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MODERNISING SCIENTIFIC CAREERS – EXPLAINING THE FACTS



PURPOSE

Modernising Scientific Careers – explaining the facts is a resource for the existing NHS healthcare science community, those currently on training programmes and individuals considering a career in healthcare science. It provides you with answers to some frequently asked questions (FAQs) and aims to bust some myths surrounding the Modernising Scientific Careers (MSC) programme.

It has been designed as a digital resource – to help you navigate around the document, the FAQs have been grouped into themes. For ease, you can use the quick links on the contents page, and at the end of each section is a 'back to contents' link to return back to the main contents page.

PARTNERSHIP APPROACH

The Modernising Scientific Careers programme is built on the principles of partnership working, recognising that Local Education and Training Boards, the professions, the education sector, employers, trade unions and others must work together to implement the changes to make a difference for patients.

This guide has been produced in partnership with the Health Education England MSC team, the NHS Employers organisation, Unison, Unite and the Federation of Clinical Scientists (FCS).



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ABOUT MODERNISING SCIENTIFIC CAREERS

What is MSC?

The UK-wide Modernising Scientific Careers (MSC) programme was established in 2008 by the Department of Health (DH) led by the Chief Scientific Officer (CSO). The programme was developed to ensure that the education and training of the healthcare science workforce was harmonious with arrangements for other healthcare professionals, as well as being both consistent and coherent across the different scientific specialisms. Previously, healthcare science education and training arrangements had been inconsistent, incoherent and at times ad hoc. The MSC programme ensures that the healthcare science workforce will be fit to respond to future scientific and technological advances and to meet the demographic, epidemiological and financial challenges facing the health and social care system.

Very simply, MSC is about making sure that those working in healthcare science can deliver quality services to patients and continue to play a major role in healthcare.

MSC is addressing some of the historic difficulties within the healthcare science workforce, for instance by replacing the large number of routes through education and training, which made pathways unclear and difficult for individuals and employers to find their way through, with a clear framework of education pathways and workforce development.

The programme continues to be led by the Chief Scientific Officer, who now provides professional leadership and expert clinical advice across the health system from within NHS England.

What are the main changes within MSC?

MSC now sits within Health Education England (HEE) as a core national programme. HEE is responsible for the education, training and professional development of the NHS workforce and delivering a better healthcare service for the UK.

MSC is bringing changes to the education and skill mix of the healthcare science workforce, to ensure that it is trained and structured in a way to allow for future changes in service delivery and to maximise the benefits of new scientific and technological advances.

The key elements of the MSC framework* (see Figure 1) and its implementation are:

- a. Standardised training and education pathways and curricula with defined learning outcomes and competences, to enable delivery of consistent academic programmes and workplace training and skills development.
- b. Broader training in themes of cognate specialisms, resulting in a more flexible and responsive workforce whose breadth of training reflects the complex pathologies of the potential patient population.
- c. Robust and consistent assessment criteria linked to the learning outcomes, and captured by a nationally procured assessment tool and e-portfolio to enable monitoring and quality management of trainees' progress.
- d. A defined strategy for recognising an individual's previous experience and training (equivalence), which will also support local staff development and progression.
- e. An affordable and coordinated approach to the commissioning and provision of education and training and Continuing Professional Development (CPD) requirements.
- f. An overarching quality management and assurance and accreditation framework, to ensure specified national educational standards are met.
- g. A standardised approach to trainee recruitment and employment.

* Which were subject to piloting

The MSC programme underpins a flexible career structure with four main education and training pathways for:

Healthcare science assistants and associates who undertake clearly defined task and protocol based, high volume, low risk activities. Their development will be supported by a national Learning and Development framework with vocational awards and qualifications, designed to provide maximum flexibility in the development of a support role specific to local employer needs.

Healthcare science practitioners who undertake a largely technology-based role in the delivery and reporting of quality assured tests, investigations and interventions. Their training comprises a three-year undergraduate Bachelors Honours degree programme, which provides the underpinning knowledge and skill development – including 50 weeks of work-based training and assessment to ensure trainees are fit for purpose on graduation and can meet the requirements for statutory or voluntary regulatory arrangements.

Clinical scientists who undertake complex scientific and clinical roles. Their training comprises a three-year postgraduate-level programme incorporating two components, which are very closely aligned:

- i) an academic MSc in Clinical Science with a defined research component
- ii) highly structured and nationally specified workplace training, with the first year spent in rotational training to develop a broader skill and knowledge base.

The remainder of training is spent in a chosen specialism leading to statutory regulation as a clinical scientist.

