Statement from the Academy of Medical Royal Colleges on Higher Specialist Scientific Training

Executive Summary

1. The Academy of Medical Royal Colleges (AoMRC) recognises the importance of Higher Specialist Scientific Training (HSST) in ensuring appropriate career development and progression for a highly skilled healthcare scientific workforce.

2. AoMRC recognises that scientists, who have completed Higher Specialist Scientific training, should have recognition of their training and status. The mechanism of establishment of such an arrangement will vary across the Royal Colleges, but may be achieved by membership or fellowship of the relevant Medical Royal College or a Faculty of a Royal College or through a collaborative Royal Colleges’ framework.

3. We intend to support the development of curricula for top-level scientists working in areas relevant to each college’s field of interest, as part of the Modernising Scientific Careers (MSC) programme. These curricula will be developed by both scientists, currently working at an appropriate level in the relevant field, and medically trained colleagues, who may be nominated by the Specialist Society or specialist group, as determined by the relevant Royal College, together with specialist colleagues with an interest in education and training.

4. Detailed curricula for each scientific discipline will serve to define the appropriate scope of practice to ensure both clarity and synergy between the medical and scientific disciplines and promote optimal patient care. It is our intention that these curricula and assessment will be designed to promote the development of a cohort of outstanding healthcare scientists.

5. Copyright and intellectual property rights relating to the curricula and assessments will be the property of the relevant College or Faculty. This does not conflict with the acknowledged need for external scrutiny and approval, and utility within the MSC HSST programme.

6. We believe that that this work should be subjected to external, independent scrutiny and regulation, such as that which is currently delivered for the medical profession by the General Medical Council.

7. The use of the word ‘consultant’ in the title of posts held by non-medical scientists must not mislead the public. The AoMRC welcomes the Chief Scientific Officer’s agreement to discussions to ensure that this shared aim is achieved.
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The status of scientists in the health service
The AoMRC recognises and welcomes the huge contribution made by non-medical scientists across many different aspects of the delivery of healthcare. As medical science and technology have advanced, the role of highly trained scientists has expanded. We anticipate that this expansion will continue.

The contributions of healthcare scientists are enormously diverse, not only in terms of the disciplines covered but also in terms of the patterns of training and the extent and intensity of training. MSC addresses the diversity of approach which has characterised healthcare science training to date by creating a transparent education and training programme. Entry to HSST will require a defined Masters degree and successful completion of the Scientist Training Programme followed by 5 years of workplace based training which is at least as long and arduous as that demanded from medically qualified consultants and concludes with a final award appropriate to the discipline.

The AoMRC believes that the status of professionals should be related to the entry requirements to the training programme and the rigour and duration of the training that is necessary for them to deliver their role. Consequently, we are fully in agreement with the proposal that there are top-level healthcare scientists currently within the workforce, whose training and expertise justify a status that is equivalent to that enjoyed by medically qualified consultants.

We believe that the training of top-level scientists and the names used to describe their posts are separate issues. This document will concentrate on the former.

The roles of healthcare scientists
The areas covered by non-medical scientists include laboratory diagnostic services, medical physics and the use of ionising radiation, clinical engineering, various surgical support services and ‘physiological sciences’ which include a diversity of healthcare practice spanning many clinical areas of secondary care. This list is not exhaustive. This diversity of disciplines requires recognition of the variety in training, qualification and top-level practice across the entire spectrum of healthcare scientists.

The roles of scientists in the health service have expanded in recent years. In some areas, they now undertake tasks that in previous years were reserved for medically qualified staff. The Academy of Medical Royal Colleges supports such a transfer of duties, provided that it can be demonstrated that this results in the best quality of care delivered to the patient. One of the aims of HSST and the engagement of the Medical Royal Colleges is to bring clarity to the training and roles of scientists in optimal healthcare provision, within the multidisciplinary team.

AoMRC would emphasise that the limits of practice of scientists in the health service should be set by what represents safe, high quality healthcare, a principle that applies to all healthcare professionals. These limits should be set by collaboration and must be based on putting the best interests of the patient first. We believe that, at the present and for the foreseeable future, this means that the overall long-term responsibility for the planning and oversight of the care of
individual patients must lie with someone, who has the breadth of background knowledge that is delivered by a medical training; that person may be a GP or a (medically qualified) consultant, depending on the specific clinical situation. However, healthcare is delivered by teams. It is often appropriate for specific aspects of care to be delivered by individuals who do not have a medical qualification.

**The involvement of Medical Royal Colleges in higher scientific training**

The fact that doctors and healthcare scientists deliver integrated care for patients as part of a team provides a strong argument that curricula for training of doctors and healthcare scientists should be developed and delivered by scientific and medical specialists in the relevant field, to maximise mutual understanding and synergistic working.

The Colleges believe that scientists who complete courses of training with comparable demands, rigour and duration to those that lead to membership\(^1\) of the Colleges should have equivalent status to that enjoyed by medically qualified colleagues. The mechanism for such recognition will vary from College to College.

