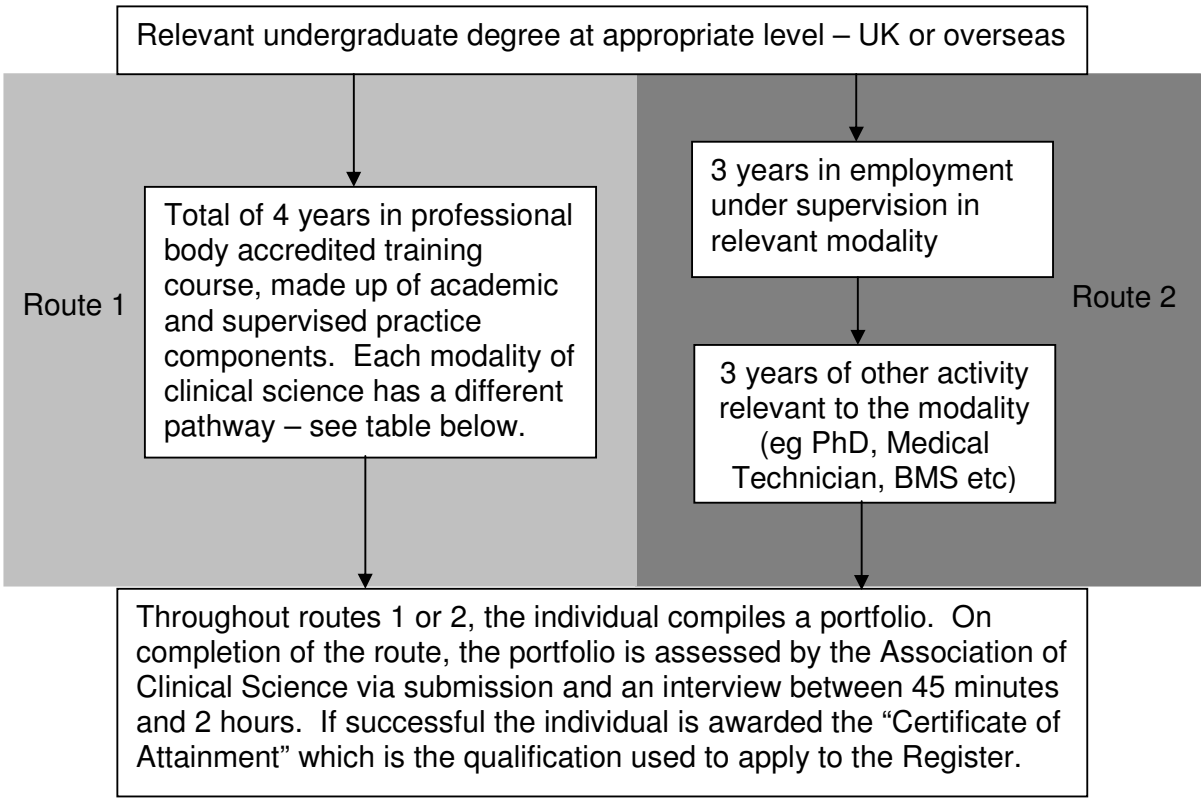
supervision and three years of additional relevant experience and further training such as a PhD, Medical Technician roles or Biomedical Science roles.

During either route, individuals will be compiling a portfolio for assessment by the ACS. At the end of route one or two, the portfolio is submitted for assessment by ACS assessors. An interview lasting between 45 minutes and two hours will take place with the assessors and the individual. Both the portfolio and the interview will form the basis of the decision whether to award the Certificate of Attainment.

The Certificate of Attainment then confers eligibility to apply to the HPC Register as a Clinical Scientist. The relevant modality is recorded as an annotation on the Register. Not all the modalities listed by the ACS which have routes to Registration appear as annotated modalities on the HPC Register.

Overseas applicants to the Register are assessed exclusively by HPC.