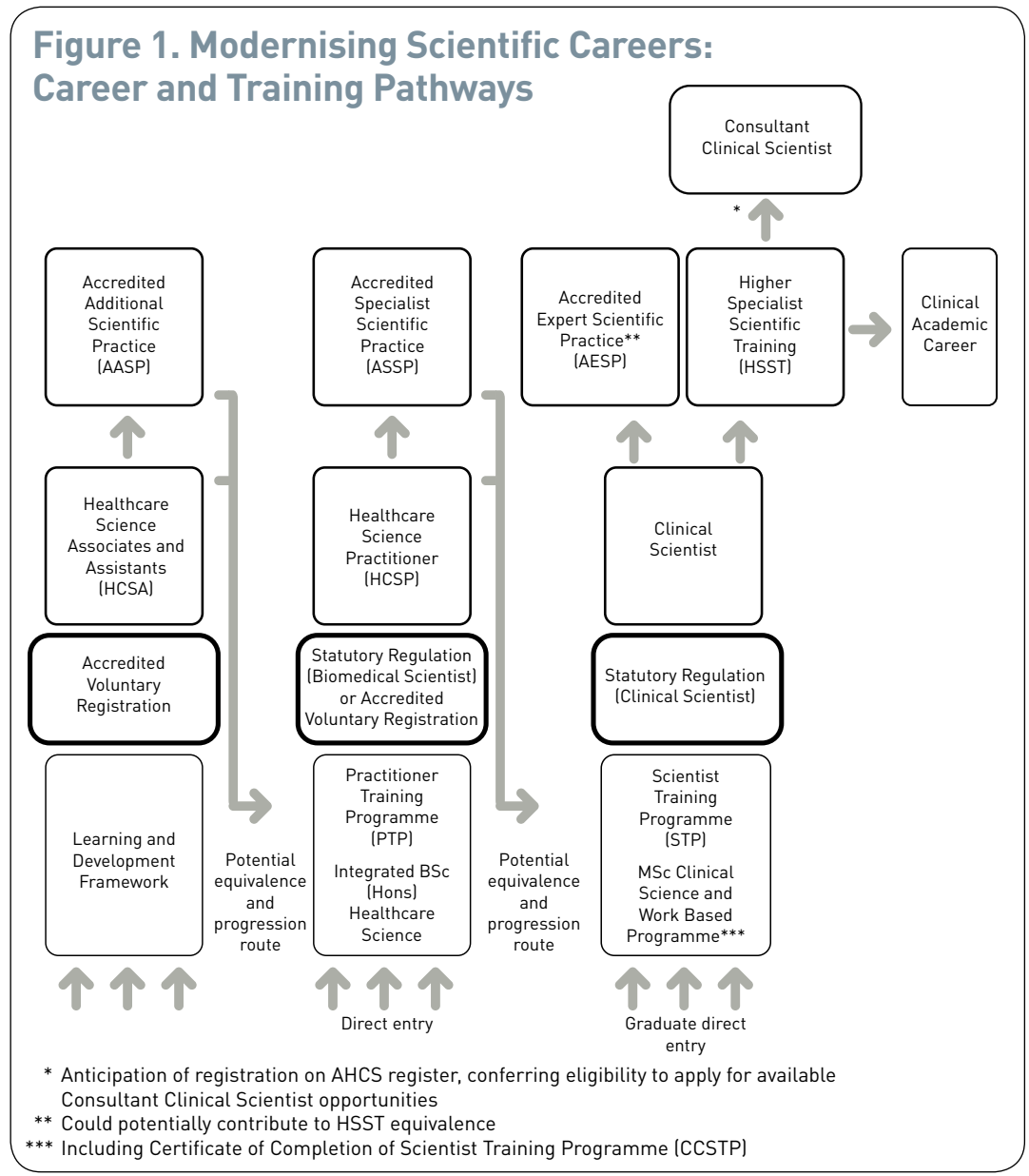
Consultant clinical scientists whose higher specialist scientific training comprises a five-year doctoral-level programme being developed in conjunction with medical Royal Colleges, including research, leadership and specialism-specific clinical scientific content. This advanced programme will equip the individual with skills for their future in-depth and highly complex roles as clinical scientific experts, as clinical leaders and directors and innovators.

The outcomes of these programmes lead to defined roles in practice, with clearly defined roles that are applicable to all healthcare science disciplines.

MSC supports a care pathway with opportunities to progress up the career ladder through the demonstration of prior learning and experience (through a system of equivalence, see separate [FAQ on equivalence](#)), as well as the completion of new NHS approved training programmes.

Through consultation with the service and professional bodies, training programmes have been, and are being, developed and introduced which support the training of staff at all levels – from assistant through to clinical scientist, and to consultant clinical scientist in some identified specialisms. The focus is on the provision of broad-based development, with additional specialist skills to support a more flexible workforce in terms of the knowledge and expertise of staff.





What is the timescale for MSC implementation?

MSC is well underway across the country. Following a pilot in genetics, the new MSC education and training programmes for clinical scientists (STP) began in 2010 and 2011, with the remainder starting in 2013/14. The healthcare science practitioner training programme (PTP) is currently in its third year. Training programmes to develop the consultant clinical scientist workforce (HSST) will begin from 2014, and the development opportunities for assistants and associates are expected to be available from April 2014.

The NHS Employers organisation publishes a quarterly update, which summarises current developments across the various elements of MSC and the healthcare science workforce modernisation agenda. Download the latest update from the tools and resources page on the [NHS Employers website](#).



Is MSC for me?

Changes to education routes, advances in technology, greater patient expectations and a profession that works more closely with patients and other members of the healthcare delivery team, all present new opportunities for the existing workforce and new entrants into the profession.

MSC is about making sure that those working in healthcare science are equipped to meet the challenges and opportunities of the future, so that they can deliver high-quality care to patients, play a major role in prevention, health improvement diagnostics and therapeutic services and bring innovation into healthcare.

What is the MSC healthcare science provider framework?

