

Guidelines for Higher Education Institutions and their NHS/Health Service Partners delivering the BSc (Hons) Degree Programmes in Healthcare Science

DELIVERING FOR
MODERNISING SCIENTIFIC CAREERS
HEALTHCARE SCIENCE
PRACTITIONER TRAINING PROGRAMME

Revised in January 2016

Developing people
for health and
healthcare

www.hee.nhs.uk

CONTENTS

Introduction	4
Readership	4
Background	5
Accreditation	6
Objectives of Accreditation	6
Overview of Accreditation Process	7
Accreditation Standards	8
Programme Content	8
Programme Delivery and Environment	8
Public Patient and Service User Involvement	8
Liaison with Professional Bodies	8
Submission of Expression of Interest	9
Cost of Accreditation and Charges	10
Programme Delivery	10
Accreditation Process	
Accreditation Visit Outcomes	12
Accreditation Without Conditions	12
Accreditation With Conditions	12
Accreditation declined	12
Changes made to degree programmes before the date of re-accreditation	13
On-going review	13
Accreditation of Prior Learning	15
Assessment	15
Work-based Assessment	16
Compensation/ Condonation	16
Curriculum	17
Curriculum Mapping	17
Curriculum Delivery	18
Generic Curriculum	19
Curriculum Revisions	19
Independent Learning	19
Inter-Professional Learning	19
Degree Classification	19
Equality and Diversity	20
Professional Suitability	20
Library Resources/Reading Lists	20
Monitoring and Feedback	21
Patient and Public Involvement	21
Professional Body Links	21
Programme Titles	22
Record Keeping and Registration	22
Recruitment and Admission	22
English Language	22
Research and Innovation	23
Research Project	23
Staff Experience and Qualifications	24

Student Support	24
Training Work-Based Trainers	24
Work-Based Learning	25
Supervision of Workplace Based Learning	27
Attendance at Work-Based Placements	27
Attainment of Learning Outcomes	27
Quality Assurance of work-based Placements	27
Conclusion and Feedback	28
Appendix 1	
Standards underpinning MSC Programme.....	29 - 33
Appendix 2	
Self-Assessment Accreditation Proforma	34 - 61
Appendix 3	
Accreditation Standards.....	62 - 65
Appendix 4	
Typical Agenda.....	66 - 68
Appendix 5	
Change Notification Form	69 - 71
Appendix 6	
Annual Monitoring Form	72 - 74
Appendix 7	
Template for a PPI Plan	75 - 76
Appendix 8	
Glossary	77 - 78

INTRODUCTION

This guide is intended to help clarify, for Higher Education Institutions (HEI) and their National Health Service (NHS) partners including Local Education Training Boards (LETB) in England, and the equivalent health service bodies in Northern Ireland, Scotland and Wales, the requirements for delivery of BSc (Hons) degree programmes in Healthcare Science which are accredited as meeting the requirements of *Modernising Scientific Careers: The UK Way Forward*¹ which sets out the four UK Health Departments' agreed policy.

The implementation of Bachelors degrees to deliver the Modernising Scientific Careers (MSC) Healthcare Science Practitioner Training Programme (PTP) curriculum requires a partnership between the HE sector and the NHS/health service. Integral to this is the recognition that HEIs are autonomous institutions that will be investing their own resources in MSC approved programmes. In order to achieve accreditation as meeting the requirements of MSC and fit for NHS/health service purpose, there are key principles and criteria which the new degree programmes need to demonstrate are fulfilled.

It is recognised that the NHS education and training landscape in England has undergone significant changes recently. The HE sector too is experiencing significant changes, with changes to student fees in England prompting a greater focus on employability and return on student investment, and long term repayments.

For England, reference is made throughout this document to the NHS and the Local Education and Training Boards (LETB), but this should be taken to refer to equivalent health service organisations in Northern Ireland, Scotland and Wales and to successor organisations/structures to English LETBs.

This guide should be read with the relevant BSc curricula and PTP learning guides for the work-based training. The latest versions can be found on NHS Networks at: <http://www.networks.nhs.uk/nhs-networks/msc-framework-curricula>. HEIs are encouraged to join the network to receive automatic alerts when any changes are made or new material is added.

READERSHIP

This guide is intended to be used by:

- Academic staff within Higher Education Institutions
- Administrative staff within Higher Education Institutions
- External examiners
- Expert reviewers and those involved in NSHSC MSC HEE accreditation events and reviews

¹ Modernising Scientific Careers: The UK Way Forward, UK Department of Health, February 2010; Product number: 299980; Gateway reference:13494; Copyright holder: Crown

- LETBs and equivalent health service organisations in Northern Ireland, Scotland and Wales.
- Commissioners and planners of healthcare science education and training
- Directors of healthcare science training in the workplace
- Work-base trainers, coordinators and supervisors
- Managers of health services that employ healthcare science staff and the healthcare science workforce
- Patients, carers and members of the public
- Professional Bodies and the Academy for Healthcare Science
- Regulatory Bodies i.e. Health and Care Professions Council.

BACKGROUND

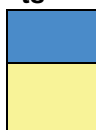
The integrated BSc (Honours) degree in Healthcare Science combines and blends academic and work-based learning. Within the first year it is expected that the placement component will provide a broad experience including short ‘tasters’ of specialisms within the healthcare science division or theme. This will give the student a wide appreciation of the different specialisms within healthcare science and a more holistic view of the areas which contribute to high-quality patient care. On successful completion of the degree, the graduate will be able to fulfil the role of a healthcare science practitioner.

Figure 1 below depicts the high level framework around which all BSc (Hons) degree programmes must be structured. Each healthcare science division has interpreted and adapted this MSC framework. This is an indicative model and an HEI can organise these subjects into different modules as long as the proportion, subjects and level remain the same as the diagram.