The routes to registration can be summarised by the diagram below and table overleaf:



Summary table of modality specific routes to registration

Modality	Routes to registration	Duration of academic training	Duration of clinical component	Professional Body	Modality Recorded by HPC
Audiological Science	Routes 1 or 2	3 Years	1 Year	British Academy of Audiology (BAA)	Yes
Clinical Biochemistry	Routes 1 or 2	3 Years	1 Year	Association for Clinical Biochemistry (ACB)	Yes
Clinical Embryology	Routes 1 or 2	2 Years	2 Year	Association of Clinical Embryologists (ACE)	Yes
Clinical Cytogenetics	Routes 1 or 2	2 Years	2 Year	Association of Clinical Cytogenetics (ACC)	Yes
Clinical Molecular Genetics	Routes 1 or 2	2 Years	2 Year	Clinical Molecular Genetics Society (CMGS)	Yes
Clinical Haematology	Routes 1 or 2	3 Years	1 Year	N/A	Yes
Clinical Immunology	Routes 1 or 2	3 Years	1 Year	Association of Clinical Scientists in Immunology (ACSI)	Yes
Clinical Microbiology	Routes 1 or 2	3 Years	1 Year	Society for General Microbiology (SGM)	Yes
Histocompatibility and Immunogenetics	Routes 1 or 2	3 Years	1 Year	British Society for Histocompatibility and Immunogenetics (BSHI)	Yes
Medical Physics and Clinical Engineering	Routes 1 or 2	3 Years	1 Year	Institute of Physics and Engineering in Medicine (IPEM)	Yes
Clinical Physiologist	Route 2	N/A	N/A	N/A	No
Cellular Science	Route 2	N/A	N/A	N/A	No
Developing Science	Route 2	N/A	N/A	N/A	No

Analysis of the routes to registration

The ACS is made up of representatives from the professional bodies that accredit the training schemes for each modality. For route one, the professional bodies accredit the pathways leading up to final assessment for the award of the Certificate of Attainment of the ACS. However, ACS as an organisation does not directly approve each programme of study and periods of supervised practice. The route two pathway which is used as a method to recognise experience gained from non-accredited pathways is similarly not directly quality assured by the ACS.

Rather ACS assesses the output from the various pathways using the portfolio and the interview. The standards of professional competence are measured by the ACS based on these assessment methods.

When viewed as an education provider or validating body, it is currently unclear in what ways ACS takes responsibility for the standards in relation to the quality of the provision of education.

All programmes that award approved qualifications have to meet all the standards of education and training and effectively deliver and assess all the standards of proficiency. The ACS may be required to make more explicit the mechanisms enacted by the validating body to quality assure the provision of the academic and supervised practice elements of the programme if continued approval were to be granted. This would be the case for both route one and two pathways.

The ACS Certificate of Attainment was brought over to the HPC as an approved qualification at the Councils inception and has not been subject to an approval visit or the monitoring processes.

Operational Considerations

Given the complexity of the landscape of pre-registration education and training for clinical scientists, it will take time and a period of transition before the HPC approval or monitoring process can be applied. The summary below indicates the currently planned time-line for activity.

Timescales

- December 2008 – paper to note to Education and Training Committee.
- March 2009 – decision paper to Education and Training Committee to determine how best to measure the continued ability of the ACS and the Certificate of Attainment to meet HPC standards.
- October 2009 – if it is decided to conduct an approval visit we will require six months notice and this will be the earliest possible time that we could conduct a visit.
- January 2010 – if a visit is selected and because we estimate the post-visit process to take three months, this is the earliest possible time to conclude the approval process.

The Committee is minded that the approval or monitoring processes are normally applied to schemes of training and education. The ACS methodology may require adaptations to the approach taken in applying the approval or monitoring processes.

At these early stages it is apparent that the members of the Education Department will require briefing on the differences between this model of approved qualification and the more traditional qualifications that are approved. The same will also be true for visitor partners; many of whom have not yet conducted a visit for HPC as our clinical science visitors have not yet had the opportunity.

There may also be changes required to elements of the process. Most predictable of these changes are to the required documents requested before the visit and to the agenda as some new meetings may need to be added and others removed to collect all the relevant evidence from the education provider.

There may be other impacts on the process of approval or monitoring and it may be prudent to conduct a preliminary meeting with representatives of the ACS to determine how best to conduct the processes.

Decision
The Committee is requested to note the document. No decision is required.

Background information
Education Department Workplan 2008-2009

Resource implications
None

Financial implications
None

Appendices
None

Date of paper
14 November 2008