The MSC programme is simplifying career structures and education and training for the healthcare science workforce along a common framework. As a result, career pathways will be more aligned with other healthcare professionals and more transparent for those already in the workforce or considering entering it.

The MSC healthcare science provider framework will be an online and interactive resource, designed for use by service commissioners, employers and providers to understand:

- what workforce is needed to deliver safe and effective scientific services
- how to use the healthcare science workforce more effectively
- what skills and talents the healthcare science workforce possesses and how they can be deployed more effectively in clinical multi-disciplinary teams
- what education and training is needed for safe and effective working at different levels
- the opportunities to develop the careers of this workforce.

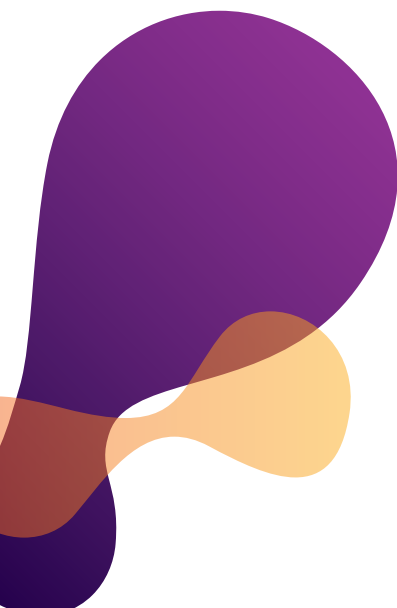
The first stage of the framework is being established to support employers in developing the scientific workforce in a way that aligns with MSC and reflects changes in service delivery models. It will provide structure and information to support skills development and the delivery of safe and effective scientific services.

New resources on education, training and new and innovative roles will be added as it becomes available, resulting in a comprehensive framework.

When can I see the new healthcare science provider framework?

The NHS Employers organisation is working closely with the MSC team and key stakeholders to develop the new framework for healthcare science. We anticipate the framework will be completed during 2014.





WHY MODERNISING SCIENTIFIC CAREERS?

Why have we implemented MSC?

The health system needs a healthcare science workforce that meets modern day demands and keeps up with the rapid advances in science and technology. MSC is providing employers with tools to structure the workforce, and education and training programmes to equip staff with the right set of knowledge and skills, to ensure patients can benefit from these advances and receive the best quality of care.

What are the drivers for MSC?

The non-medical healthcare science workforce in the NHS is specialised and complex, with some 50,000 staff in England, making it the largest 'basic' science group in any employment sector in the UK. They are employed in more than 45 specialisms, delivering over 100 highly specialist or sub-specialist scientific, diagnostic and therapeutic services. They play a critical role in the innovation pathway from invention through to adoption and diffusion of new technology and knowledge management, particularly in the rapidly developing fields of genomics and bioinformatics. Although this workforce comprises approximately 5 per cent of the total healthcare workforce in the UK, their work underpins 80 per cent of diagnosis. They work within NHS provider trusts, in primary care, public health and within the National Blood and Transplant Authority (NHSBT).

The total cost of scientific and highly specialised scientific and therapeutic services in the NHS in England is greater than £8 billion per annum. MSC will ensure that we have a healthcare science workforce fit for future quality service delivery, with the right values and behaviours and a focus on outcomes and continual improvement.

The drivers for change can be grouped by the impact they would have on patients, workforce planning and education and training.

Patients and the public:

- to ensure a reliable supply of appropriately trained healthcare scientists, with a focus on outcomes for patients and the public
- new delivery models outside traditional boundaries, providing better access and reductions in inequalities
- new services and care pathways need to be delivered and require the necessary specialist workforce to be trained at the appropriate level
- changing demographics of patients requiring diagnosis and treatment management of complex medical conditions
- changes to life expectancy and prevalence of long-term conditions
- a focus on prevention health promotion and improvement.

Workforce planning:

- need for clear progression routes
- simplifying the complex and fragmented career pathways, which resulted in over and under-supply of healthcare scientists in some specialisms
- overcome challenges for workforce planners in relation to staff working across pathways
- support the drive to integrate workforce planning with other professions
- need to plan for a workforce with the right values and behaviours, flexible skills and knowledge to meet the needs of services and patients
- need to achieve safe skill or grade mix for delivery of effective services
- robust succession planning for preservation of acquired knowledge and experience, particularly in highly specialised areas of expertise.

Education and training:

- clarity needed to ensure pathways are clear and flexible to meet the needs of service commissioners and providers and trainees
- education and training curricula need to be well matched with the emerging new roles and the emerging scientific and technological advances, especially in clinical settings
- clarity needed between provider organisations and universities and further education colleges, in terms of education standards and requirements.

What is the Council of Healthcare Science in Higher Education?

The Council of Healthcare Science in Higher Education (CHS) has been established to give an effective national voice and single point of contact to academic healthcare science. The [website](#) contains details about the MSC training programmes and the universities providing them.

What is the remit of the National School of Healthcare Science?

The National School of Healthcare Science (NSHCS) forms part of the new system for healthcare science training established through MSC. The role of the NSHCS is to support individuals through their courses, ensuring high standards of education and training, clear and fair assessments and appropriate professional recognition of competency at the end of the course. They also support departments and staff providing training and help to maintain consistency and standards through quality assurance of training courses and overseeing a national system of assessment. You can find out more about the NSHCS by visiting their [website](#).