**Figure 1 – HIGH LEVEL FRAMEWORK
INTEGRATED BSc (Hons) IN HEALTHCARE SCIENCE**

Year 3 Application to Practice	Professional Practice [10]	Scientific Basis of Healthcare Science Specialism [60]		Practice Based Project [30]	Work-based Training 25 weeks [20]	*46 wks	Extended Academic Year *estimated duration. [XX] = number of credits
	Generic Curriculum	Specialism Specific Curriculum					
Year 2 Techniques & Methods	Professional Practice [10]	Research Methods [10]	Scientific Basis of Healthcare Science [60]	Principles of Scientific Measurement [30]	Work-based Training 15 weeks [10]	*40 wks	
	Generic Curriculum		Division/Theme Specific Curriculum		Discipline		
Year 1 Scientific Basics	Professional Practice [10]	Scientific Basis of Healthcare Science - Integrated Module across Body Systems will usually include informatics, maths and statistics [60]		Scientific Basis of Healthcare Science [50]	Work-based Training 10 weeks	*36 wks	
	Generic Curriculum			Division/Theme Specific Curriculum			

ts



Generic Modules: common to all divisions of healthcare science

Division/Theme Specific Modules: Life Sciences; Physical Sciences and Biomedical Engineering; Cardiovascular, Respiratory & Sleep Sciences;



Neurosensory Sciences

Specialist Modules: specific to a specialism

ACCREDITATION

An accreditation process has been developed to confirm that HEIs provide students with a Bachelors degree programme that meets the requirements of the MSC Practitioner Training Programme outlined in *Modernising Scientific Careers: the UK Way Forward*². This accreditation process is conducted by the National School of Health Care Science (NSHCS) Accreditation Unit; on behalf of Health Education England. The process is quality assured by the Academy of Healthcare Science (AHCS). The AHCS attend visits and provide valuable input. The recommendations made at accreditation visits are ratified by the Education and Training Scrutiny Group (ETSG) and Healthcare Science Implementation Network Group (HCSING).

The overall aim of accreditation is to establish and maintain a high quality education and training experience for students who, on graduation, are able to perform the role of a healthcare science practitioner in the NHS and meet the needs of patients and the public. It is based on adherence to a number of professional and educational and training standards (appendix 1), which apply across MSC healthcare science training programmes including those at undergraduate level.

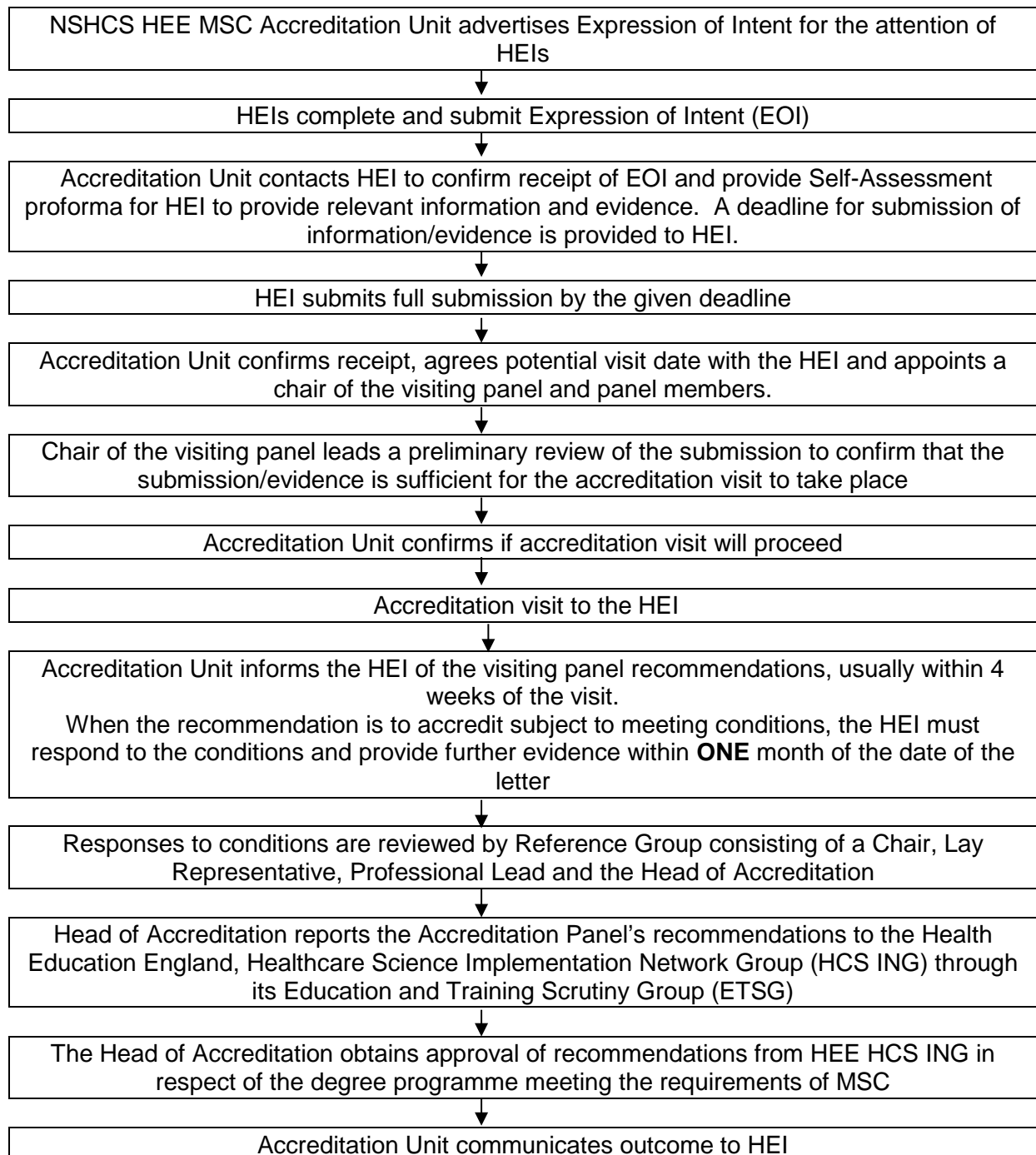
Objectives of Accreditation

The objectives of accreditation are to ensure that each degree programme:

1. meets the requirements of the MSC ethos, framework, educational and training standards, curriculum and learning guides specifications;
2. involves NHS staff, patients and the public;
3. has sufficient academic and clinical expertise and resources;
4. continues to develop and evolve in response to NHS developments, curriculum changes and feedback from employers, students, lay people and other partners.

² Modernising Scientific Careers: The UK Way Forward, UK Department of Health, February 2010; Product number: 299980; Gateway reference:13494; Copyright holder: Crown

Overview of Accreditation Process



Accreditation Standards

S.1 PROGRAMME CONTENT

S.1.1 The academic content of the degree complies with the Modernising Scientific Careers (MSC) curriculum; with the learning outcomes for each module and their relative credit ratings, including procedures for accreditation of Prior Learning and/or Prior Experiential achievements and maximum credit exemption allowed, clearly mapped to the MSC curriculum framework

S.1.2 The content and timing of the work-based learning programme complies with the MSC curriculum and framework, educational and training standards, ensuring that theory and clinical placements and/or classroom practical components have synergy using a blended learning approach.