On that basis, the Medical Royal Colleges state their wish to be involved in the following activities\(^2\):

- The Medical Royal Colleges state their intention to explore mechanisms to admit non-medical scientists and this may be achieved by membership or fellowship of the relevant Medical Royal College or a Faculty of a Royal College or through a collaborative Royal Colleges’ framework. It is understood that any process that decides whether or not an individual is recognised as a member of a Medical Royal College or an associated Faculty must be under the control of that College or Faculty.

- The structure and constitutions of such arrangements will be determined in collaboration with the relevant professional groups. The Colleges will not seek to impose a link between any group of scientists and any specific College and such Faculties may have links to more than one College.

- We intend to develop MSC HSST curricula for top-level scientists for the practice relevant to each college’s field of interest. These curricula will be developed by scientists, currently working at an appropriate level in the relevant field, together with medically trained members of the College, in the relevant medical disciplines, and colleagues with an interest in education and training. This will ensure appropriate synergy with current medical curricula and inclusion of relevant clinical skills for scientists. Where appropriate, relevant medical and scientific specialist societies or groups will be consulted or involved.

- We intend to develop assessment methods that are linked to these curricula.

- The curricula will be developed to the standards of education which are equivalent to those set out by the GMC, with which the Colleges are all familiar (Standards for Curricula and Assessment Systems, 2010). We understand that the Academy of Healthcare Science are developing similar professional standards for Healthcare Science education and training which may enable those completing STP to register with

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\(^1\) Please note that ‘member’ and ‘membership’ with a lower case ‘m’ are used to indicate belonging to a College or Faculty in a generic sense, as contrasted with ‘Member’ as a title.

\(^2\) Subject to agreement on start-up funding and other College-specific details.
the Health Professions Council (HPC) as Clinical Scientists, from whom those entering HSST will be recruited.

- It is our intention that these curricula and assessment methods will be designed to be relevant to senior non-medical scientists pursuing a high level scientific career in the health service.
- We intend to work with Medical Education England, the Chief Scientific Officer and the Department of Health’s MSC team to address the curricula and assessment requirements to satisfy the needs of the MSC HSST programme. It is anticipated and hoped that similar arrangements will be introduced in the three devolved nations.
- The curricula will refer to MSC defined minimum entry requirements for HSST which includes opportunities to demonstrate equivalence to enable diversity of access. The curricula will be designed to follow on from the outputs of the MSC Scientist Training Programme and will ensure quality by the rigour of the assessment processes.
- The Colleges wish to promote the development of systems to assess the quality of training programmes against the requirements of these curricula, together with appropriate accreditation of organisations that provide the training.
- Collaboration of scientists and doctors, within the Medical Royal College structures, will mean that copyright and intellectual property rights relating to the curricula and assessment methods will be the property of the relevant College or Faculty. This does not conflict with the acknowledged need for external scrutiny and approval, and the use of curricula for delivery of MSC HSST programmes (see ‘Independent regulation’ below).
- Recognition of training and status of top level scientists who have completed current established training programmes comparable to HSST (e.g. some pathological disciplines) is already established in some Colleges, while, in others, further discussions are required. Titles such as ‘Fellow’ and ‘Member’ (and the associated postnominals) are currently awarded and used in different ways by different colleges. Thus, it is not possible to specify for Colleges in which this is not current practice what titles and postnominals may be conferred on scientists who demonstrate completion of training that is broadly equivalent to medical members of Colleges. However, the intention is to establish an appropriate mechanism to recognise equivalent status for those who have earned such recognition through HSST. Consideration will be given to enabling senior scientists already working at a relevant level to be recognised in a similar manner. This route of entry is likely to be appropriate for the senior scientists involved in the initial establishment of curricula.
- Systems to ensure continuing high standards of scientific practice will be developed, as far as is practical for non-statutory bodies such as Medical Royal Colleges. If and when revalidation is developed for non-medical scientists, Colleges will support their scientific colleagues, with expertise gained through the programme of revalidation for doctors.

Independent Regulation
We believe that Medical Royal Colleges are best placed to deliver integrated curricula and assessments for top-level healthcare scientists and to ensure that high standards are maintained. However, we also believe that this work should be subjected to external, independent scrutiny and regulation, such as that which is currently delivered for the medical profession by the General Medical Council. Since those completing HSST will already be registered with the HPC, we believe that regulation of their Higher Specialist Training should also be done by the HPC. Discussions should occur with the HPC to determine their willingness and ability to deliver such external regulation. In case there proves to be a need for
an alternative system of independent oversight this should comply with agreed principles of
good regulation and it should be on a statutory basis. Any lesser form of regulation would be to
the detriment of the status and responsibilities of the scientists concerned.

**A ‘voice’ for healthcare scientists**
The Chief Scientific Officer has pointed out that the diversity of scientists working in the health
service has resulted in scientists not having a single coherent ‘voice’ or point of contact. It is
anticipated that leading members of the scientific community will join together to form an
independent group through which that problem can be resolved.

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