What is the remit of the Academy for Healthcare Science?

The Academy for Healthcare Science (AHCS) is a UK-wide organisation responsible for setting and maintaining high standards of education and training for healthcare science. The AHCS brings together the UK's diverse and specialised scientific community who work across the health and social care system, including NHS trusts, NHS Blood and Transplant, Public Health England, independent healthcare organisations and the academic sector across the UK.

The AHCS has been commissioned to undertake educational and training equivalence for the healthcare science workforce. For clinical scientists, the Health Care Professions Council (HCPC) has given approval to the AHCS to grant Certificates of Equivalence and Attainment, leading to eligibility for registration as a clinical scientist.

The AHCS is still working through equivalence processes for other aspects of the career framework and voluntary assured registration for disciplines not regulated by the HCPC. More information can be found on the [AHCS website](#).

What is the role of Health Education England (HEE) and the Local Education and Training Boards (LETB), including the lead LETB?

Health Education England (HEE) is responsible for the education, training and professional development of the NHS workforce and delivering a better healthcare service for the UK.

Health Education West Midlands is the Lead LETB for healthcare science. Their role is to lead on Genomics education, host the National School of Health Care Science and commission Health Care Science education for England.



The other 12 LETBs, along with the lead LETB, have specific duties and responsibilities to deliver quality education and training that improves the quality of care and treatment to patients. Their main functions are to:

- identify and agree local needs for education and training to meet future needs
- plan and commission high quality education and training whilst seeking to ensure and improve quality in line with the [Education Outcomes Framework](#), standards of professional and other regulators, outcomes frameworks for the NHS, public health and social care
- bring providers and stakeholders together to develop the whole workforce.

Further information on LETBs, including location, can be found on the NHS Employers [website](#).

What is the evidence base for MSC?

The Future of the Healthcare Science Workforce. Modernising Scientific Careers: The Next Steps was published in 2008 as a consultation, setting out proposals to ensure the healthcare science workforce was trained and educated to meet the challenges and demands of modern day healthcare. Almost 1,000 responses were received with considerable support for the policy.

The consultation outlined the challenges for workforce planning and the education and training of the healthcare science workforce, which unless addressed would hinder the productivity and quality of healthcare science services.

The rationale for MSC is set out in *Modernising Scientific Careers: The England Action Plan Impact Assessment*, which can be accessed from the [GOV.UK](#) website. [Liberating the NHS: Developing the healthcare workforce from design to delivery](#) sets out the policy framework for the new approach to workforce planning and education and training of the health and public health workforce, including healthcare science. It is 'ensuring that the NHS attracts, develops and retains some of the brightest science graduates and young people in the UK with an interest in science, technology, engineering and mathematics (STEM) subjects'.

How is the success of MSC being evaluated and measured?

The implementation of MSC is lead locally by NHS organisations with changes taking place based on workforce priorities. As outlined by the Department of Health in *Modernising Scientific Careers: The England Action Plan*, successful delivery of the MSC programme is evaluated using the following success criteria:

- a workforce able to respond quickly to service needs
- better trained staff with the skills to deliver high quality care
- better value for money (workforce, training and education costs) while maintaining or improving quality of patient care
- more motivated staff delivering better quality care and reduced risk of workforce or skills shortages or oversupply
- an improved training experience and better outcomes for trainees.

Various aspects of the programme have been evaluated including the policy approach.





TRAINING AND EDUCATION PATHWAYS

What are the education and training programmes within MSC?

Information about the training routes available to the healthcare science workforce, including the new training pathways and those currently under development, is available on the [NHS Careers](#), [National School of Healthcare Science](#) and [Academy for Healthcare Science](#) websites.

In summary, the routes into healthcare science are:

Healthcare science assistants and associates, whose development will be supported by a national Learning and Development framework with vocational awards and qualifications designed to provide maximum flexibility in the development of a support-role specific to local employer needs.

Healthcare science practitioners, whose training comprises a three-year undergraduate Bachelors Honours degree programme which provides the underpinning knowledge and skill development including fifty weeks of work based training and assessment to ensure trainees are fit for purpose on graduation and can meet the requirements for statutory or voluntary regulatory arrangements.

Clinical scientists, whose training comprises a three-year postgraduate-level programme incorporating two components which are very closely aligned: (i) an academic MSc in Clinical Science with a defined research component and (ii) highly structured and nationally specified workplace training of which the first year is spent in rotational training to develop a broader skill and knowledge base. The remainder of training is spent in a chosen specialism leading to statutory regulation as a Clinical Scientist.

Consultant clinical scientists, whose higher specialist scientific training comprises a five-year doctoral-level programme being developed in conjunction with medical Royal Colleges including research, leadership, and specialism-specific clinical scientific content.

Have the curricula for the new education programmes been designed with patients and those that work in that area?

Yes. The development of all curricula for new MSC education programmes is carried out with engagement from professional bodies, royal colleges, patient and lay public representatives and key stakeholders, including senior healthcare scientists from provider organisations.

Which MSC training programme is right for me?

Depending on where you are currently in your career, there are different education and training options available to you. Below is a summary of the options and [NHS Careers](#) can provide further information on entry requirements to the various programmes.