S.1.3 The degree programme aligns with, and is mapped to, the MSC educational and training standards (appendix 1) and those of the Health and Care Professions Council Standards of Education and Training and relevant QAA subject statements.

S.1.4 The programme content is based upon current subject specific practice, regular contact with subject specialists, advances in technology and on-going internal/external institutional research/activity which contributes to the programme.

S.1.5 There is a commitment to ensuring continued compatibility with the evolving MSC strategy and communication with the Accreditation team.

S.2 PROGRAMME DELIVERY AND ENVIRONMENT

S.2.1 Resources to support learning/ teaching and practical/clinical space, including IT and e-learning facilities must be appropriate to the curriculum; support student numbers and the subject specialism;

S.2.2 Rigorous Quality Assurance measures are in place across all systems including:-

- i) admissions procedures;
- ii) record keeping;
- iii) staff recruitment;
- iv) staff training and development;
- v) student progression and feedback;
- vi) programme maintenance and development;
- vii) internal and external institutional monitoring, audit and evaluation;
- viii) work-base placement centres,
- ix) assessment;

S.2.3 All assessment policies and procedures are valid, reliable, consistent and equitable utilising a spread of assessments; clear module mark descriptors, assessment criteria, credit weightings, module mark determination, deferrals, reassessments, failures and exit routes

S.2.4 The programme team is appropriately staffed with an adequate number of qualified and experienced staff to deliver the programme. Staff delivering of specialist modules should have subject specialist knowledge and be members of the relevant professional register and/or professional body; where appropriate staff are undertaking continuing professional development (CPD);

S.2.5 The work-base placement plan has LETB (and/or NHS partner) approval³, providing high quality learning environments with an adequate number of qualified and subject-experienced staff who are fully prepared for the placements;

S.2.6 The degree programme is taught in a research-active, academic environment, and is informed by recent research findings

S.3 PUBLIC, PATIENT AND SERVICE USER INVOLVEMENT

S.3.1 There is an appropriate involvement/interface with patients, carers, NHS policy and the public in the design, delivery, quality assurance and development of the programme.

S.4 LIAISON WITH PROFESSIONAL BODIES

S.4.1 There is appropriate involvement/interface with professional bodies ensuring the programme requirements take account of any subject registration requirements

** A pre-requisite for the Accreditation Visit is that the HEI must have HEI validation of the programme.*

Submission of Expression of Intent

- i. The time-lines for submission of the Expression of Intent (EOI) will be published on NHS Networks, National School of Healthcare Science (NSHCS) and Council for Healthcare Science newsletter
- ii. A separate EOI must be made for **EACH** programme i.e. Life Sciences; Physiological Sciences (Cardiovascular, Respiratory and Sleep); Physiological Sciences (Neurosensory); Physical Sciences and Biomedical Engineering (Medical Physics); Physical Sciences and Biomedical Engineering (Clinical Engineering); Informatics (Clinical Bioinformatics and Health Informatics), and submitted to the Accreditation Unit via msc.accreditation@wm.hee.nhs.uk
- iii. On receipt of an EOI, the Accreditation Unit will send the HEI a Self-Assessment Proforma, (Appendix 2) which must be returned, along with the accompanying documentary evidence by the given deadline;

³ Or equivalent health service bodies in Northern Ireland, Scotland and Wales.

- a. Documentary evidence should be clearly linked to each of the accreditation standards, be focused, relevant, up-to-date and accurate;
 - b. Documentary evidence should be submitted both electronically and in hard copy;
- iv.** The HEI must supply **three** hard copies of the documentary evidence to the Accreditation Unit at National School of Healthcare Science St Chads Court, 213 Hagley Road, Edgbaston, Birmingham, B16 9RG
- v.** A full day visit may be required for **EACH** programme i.e. Life Sciences; Physiological Sciences (Cardiovascular, Respiratory and Sleep); Physiological Sciences (Neurosensory); Physical Sciences and Biomedical Engineering (Medical Physics); Physical Sciences and Biomedical Engineering (Clinical Engineering); Informatics (Clinical Bioinformatics and Health Informatics) and every attempt will be made to schedule this with a university validation event if appropriate and possible.

Costs of Accreditation and Charges

The Accreditation Unit will make the arrangements for travel and accommodation for the panel for the visit, but will reclaim these costs from the HEI following the visit. If any conditions need reviewing following reimbursement of the visit costs, there may be an additional charge.

Programme Delivery

- i. It is expected that the programme should be an integral part of the faculty/school and that opportunities for inter-professional learning are maximized.
- ii. There should be an appropriate balance between academic staff and visiting specialist staff to ensure teaching reflects current NHS practice
- iii. Academic and pastoral mentoring/support systems must provide on-going support, be responsive to urgent situations and have strong links to the work-base, in case of difficulty during work-based placements. These arrangements should link to university student support services and all academic and NHS staff should be fully aware of the support systems in place.

Accreditation Process

- i. The Accreditation Unit will appoint an accreditation visiting panel chair and the following panel members will normally be included on each panel:⁴

Member	Key Role
Accreditation Visiting Panel Chair	<ul style="list-style-type: none"> • Leads the review of the submission prior to the visit, identifying any areas where information has not been provided and flagging up any major concerns. • Leads the accreditation visit • Approves the visit letter and report post-visit • Contributes as part of the Reference Group in review of the evidence to meet any conditions
Professional Advisor	<ul style="list-style-type: none"> • Provides advice with respect to alignment of the programme to the health care science division and specialism curricula frameworks and learning outcomes. • Link with the professional body representatives.
Patient/Lay Representative	<ul style="list-style-type: none"> • Leads on and patient/lay involvement (PPI) at all levels of the programme, including programme design, delivery, development and quality assurance • Contributes as part of the Reference Group in review of the evidence to meet any conditions and PPI Action Plans
Professional Lead from the National School of Healthcare Science (England only)	<ul style="list-style-type: none"> • Advises on alignment with national workforce planning and work-based training including quality assurance of work-based training. • Contributes as part of the Reference Group in review of the evidence to meet any conditions
Representative from the Academy for Healthcare Science	<ul style="list-style-type: none"> • Advises on education and training quality and standards.
Professional Body representative/s	<ul style="list-style-type: none"> • Provides specialist advice, as appropriate
UK Health Department Advisor	<ul style="list-style-type: none"> • Advises on alignment with education and training requirements for Northern Ireland, Scotland or Wales

⁴ Guidelines on the Code of Conduct for Accreditation Panel Member can be found in Appendix 8

(except England)	as applicable
------------------	---------------

*** Guidelines on the Code of Conduct for Accreditation Panel Member can be found in Appendix 8**

- ii. The Chair of the visiting panel will lead an initial review of the submission to ascertain if the submission is complete and identify any further information needed prior to the visit. If necessary a teleconference with the panel will be convened prior to the visit. The visit will be deferred if the submission is inadequate or incomplete.
- iii. The accreditation visit agenda (see Appendix 4) will be agreed between the Accreditation Unit and HEI. The agenda should provide time for discussions between the accreditation visit panel and HEI senior management, programme leaders and teams, external lecturers, work-based placement providers, lay/patient advisors and students.

ACCREDITATION VISIT OUTCOMES

At the end of the visit, the Chair of the accreditation visiting panel will indicate the recommendation which will be made to the approving committees (ETSG and HCS ING). The possible outcomes are:-

- Accreditation without conditions
- Accreditation subject to meeting conditions
- Accreditation declined, resubmission required

Accreditation without conditions

Following a successful panel visit, accreditation will be awarded for a period of four years. The Accreditation team will list accredited degree programme titles, and HEIs on its NHS Networks website.

Please note that the final reports produced by the Accreditation Panel (following their accreditation visit) will not be made publicly available.

Accreditation subject to meeting conditions

If the recommendation is to accredit subject to meeting conditions the HEI's response to the conditions must be received within one month of the date of the outcome letter. A Reference Group comprising of a Chair, a PPI rep and a Professional Lead will review the response and provide recommendations to the Head of Accreditation.

Accreditation Declined

In the case of the programme not meeting the accreditation criteria, guidance will be provided by the Accreditation Panel on how the programme could meet the criteria. The programme will not normally be re-considered for accreditation until a period of 12 months has elapsed. For re-consideration, a full report will be required from the Programme Organisers explaining and documenting changes made to address each

of the points made by the Accreditation Panel. If internal approval is required for the amendments, then it would normally be expected that approval has been given before the programme is re-considered. The Accreditation Panel shall decide whether or not a further site visit is required.

Following the Accreditation Panel meeting, the HEI will be notified of its recommendation to the Education and Training Scrutiny Group (ETSG) and Healthcare Science Implementation Network Group (HCSING). The HEI will be formally advised that accreditation is awarded when the HCSING has received and approved the advice in respect of accreditation.

Any appeals to the outcome must be made in writing within one month of notification of the Head of Accreditation's decision and submitted to msc.accreditation@wm.hee.nhs.uk

Changes made to degree programmes before the date of re-accreditation

Programmes of study evolve to reflect the latest developments in the subject and to meet the needs of students, applicants and external influences such as professional and statutory bodies and policy changes.

The HEI must inform the Accreditation Unit immediately of any significant planned changes to the accredited programme(s) which occur during the period of accreditation, as well as providing a clear rationale for the change.

The HEI should complete the Change Notification Form (appendix 5) and send this to the Accreditation Unit via msc.accreditation@wm.hee.nhs.uk

The proposed changes will be reviewed and a judgment will be made as to whether re-accreditation is required.

Failure of the HEI to maintain compliance with the criteria for accreditation will trigger a review by the Accreditation Unit that may result in accreditation being withdrawn.

On-going Review

Accreditation is for a period of 4 years. During the period of accreditation, annual monitoring will take place every 12 months, necessitating the HEI to complete the relevant form. The Accreditation Unit will review the information submitted via the annual monitoring form. The Accreditation Unit will then make a decision to:-

- i. do annual monitoring again in 12 months' time
- ii. arrange an Accreditation Review Visit
- iii. arrange a Liaison Visit

An accreditation review visit involves submitting paperwork prior to the visit. The review will be based upon the documentation and data described below. If the submission supports the view that the programme is being delivered to a high standard, then the review visit will focus on verification and recognition of good practice.

Where the documentation and data, including student or service-user feedback indicate that there are, or have been, concerns and difficulties, the accreditation review visit will focus on how the HEI has dealt with such issues and whether they have been resolved.

The review will comprise of a paper-based review of the submitted documentation followed by a visit (normally one day).

The aim of the paper review is to:

- i. receive and review an evaluation of the information on student admissions, progression and attrition;
- ii. receive and review annual monitoring reports, external quality assurance reports, student feedback, assessor/supervisor feedback, work-based audits and patient/lay feedback and progress to implement the action plan for patient/lay involvement;
- iii. receive and review documented changes to programme modules, delivery strategy, staffing, teaching resources and placement centres, previously approved via HEI regulation requirements and notified to the Accreditation team
- iv. review progress towards achieving the recommendations of the Accreditation Visiting Panel

At the one-day visit the Panel will confirm the evidence submitted, discuss any issues seeking clarification and

- v. meet with HEI students and staff;
- vi. review of students' work, assignments, examinations and training manuals, etc.
- vii. meet with NHS trainers within the HEI or in the work-base;
- viii. meet with LETB staff;
- ix. confirm that the programme continues to meet the accreditation criteria

The HEI will be notified of the planned date of the review 3 months in advance and the agenda will be agreed following receipt of the documentation.

Documentation must be submitted at least 6 weeks in advance of the visit.

The Accreditation visiting team will usually include:

- Chair
- Professional or Professional Body Advisor
- Patient/Lay representative
- NSHCS representative
- Academy of Healthcare Science representative
- Representative from Northern Ireland, Scotland or Wales as appropriate

The outcome of the accreditation review will be:

- Accredited status continues

- Accredited status continues subject to conditions
- Accreditation withdrawn.

The HEI will be notified of the outcome and additional advice/recommendations shared with them.

In the event of failure to meet the conditions set within a specified time period, a process of accreditation withdrawal may commence.

The Accreditation Unit reserves the right to undertake any further accreditation activity it deems necessary. It will always work in partnership wherever possible.