Healthcare science assistant or associate – recruitment to become a healthcare science assistant or associate is managed by local NHS organisations, so to find out more if you are already employed in the NHS talk to your current employer or visit www.jobs.nhs.uk. To become a healthcare science assistant or associate you are likely to be required to work towards a vocational qualification. One way to do this would be to undertake an [apprenticeship](#). Healthcare science associates are commonly trained through a foundation degree or diploma. There is work underway to create a national learning and development framework that will provide national awards and qualifications for assistants and associates, enabling a clear route to progress to practitioner level training.

Healthcare science practitioner – as a prospective healthcare science practitioner you can take the Practitioner Training Programme (PTP) route to gain your first degree (BSc (Hons) Healthcare Science) and will then be eligible to apply for healthcare science practitioner roles in the NHS. If you are already employed by the NHS in an associate or assistant role, then you may be eligible to apply for the PTP route with demonstration of relevant experience. If you are not already employed in the NHS, Public Health England, NHS Blood and Transplant (NHS BT) or other health organisations, in an associate or assistant role (or have no experience of such), then typical entry requirements for the PTP are 'A' levels (or equivalent). The programmes are offered by a number of universities across England and involve integrated academic learning and workplace-based training, spread over three years.

Clinical scientist – if you are looking to become a clinical scientist you will be required to have an existing degree or postgraduate qualification or equivalent, and would need to progress through the Scientist Training Programme (STP) route. If you are already employed by the NHS, Public Health England, NHS BT or other health organisations in a practitioner role then you may be eligible to apply for the STP route either with an existing science degree, postgraduate qualification or by demonstrating relevant experience. To access the scientist training programme (STP) you must apply through the National School of Healthcare Science, which manages the national recruitment process with applications typically invited through an advertisement in the New Scientist at the start of each calendar year. This is a three year workplace based postgraduate pre-registration programme (with a Masters degree in Clinical Science) and successful candidates will be employed by an NHS trust for the duration of their training.

Consultant clinical scientist – Higher Specialist Scientist Training (HSST) will support the development of a consultant clinical scientist workforce in defined scientific specialisms where there is a workforce requirement. Curricula have been developed in partnership with medical royal colleges. This is a five year workplace based training programme supported by an underpinning doctoral level academic award. It is expected that the first HSST programmes will start in early 2014. Recruitment will be through a nationally coordinated process led by the National School of Healthcare Science.


What training opportunities are available for healthcare science assistants and associates?

Healthcare science assistants and associates work towards vocational qualifications in subjects, such as pathology support, sometimes using apprenticeships as a training route. Healthcare science associates are commonly trained through a foundation degree or diploma. Many organisations are familiar with developing their wider support workforce using these education routes and already have arrangements in place.

Through MSC there are new awards and qualifications and training pathways under development and available from after April 2014 that will provide a national curricula for assistants and associates and will also create a clearer route to progress to practitioner level training (PTP). The new curricula are expected to comprise a range of further and education and training programmes integrating work based training.

What is Accredited Scientific Practice?

Accredited Scientific Practice (ASP) will meet the needs of staff working at each level in the healthcare science workforce to develop new skills in addition to those acquired through their initial qualification. It also will meet the requirements of the registering and regulatory bodies for healthcare professionals to keep up to date and to undertake continuing professional development. ASP is a framework that will provide formal programmes of work-based and academic continuing professional development (CPD) reflecting patient and service needs, with a mechanism to accredit the development of skills in relation to certain areas of scientific practice. Recognition of ASP will be conferred by the Academy for Healthcare Science on receipt of the required evidence of attainment.



ASP will operate at three levels, namely Accredited Additional Scientific practice (for Associates) Accredited Specialist Scientific Practice (for Practitioners), and Accredited Expert Scientific Practice (for Clinical Scientists).

The Accredited Scientific practice programme is currently under development. More details will be available during 2014 from the National School of Healthcare Science.

What is Higher Specialist Scientific Training (HSST)?

The Higher Specialist Scientific Training Programme (HSST) is a five year workplace based programme supported by an underpinning doctoral level academic award. The MSC team is working with the medical royal colleges and other key stakeholders to develop the curriculum for these consultant clinical scientists in specialisms where there is a clear workforce need. The first HSST programmes are expected to start in 2014.

How do I apply for the Practitioner Training Programmes?

Healthcare science practitioners are now trained through NHS approved and accredited BSc honours degrees in the Practitioner Training Programme (PTP) in one of five scientific themes of healthcare science (cardiovascular, respiratory and sleep sciences, neurosensory sciences, pathology sciences, medical physics and clinical engineering). PTP courses in anatomical pathology and clinical photography are also expected in 2014. Programmes are offered by a number of universities across [England](#). Details are found on the [NHS Careers](#) website and also the Council of Healthcare Science in Higher Education [website](#).

How do I apply for STP programmes?

To become a clinical scientist you can apply for the Scientist Training Programme (STP), which is currently in its third year. This leads to an accredited master's degree and certification of workplace-based training following one of the themed scientific pathways (infection science, blood sciences, cellular sciences, genetic sciences, neurosensory sciences, cardiovascular respiratory and sleep sciences, gastrointestinal physiology, clinical engineering, medical physics).