ACCREDITATION OF PRIOR LEARNING

Work is currently on-going to develop a framework for equivalence that encompasses equivalence of academic, professional and/or experiential attainments at any stage of the career pathway for healthcare science. HEIs should follow the Quality Assurance Agency guidelines. Learning should only be accredited if it is verified as valid, relevant, current and applicable to the particular programme to which the individual has applied. Good practice supports the view that such prior learning should only be used once; double counting is not recommended.

ASSESSMENT

Each HEI is responsible for the assessment programme within its degree programme and for ensuring that its assessment policies and procedures are consistent and equitable. Assessment programmes across the degree must be fair, valid, equitable, reliable, and proportionate and should meet the 2006 Quality Assurance Agency Code of Practice for the Assurance for Academic Quality and Standards in Higher Education (Section 6: Assessment of Students). It is expected that such a programme will include formative and summative assessment with an appropriate mix of assessment methods. It is also expected that assessment within the work-based modules will use the assessment tools detailed in the MSC Learning Guides.

Work-Based Assessment

It is anticipated that programmes will use the assessment methods recommended by the MSC team and included in the Assessment Strategy published by the National School of Healthcare Science (NSHCS) to support consistent national standards of training and assessment, underpinning the ability for clear and coherent equivalence and quality assurance processes to be established. It is expected that a suite of assessment methods will be recommended for the work-based modules, together with a unified online system tailored for each specialism.

The assessment tools (Direct Observation of Practical Skills [DOPS], Case-Based Discussions [CBD] and Observed Clinical Events [OBC] (formerly known as

MiniCex), Multi-Source Feedback [MSF] and an online assessment system/student portfolio [OLAT] are recommended for use in order to:

- i. provide evidence of fitness to practice/registration/certification;
- ii. provide a source of the evidence for applications for equivalence;
- iii. enable and inform decisions about progression of individual students and provide a means of identifying students in need of support;
- iv. maintain quality and consistency across the MSC PTP programme
- v. inform quality assurance of work based training programmes and training environments;
- vi. support continuing professional development.

The consequences of student failure to complete the work-based modules successfully must be made clear: i.e. that the MSC accredited degree cannot be awarded.

COMPENSATION/CONDONATION

Whilst it is recognised that universities will have a wide portfolio of degree programmes that fall under a single set of assessment regulations, the conditions set out below are required as part of the MSC BSc (Hons) degree programme accreditation process, irrespective of the university's own academic regulations. This is because the successful acquisition of every learning outcome in this programme is deemed to form an essential part of the newly qualified Healthcare Science Practitioner.

1. The overriding condition is that all modules must be successfully completed and 'passed' in accordance with the University's definition of that term. For the avoidance of doubt, no whole module score can be below the University's definition of a 'pass'.
But.....
 - a. Students may be exempted from modules they have been formally accredited on the basis of certificated prior learning, in accordance with the University's regulations governing that process.
2. Whilst in compliance with condition (1), for academic modules (i.e. non-work based) that use multiple elements of assessment, a module 'pass' mark may be achieved in accordance with the University's own regulations and practice in respect of aggregation of the marks for the individual assessment-elements for that module.
 - a. If even within the regulations of assessment-element score aggregation the module is failed, the student should be supported through the University's 'student in difficulty retrieval plan' and one resit opportunity should be offered for the failed assessment-element/s. Should the resit of the assessment-element/s be failed then the module is also failed.
 - b. Should a module be failed under the circumstances in (2a) then the student must re-attend and be re-assessed in the whole module in accordance with and as allowed by the University's regulations either as trailing credit or as interrupt, and is allowed the whole cycle of assessment plus one retake again.
 - c. Should a module be failed under the circumstances in (2b) the student must be withdrawn from the programme.
3. For work based modules that use multiple elements of assessment, every element of

assessment must attain the 'pass' mark for an assessment piece in accordance with the University's regulations and practice.

- a. When such an assessment-element is failed, the student should be supported through the University's 'student in difficulty retrieval plan' and one resit opportunity should be offered. Should the resit of the assessment-element be failed then the module is also failed.
- b. Should a module be failed under the circumstances in (3a) then the student must re-attend and be re-assessed in the whole module in accordance with and as allowed by the University's regulations either as trailing credit or as interrupt, and is allowed the whole cycle of assessment plus one retake again.
- c. Should a module be failed under the circumstances in (3b) the student must be withdrawn from the programme.

CURRICULUM

The process for approving nationally agreed BSc (Hons) curricula begins with the Education and Training Scrutiny Group (ETSG) of the Health Education England (HEE) Healthcare Science Implementation Network Group (HCSING). The ETSG reviews indicative curricula to ensure that programmes meet the requirements of *Modernising Scientific Careers: The UK Way Forward*. The decisions of ETSG are reported to HEE through the HCSING and advice is provided to all four of the UK Health Departments. A process will be agreed for approval of curricula in the other UK countries and the overall strategic approach is considered at the UK MSC scrutiny group.

Current versions of each BSc (Hons) curriculum and the associated Practitioner Learning Guides can be found on the NHS Networks website at:

<http://www.networks.nhs.uk/nhs-networks/msc-framework-curricula>

Curriculum revisions will be posted onto this website. Updating and long term storage arrangements for the curriculum are under discussion.

Curriculum Mapping

The HEI should clearly structure and map its degree curriculum against the MSC learning outcomes, indicative content and balance of learning and credits specified in the MSC curriculum framework documents for the relevant BSc (Hons) in Healthcare Science. It is recognised that the credit and module structure may vary between HEIs and there is some flexibility but broadly, the structure defined by the MSC curriculum should be met. The programme structure should include the proportion of learning and credits set out in the generic, division and specialism curriculum content. It is for HEIs to deliver those learning outcomes and indicative content in a way that suits their local arrangements (including credits awarded per module and sharing of modules with other students as appropriate/efficient) but the balance of credits to learning outcomes should be retained.

Curriculum Delivery

HEIs are encouraged to develop innovative programmes which deliver the MSC curriculum. It is fully acknowledged that the degree programmes may complement and/or be delivered with other modules or degree programmes which the HEI offers. Key principles for delivery of the curriculum include:

- agreements with local and lead education commissioners with respect to which specialism(s) each HEI offers;
- good three-way relationships between the HEI, work-base placement providers and education commissioners must be in place and maintained over time which may be supported by an employer/HEI liaison group, or similar;
- programmes should meet current NHS quality metrics for non-medical education and the equivalent of the current Health and Care Professions Council and the Standards underpinning MSC Programmes (appendix 1)
- programmes should deliver the MSC learning outcomes and indicative content, which meets the requirements of *Modernising Scientific Careers: the UK Way Forward*;
- involvement of employers and patients in the design, implementation, delivery, review and quality assurance of each course;
- clarity as to where and how the generic curriculum is integrated and delivered, including all underpinning theory;
- a fair, valid and reliable assessment system that is clearly articulated for all modules;
- opportunities for shared learning, across healthcare science and with other health professions, should be provided;
- curricula that address equality and diversity issues, as locally appropriate;
- a timetable to ensure that wherever possible the principles and knowledge underpinning practice are delivered before the specialist application and practice-based modules;
- innovative methods of teaching and learning e.g. for teaching anatomy and pathology, the use of web-based learning, 3-D anatomical packages, prosection and virtual prosection, virtual microscope and observation of dissection;
- clearly stated teaching and learning methods, which should maximise opportunities for blended learning;
- suitable teaching and learning facilities; students should have access to learning in clinical skills centres/simulation centres/teaching/research laboratories as appropriate;
- simulated clinical or laboratory environments to prepare students for the workplace can be used as part of a blended learning approach, particularly in Year 1. However, these learning experiences are not to be a substitute for work-based learning in a clinical/laboratory environment. Students must gain experience in the workplace for the majority of their work-based learning to enhance their learning for practice and prepare them for future career choices.

Generic Curriculum

A particular strength of the new MSC programmes is the generic curriculum that underpins MSC training programmes across the entire Career Framework. HEIs should ensure that the learning outcomes from the generic curriculum are clearly visible and integrated across the years of the programme with evidence of how they will be delivered. The relevant theory underpinning different aspects of the generic curriculum should be taught at the appropriate academic level.

Curriculum Revisions

HEIs are expected to ensure programme design and delivery takes account of up-to-date knowledge and technology, latest teaching/learning principles and quality assurance reviews. Modifications to the accredited programmes must be notified to the Accreditation team (Appendix 5) prior to the change being implemented, to ensure the programme continues to meet the Academic Curriculum and Training Manual/Learning Guide. A change is defined as, when the existing approved programme is to be modified which requires any module, programme design or delivery, to seek prior approval via the HEIs quality assurance processes, or approval of the External Examiner.

It is suggested that exception reporting is submitted annually or at the two-year on-going review prior to the academic changes being applied; the changes will be part of the on-going two-year review.

It is a requirement, even if there are no programme revisions, for HEIs to complete, sign and return the 'annual monitoring declaration form' (Appendix 6).

Independent Learning

The design and delivery of programmes should promote student-centered, independent adult learning. Students need to gain the skills necessary for them to manage their own learning and exercise initiative, develop critical thinking, personal and professional responsibility grounded in evidence-based practice.

Inter-professional Learning

Opportunities to enable inter-professional and interdisciplinary learning, within and outside healthcare science should be a fundamental part of each programme. Depending on the HEI's overall curriculum offer, this may involve collaboration with other HEIs. HEIs are advised to consult section 2 of the QAA Code of Practice for the Assurance of Academic Quality and Standards in Higher Education.

DEGREE CLASSIFICATION

For the purposes of securing an MSC accredited degree, the Year 2 specialism-specific modules must contribute to the calculation that determines the final degree classification. This is irrespective of the HEI's own academic regulations. It is expected that over time all HEIs will move to the European Credit Transfer (ECTs) system as the accepted module credit scheme.

EQUALITY AND DIVERSITY

All degree programmes (both HEI and the work-based environments) should reference and be able to demonstrate evidence of adherence to the Disability Discrimination Act (DDA) 1995, which was extended to education in September 2002, following amendments introduced by the Special Educational Needs and Disability Act (SENDA) 2001. Additionally evidence should be demonstrated to show adherence to the Disability Discrimination Act (DDA) (2005) which includes the Disability Equality Duty and the QAA Code of Practice on Students with Disabilities should be available. All degree programmes should also include evidence of adherence to the Equality Act (2010) and any superseding legislation with respect to equality.

PROFESSIONAL SUITABILITY

All programmes must contain explicit details of the requirements of professional practice in their admissions process. The HEI must have a clear policy with respect to Professional Suitability, which must clearly articulate how staff and students are made aware of the policy and how the policy is implemented. *The education provider either in the work-base or the HEI must comply with the MSC professional and training and educational standards in order to be eligible for accredited degree status.*

Alongside this must be a clear policy on how student whistleblowers are supported. Work-based supervisors/trainers must also be aware of the policy and how they can raise concerns about students through informal and formal means. This should be extended to all staff who may have contact with the student including administrative staff, those assessing the students in the work place, other health care professions and in some instances patients and the public. Breaches of professional practice and behaviour must be reported and investigated in accordance with this Professional Suitability policy and accurate records maintained within the HEI.

LIBRARY RESOURCES/READING LISTS

There should be an adequate stock of up-to-date learning resources to support each BSc (Hons) Healthcare Science degree programme. Up-to-date and appropriate reading lists for all modules, including the specialist modules need to be available. Learning materials should be available to students when they are in the workplace, normally via the HEI's VLE.

MONITORING AND FEEDBACK

A monitoring and feedback system should be in place that enables HEI staff, students, LETBs and NHS work-based trainers, supervisors, assessors, patients and lay people to provide constructive feedback about the BSc (Hons) programme to the course organisers. A system to monitor the effective implementation of the

programme and address any problems that may occur in a timely manner must also be in place.

The feedback and response documents would normally be available for review at accreditation visits, subject to issues of data protection and confidentiality where these may apply.

PATIENT AND PUBLIC INVOLVEMENT

The HEI programme team should have a formal strategy and action plan in place; this should include a set of objectives, systems for monitoring and evaluating the use of volunteers and patients in academic teaching and work-based learning. The plan should demonstrate how patients and public can contribute as part of a working partnership with academics and work-based supervisors. Degree programmes need to make clear and explicit links to new models of service delivery, care and patient pathways. The delivery of high quality, patient centered care should be an integral part of each degree programme, with the emphasis on the contribution of the healthcare science workforce.