Some new Scientist Training Programme courses began in September 2013 and include clinical pharmaceutical science, bioinformatics (genomics), critical care science and reconstructive science. It is anticipated new bioinformatics (physical sciences and biomedical engineering), bioinformatics (life sciences) and health informatics courses will be in place for 2014. The national recruitment process is managed by the National School of Healthcare Science and begins at the start of each year with an advert in *New Scientist* and www.jobs.ac.uk. Support is also provided from [NHS Careers](#). Details can also be found on the [Council of Healthcare Science in Higher Education](#) website.

How do I apply for the HSST programmes?

If you are looking to become a consultant clinical scientist, Higher Specialist Scientist Training (HSST) will be an option when programmes are expected to be introduced from 2014. You can find out more from Health Education England and the lead LETB.



What will happen with students or trainees who have started on the ‘old’ style training programmes, now that there are new training programmes?

Students or trainees who began training before the introduction of the new training pathways will continue on their original programmes.

The National School of Healthcare Science (NSHCS) should be notified by employers, who are work-based training providers, of all existing trainees currently on the previous training routes so that trainees can be offered guidance about training and support opportunities.

I’ve heard people mention ‘equivalence’. What is it?

Some individuals wishing to enter into or progress through the healthcare science career structure, may already have undertaken similar training or hold considerable periods of professional experience. This means that undertaking training from the beginning would likely result in unnecessary repetition.

Equivalence assessment is a way to allow individuals who have relevant qualifications, skills and particularly experience, to gain exemption from parts of training or even be judged equivalent in competency to someone who has been through a full training programme.

Equivalence is expected to work across the healthcare science workforce so that someone can use the process to enter or progress through any level of the workforce.

A Certificate of Equivalence is granted by the Academy for Healthcare Science (AHCS) to an individual who has successfully completed an assessment process. Equivalence assessments will soon be available at clinical scientist level and are expected to be extended to other career levels in due course.

Where the curricula for training programmes are still being developed for assistant, associate and consultant levels, it is not currently possible to undertake equivalence. Equivalence will be extended to these levels in due course. For the underpinning academic programmes, equivalence (Accreditation of Prior Education and Learning) can be undertaken via the university.

How do I go through the equivalence process?

[The Academy for Healthcare Science \(AHCS\)](#) has been given approval by the Health and Care Professions Council to grant Certificates of Equivalence for Clinical Scientists. To find out more about the precise steps for an equivalence application please see the guide for applicants available on the AHCS website. The Academy is looking at other levels of equivalence and information on this will be available as work develops.





PROFESSIONAL REGISTRATION AND REGULATION OF THE HEALTHCARE SCIENCE WORKFORCE

Employers are responsible for delivering high quality care and making sure there are strong processes in place to ensure that the quality of care and patient experience not only meets the desired standard, but is continually improving. This can be achieved through a variety of employment and workforce practices, such as effective recruitment, clinical leadership, supervision, continuing professional development, staff engagement, having clear standards, expectation and boundaries in place, through effective appraisal and strong organisational policies.

Registration and regulation further enhances public assurance and protection and exists in several forms. Some parts of the healthcare science workforce are regulated by statute (law) through registration with the Health and Care Professions Council. Other parts of the workforce participate in voluntary registration programmes and, for some, neither registration nor regulatory systems currently exist.

Professional regulation is intended to protect the public, making sure that those who practise in the healthcare profession meet required standards of education, competence and conduct. Registration with a relevant professional body can be an important indicator for an employer of a person's competence and suitability. Further information, including key bodies associated with the regulation and registration of the healthcare science workforce, can be found on the [Professional registration and regulation of the healthcare science workforce](#) section of the NHS Employers website.

Once I complete my training course will I be able to register with the HCPC?

The Health and Care Professions Council (HCPC) is the professional regulator for those healthcare scientists that are regulated by statute. Not all healthcare science programmes lead to statutory regulation with the HCPC.

There are currently three groups within the healthcare science workforce that are regulated by statute (law) with the protected titles of biomedical scientist, clinical scientist and hearing aid dispenser.

Successful completion of the Practitioner Training Programme leads to a degree in healthcare science and eligibility to apply for roles as a healthcare science practitioner. Practitioners in life sciences are regulated by law and required to register with HCPC as a biomedical scientist.

Healthcare science practitioners who undertake pre-registration education and training at Bachelors level in Clinical Physiology and Clinical Technology (Medical Physics and Clinical Engineering) can apply for voluntary registration with the relevant professional body. In doing so, they show their commitment to meeting and maintaining standards of education, competence and conduct. The Professional Standards Authority (PSA) oversees the work of the statutory and voluntary health and social care regulators. The Academy for Healthcare Science is currently establishing a register for those groups of staff not regulated by statute to ensure that those exiting from accredited training programmes are fit to work in the NHS.

Those who successfully complete the Scientist Training Programme (STP) can apply for roles as a healthcare scientist. They will be granted a Certificate of Attainment by the AHCS. In disciplines regulated by the HCPC, this award leads to eligibility to apply for statutory registration with HCPC as a clinical scientist.

It is anticipated that Higher Specialist Scientific Training (HSST), once introduced could lead to voluntary registration on a Higher Specialist Register for consultant clinical scientists held by the AHCS.