It is expected that patients will be represented on course committees at all levels and contribute to teaching, learning and assessment; the aim of this working partnership should be to initiate and take forward training ideas to give a better understanding of the implications of the students work and the impact it has on the treatment of patients, irrespective of whether they have direct contact with patients. This should give the opportunity to meet a range of patients & carers, who will have a lot of knowledge and experience to impart and should increase the understanding and benefit to patients on their journey through the healthcare system. The requirement to do this is driven by the NHS which has learnt that this is a positive way of improving services and service need.

The responsibility of staff in the NHS to maximise quality, productivity, efficiency and to continually strive to improve services should be stressed. Equally important is the ability of graduates from these programmes to communicate with the general public with respect to healthcare science, leading to a better educated public which is encouraged to take responsibility for its own health and well-being and has a greater understanding of the role that evidenced-based science plays in society.

*Appendix 7 provides a template designed to enable Higher Education Institutions applying for MSC Accreditation of BSc programmes to provide evidence of how patients and public contribute to each programme as part of a working partnership with academic staff, clinical staff and work-based supervisors.

PROFESSIONAL BODY LINKS

It is expected that the HEI will have established links with the relevant members of each profession and where appropriate, professional body, and have involved them in the design, delivery and development of all programmes.

PROGRAMME TITLES

The title of the degree programme should be consistent with MSC terminology. The award titles are:

Certificate in Higher Education in Healthcare Science
Diploma in Higher Education in Healthcare Science
BSc (Hons) Healthcare Science (Specialism)

Only BSc Honours degree will lead to eligibility for admission to the relevant professional body register. This should be reflected in the title awarded to the student so there is no doubt.

If this presents an HEI with a specific difficulty they should contact the Accreditation Unit for further advice and guidance at msc.accreditation@wm.hee.nhs.uk

RECORD-KEEPING AND REGISTRATION

HEIs will have a robust, but fair, non-discriminative and accurate system in place with respect to student registration, assessment, progress, graduation and attrition and record-keeping that complies with the current Data Protection Act (DPA) 1998. This system must encompass the time students are on placement in the work-base.

RECRUITMENT AND ADMISSIONS

Marketing and promotion of these programmes is vital to attracting high calibre applicants. Health Education England has on-going programmes to promote healthcare science in schools and to the public and works with NHS Careers to ensure the information available to prospective students is accurate and up-to-date. HEIs are also expected to engage with schools and the public to promote these programmes and healthcare science.

Whilst the regulations of individual HEIs will apply, it is expected that employers and lay people would usefully offer input to inform the selection and admission process for students for each BSc (Hons) programme in Healthcare Science which is accredited as meeting the MSC specification. Choice of specialism within each degree should be informed following discussions between the LETB and HEI. It should be made clear to students entering the programme how selection into specialist training is undertaken.

English Language

Figure 2 shows the recognised English language qualifications that international students whose first language is not English are usually required to have to be eligible for admission to the new MSC BSc (Hons) programmes in Healthcare Science, alongside the HEI's academic requirements for entry. Admissions tutors are also advised to check current regulation/registration requirements.

Figure 2: Recognised English language qualifications for international students whose first language is not English

Qualification	Level required
IELTS (International English Language Testing Score)	7.0 with no less than 6 in each element
Paper-based TOEFL (Test of English as a foreign language)	600 with a TWE (test of written English) of 4.5
Computer based TOEFL (Test of English as a Foreign language)	250 with no less than 4.5 in essay writing
IBT TOEFL (Test of English of a foreign language)	88 with no less than 19 in each element

RESEARCH AND INNOVATION

HEIs will ensure that all teaching and learning is current and informed by research to ensure that at graduation the healthcare science practitioners meet the Framework for Higher Education Qualifications (FHEQ) descriptor at level 6 (<http://www.qaa.ac.uk/>). Each programme should make students aware of the potential contribution of the healthcare science workforce to research and innovation. There is a requirement for the HEI to keep abreast of developments in science and healthcare science to ensure that the learning outcomes are contextualised to new or emerging science and technology.

Research Project

The research project is a specific module that is additional to the Year 3 work based module. The research project must link to the practice of healthcare science in the NHS and help students develop their awareness of and adherence to current ethical and research governance guidelines and legislation. The research project should enable students to apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding by initiating, undertaking and disseminating the output from a research project. The research project may span scientific or clinical research, translational research, operational and policy research, clinical education research, innovation, service development/clinical audit, service improvement or supporting professional service users. **It is expected that many students will undertake their research project wholly or in part in the workplace** with additional weeks in the time table allocated to this i.e. not within the 25 week work based training time in Year 3. It is also recognised that the research project may take the form of a well designed and executed audit project and/or service evaluation.

STAFF EXPERIENCE AND QUALIFICATIONS

- Staff delivering the BSc (Hons) in Healthcare Science must have appropriate qualifications and demonstrate a commitment to their own continuing professional development. They must also be aware of the role of the healthcare science workforce and current priorities in the NHS.
- Teachers of all curricula must have the requisite knowledge, skills and experience including those teaching the specialist curriculum (this includes the subject areas). This teaching should be delivered using up-to-date teaching and learning methods.
- Teaching staff delivering specialist modules and supervising work-based training should normally be a member of the relevant professional register and/or professional body.
- Academic staff and visiting teachers delivering the MSC programmes must be qualified to do so as evidenced by appropriate academic and teaching and learning qualifications and/or experience in higher education.
- Recent experience in a relevant clinical area is considered to be a substitute for a formal teaching and learning qualification if the experience is accompanied by evidence of recent continuing professional development (CPD) aligned to current teaching, learning and assessment methods and research evidence.
- Each HEI must have a robust CPD strategy and implementation plan in place for all staff delivering MSC accredited programmes and staff should keep a record of their activities in this regard.
- Work-based departments/laboratories should have an accredited or designated training officer.

STUDENT SUPPORT

HEIs must have in place systems to monitor student progress and to support and mentor students during their degree. This should include systems to identify and support students in difficulty including whilst on work-based placements.

TRAINING WORK-BASED TRAINERS

A train-the-trainer programme should be in place for academic and workplace-based staff and participating lay people. All HEI staff contributing to the degree programme need to be aware of the requirements of the new MSC programmes and understand the fundamental differences between these new programmes and previous programmes. This will include an appreciation of lay/patient perspectives, the current and future role of the healthcare science workforce and the contribution that this workforce can make to research, innovation and quality within the NHS.