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HEALTHCARE SCIENCE WORKFORCE

What does MSC mean for me? (I'm already part of the healthcare science workforce)

Your role and responsibilities may change as the service adapts to changing needs and advances in technology, as well as service priorities. As the education and training pathways become more defined to support these changing roles, you may find this offers you increased opportunities for career development and clearer routes for progression.

What does MSC mean for me? (I'm considering a career in healthcare science)

MSC provides anyone considering a career in healthcare science with clearly defined routes into the profession, high-quality education and training and clearer routes for personal and career progression.

What values and behaviours will I be expected to demonstrate as part of the HCS workforce?

The NHS requires a talented workforce which is focused on delivering high-quality and compassionate patient care. Whether a staff member has a clinical or non-clinical role, is involved in direct patient care or is undertaking a supporting function, everyone makes an important contribution to patients' experiences. Increasingly, employers are taking a 'values' approach to all areas of employment practice, for instance recruitment, training, performance management, leadership, appraisal and organisational development.

The NHS Constitution describes a set of core NHS values that should underpin everything it does. Many individual NHS employers have developed and built upon these values to establish their own organisational values and behaviours associated with them. The right values and behaviours are integral to providing safe and effective services to people, regardless of what role you hold in the organisation. If you are considering a career in the NHS you should expect that during the recruitment process many employers will be looking to assess a person's approach, attitude and motives aligned with the demands of the role and the organisational values. A good place to start looking for more information about a specific NHS organisation's values is to visit their website.

Does MSC affect my AfC pay band?

No. Agenda for Change (AfC) national profiles provide a framework to enable most NHS roles to be matched to nationally evaluated profiles, based on information from job descriptions and person specifications. Work is underway to review some healthcare science AfC profiles to ensure they continue to be fit for purpose and are reflective of the changes in roles within services. Discussions are taking place with trade unions and the Job Evaluation Group, and initial work involves updating the existing profile labels so they reflect the updated MSC terminology. The changes to the profile labels will not affect your AfC band as this is linked to your job description.

Will MSC lead to downbanding or workforce re-profiling?

MSC is impacting on NHS organisations in a number of different ways. It enables a change in both the way organisations train and recruit staff, and the way in which they provide continuing professional development (CPD) support to the existing workforce.

MSC is helping to structure the workforce and equip it with the right set of knowledge and skills. This will help ensure patients can benefit from the advances in science and technology to receive the best quality of care. Any restructuring changes must be done in line with local employers' organisational change policies, subject to necessary legislative or contractual consultation, with the full engagement of staff and union representation and with support from HR colleagues. More information on the process and expectations for workforce re-profiling can be found in new Annex X (for England only), contained within the [Agenda for Change handbook](#).

What is the ESR coding project about?

There is a lack of consistency across organisations in the way in which healthcare science workforce data is recorded and stored on the Electronic Staff Record (ESR) system, making effective workforce planning very difficult. This is largely due to the complexity and the numbers of specialisms that exist within the workforce. This makes accurate data collection at a local, regional and national level problematic, so it is important that new coding systems are put in place to improve the quality and accuracy of the data used to inform workforce planning.

A healthcare science ESR project group, with representation from NHS trusts, the MSC team and information experts, has been looking to create a new, more robust method of recording the healthcare science workforce. Recording healthcare science posts correctly is essential for workforce planning, and the availability of quality workforce data will also help measure the huge contribution that the healthcare science workforce makes to improved patient care. The project is concerned with recording posts on ESR for workforce planning and information purposes and will not impact on the AfC banding of individuals.

The new approach to recording data has received approval from the Information Standards Board (ISB) for Health and Social Care, which was the final stage of the approval process. Guidance has been issued and organisations are now expected to begin implementing the new recording system.



BUSTING SOME MYTHS

Is MSC dumbing down healthcare science?

No. MSC provides an opportunity to refocus the healthcare science workforce and develop roles and teams which are better positioned to fulfil the needs of patients and meet changing service demands. By working with the education sector, the MSC programme has ensured that the new education curricula and training programmes are linked to the technological and scientific advances and emerging models of patient care. By structuring the workforce and equipping them with the right set of knowledge and skills, the NHS can stimulate research and development within the HCS community and ensure patients can benefit from these advances and receive the best quality of care.

The education and training pathways now have the same recognition as other healthcare professions as they are better understood by others outside of healthcare science.

Healthcare science has a major role to play, representing about 5 per cent of the total healthcare workforce. They contribute to all elements of healthcare in a variety of ways, are critical to national priorities and inform more than 80 per cent of all diagnosis.

I hear the new training courses are not as good as the old routes

Feedback from the new established MSC training courses has been positive from trainees, work placement providers and universities. This is evidenced up by an external academic review of the programmes. The Scientist Training Programme is heavily over-subscribed each year, with thousands of applicants competing for around 200 places. The National School of Healthcare Science publishes [trainee feedback](#) and will continue to evaluate training programmes and recruitment processes.

I hear nobody wants to undertake the PTP programme

This isn't true. Work is underway to improve course provision and recruitment in areas where there are fewer places than needed. NHS Careers has been actively promoting the programmes, showcasing the positive experiences of current PTP students. The first graduates from PTP programmes in 2013 have been successful in obtaining jobs in the NHS.



Will MSC mean that my department has to be restructured?

MSC is impacting on NHS organisations in a number of different ways. It means a change in both the way organisations recruit staff and the way in which they provide continuing professional development (CPD) support to the existing workforce. Where employers need to make changes, MSC will also support a change in the workforce skill mix, with changes in roles and responsibilities across healthcare science teams where appropriate.

MSC is helping to structure the workforce and equip them with the right set of knowledge and skills to ensure patients can benefit from the advances in science and technology to receive the best quality of care. Any restructuring changes must be done in line with organisational change policies, subject to necessary legislative or contractual consultation, with the full engagement of staff and union representation and with support from HR colleagues. More information on the process and expectations for workforce re-profiling can be found in Annex X (for England only), contained within the [Agenda for Change handbook](#).

Will anything change for me apart from my job title?

If you are already part of the healthcare science workforce, you may notice your role and responsibilities start to change over time as the service adapts to changing needs and advances in technology are applied to delivering improved care. The education and training pathways are becoming more defined to support these changing roles. You may find this gives you increased opportunities for career development and you can begin to see clearer routes for progression. Some job titles are protected by Statute, so these will not change without legislative amendment (these are biomedical scientist, clinical scientist and hearing aid dispenser).

What are workforce re-profiling tools and do they mean my job is going to be made redundant/be downgraded?

No. Workforce re-profiling tools are used by some employers to help them understand the functions undertaken at different levels and to effectively plan their healthcare science workforce. The workforce planning tools that were commissioned by the Department of Health (hosted on [NHS Employers website](#)) are designed to allow staff who are responsible for collecting and analysing workforce data to look at the existing workforce, the tasks undertaken and the services provided, helping to assess future service demand and who is best placed to carry out roles.

Any restructuring changes as a result of re-profiling must be done in line with the local employer's organisational change policies, subject to necessary legislative or contractual consultation, with the full engagement of staff and union representation and with support from HR colleagues. More information on the process and expectations for workforce re-profiling can be found in Annex X (for England only), contained within the [Agenda for Change handbook](#).

GET INVOLVED AND FIND OUT MORE

How do I get involved in MSC?

To find out more or to get involved in the implementation of MSC, contact your local science lead and your professional body. If you are thinking about a career in healthcare science, or would like further information about career progression and development, NHS Careers can provide you with the information you need to make that step.

If you already work in healthcare science, you can help to inspire the healthcare scientists of the future by becoming a STEM ambassador. Healthcare science ambassadors work with local schools to boost science activities and to raise awareness of the diversity of career opportunities the healthcare science professions can offer. To register to become an ambassador, or to find out more, please visit the [NHS Careers](#) website.

Where can I get further information?

There is lots of information available from a variety of sources. NHS Employers has a suite of web pages dedicated to the MSC programme, which includes information on the government policy that underpins the programme along with resources to support employers with local implementation. The [GOV.UK](#) website also contains information about MSC policy.

You can also find out more:

- careers in healthcare science from [NHS Careers](#)
- the [National School of Healthcare Science](#) provides information on education and training
- the [Academy for Healthcare Science](#) has information on equivalence and regulation
- a list of the Local Education and Training Boards can be found [here](#)
- a list of the regional scientific directors can be found on the [NHS Networks](#) website
- keep up to date with Chief Scientific Officer developments by signing up to the [CSO bulletin](#)
- contact professional bodies relevant to the area of healthcare science that you are interested in.

Key contacts:

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ACRONYM BUSTER

AfC	Agenda for Change
AHCS	Academy for Healthcare Science
AP	Associate practitioner
APEL	Accreditation of Prior Education and Learning
ASP	Accredited Scientific Practice
BSc	Bachelor of Science
CSO	Chief Scientific Officer
CHE	Council of Healthcare Science in Higher Education
DH	Department of Health
ESR	Electronic Staff Record
FD	Foundation degree
HCPC	Health and Care Professions Council
HCS	Healthcare science
HEE	Health Education England
HEI	Higher education institute
HSST	Higher Specialist Scientist Training
IBMS	Institute of Biomedical Science
IPEM	Institute of Physics and Medicine in Engineering
LETB	Local Education and Training Board
MSc	Master of Science
MSC	Modernising Scientific Careers
NHSBT	National Blood and Transplant Authority
NSHCS	National School of Healthcare Science
PTP	Practitioner Training Programme
PSA	Professional Standards Authority
STEM	Science, technology, engineering and maths
STP	Scientist Training Programme

NHS Employers

The NHS Employers organisation is the voice of employers in the NHS, supporting them to put patients first. Our vision is to be the authoritative voice of workforce leaders, experts in HR, negotiating fairly to get the best deal for patients.

We help employers make sense of current and emerging healthcare issues to ensure that their voice is front and centre of health policy and practice. We keep them up to date with the latest workforce thinking and expert opinion, providing practical advice and information, and generating opportunities to network and share knowledge and best practice.

We work with employers in the NHS to reflect their views and act on their behalf in four priority areas:

- [pay and negotiations](#)
- [recruitment and planning the workforce](#)
- [healthy and productive workplaces](#)
- [employment policy and practice](#).

The NHS Employers organisation is part of the NHS Confederation.

Contact us

For more information on how to get involved in our work,
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 [@nhsemployers](https://twitter.com/nhsemployers)

 [NHS Employers](https://www.linkedin.com/company/nhs-employers)

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