Staff training should ensure that all staff involved in the assessment of work-based training are aware of the principles of assessment, the assessment tools/methods and their use. Staff supervising and teaching students in the workplace would be expected to demonstrate recent training and/or experience in student support and

feedback and be conversant with the range of student support services available in the HEI.

The work-based training environments must adhere to the standards underpinning MSC programmes (appendix 1).

WORK-BASED LEARNING

The BSc (Hons) curriculum and full time programme structure approved by the four UK Health Departments as meeting the requirements of the MSC Practitioner Training Programme comprises approximately two thirds of learning in an academic setting and one third (50 weeks) of work-based learning.

The timing of the academic and work-base learning should promote the integration of knowledge, skills and experience including professional practice and ensure that students, wherever possible, are enabled to gain the necessary underpinning knowledge and skills prior to their work-based training. It is expected that in Year 1 the work-based learning will consist of shorter, more frequent time periods in the workplace, with longer blocks of work-based learning in Year 2 and Year 3.

The work-based learning should embrace ten weeks in Year 1, fifteen weeks in Year 2 and twenty-five weeks in Year 3 [see Figure 1 page 5]. It is accepted that for timetabling reasons or work-based placement centre work-loads it may be necessary to make minor variations to this guidance, especially in Years 2 and 3. However, each programme must deliver 50 weeks of work-based learning across the three years. Work-based learning, wherever possible, should be the placement's normal working day to give maximum learning opportunity and experience of the NHS work culture. Where the work-based learning is timetabled as 'a week' this should be Monday to Friday or equivalent, to ensure that the total work-based learning equates to the 50 weeks work-based days over the three years for each student on the programme.

Whilst it is expected that the work-based learning will take place in the workplace, HEIs may wish to make a case for some learning to take place in 'simulated' laboratories within an HEI or other suitable organisational setting; this may be relevant particularly in Year 1. Where some work-based learning in Year 1 takes place in an HEI environment or other setting outside the work-base, the HEI must be able to demonstrate equivalent learning including the professional practice outcomes to that which would be delivered in an NHS workplace training provider.

Wherever possible, the academic and work-based learning should be synchronised and interwoven in blocks to enable synergies between the academic and work-based components using a blended learning approach.

The learning outcomes and indicative content that must be achieved in the workplace are contained within the MSC BSc (Hons) curriculum. These are expanded in the PTP learning guides and have a number of associated competencies. Each HEI should have in place a well-designed workplace placement plan, which has approval from the LETB (and is the result of engagement with local

service providers in and for the NHS). This workplace placement plan should ensure a suitable mix of high quality learning environments and must be clearly articulated in a written format, to reflect the workplace training requirements outlined in the MSC training manuals/learning guides. The PTP training manuals are available at: <http://www.networks.nhs.uk/nhs-networks/msc-framework-curricula>

The work-base environments must comply with the standards underpinning MSC programmes (appendix 1).

Year 1

The work-base learning in Year 1 has been designed to orientate the student to the work of the wider healthcare science workforce in the NHS to inform their eventual specialism in Years 2 and 3 of the programme. It is expected that students will have the opportunity to gain a wider appreciation of the NHS across primary, secondary and tertiary care by visiting and observing patient care in a range of healthcare settings and hearing feedback from patients and lay people. Students should also have the opportunity to observe how the work of healthcare science impacts on patients, the patient care pathway and the work of multi-disciplinary teams, including in social care where relevant.

This first year of work-based education will enable the student to integrate learning from the HEI setting with the work undertaken within a healthcare science setting. In addition it will promote learning in context, encourage and motivate students and provide an opportunity for them to apply and recognise the importance of the basic science they are learning and the professional practice they are developing.

It is envisaged that in the first semester/term, students could undertake a small number of workplace visits and begin to gain some basic practical skills, for example basic life support and hand-washing. As the year progresses it is expected that students will spend blocks of time in the workplace up to a total of 10 weeks.

Year 2 and Year 3

As the student progresses through the degree, there will be increasing specialisation, although the point at which this occurs will vary among the four divisions of healthcare science (Life Sciences, Physical Sciences and Biomedical Engineering and Physiological Sciences, Informatics). Students will be working to gain the knowledge, skills and experience needed by a healthcare science practitioner immediately upon commencement of employment. The MSC framework does not allow the Year 2 and 3 work-based learning to be delivered as a sandwich year, or back to back.

Supervision of Workplace-based Learning

The duties, working hours and supervision of students in the workplace must be consistent with the delivery of high quality and safe patient care. Each placement provider must have an appropriately qualified (professionally and with respect to teaching, learning, assessment and supervision) training officer.

Attendance at Workplace-based Placements

Normally, students should achieve and record 100% attendance at work-base placements and will be expected to make up any time lost due to illness or other extenuating circumstances. The responsibility for monitoring lies with the HEI but this will need to follow a process agreed with each work-base supervisor. Decisions as to how any lost time is made up will need to be taken on an individual basis by an HEI in discussion with the student and work-base.

Attainment of Workplace-based Learning Outcomes

Students must pass all elements of the workplace-based modules and complete the work place assessments.

Quality Assurance of Workplace-based Placements

The quality assurance of workplace-based training will be defined in a formal written agreement between the HEI and NHS service provider and the LETB and NHS service provider.

The training provider must comply with the MSC educational and training standards (appendix 1).

The type of placement provision may vary dependent upon the specialism and the area of the curriculum being studied. Programme management teams will update their specifications annually and inform workplace-based placement providers well in advance of any changes needed.

It is expected that placement providers will provide high quality placements following generic quality requirements and each HEI will evaluate and monitor the quality of each placement centre.

Workplace-based placements should comply with the MSC educational and training standards and provide:

- a well-organised and appropriate programme of education and training;
- an appropriate balance and reliability of teaching;
- appropriate contact with patients;
- regular and constructive feedback on student performance;
- trained staff and systems to assess student competence using the MSC recommended assessment methods;
- clear information in respect of who in the HEI is responsible for the placement and who should be contacted in the event of any difficulties;
- a supportive student-centred learning environment;
- access to appropriate facilities for the student;
- clinical supervision and mentoring from appropriately qualified staff.

Workplace-based placements should ensure the student has the opportunity to:

- integrate their underpinning knowledge and practical experience;
- build on and develop their professional practice;
- observe and take part in multi-disciplinary meetings/activities;
- become a member of the department team;
- achieve all of the learning outcomes in the work-based modules.

CONCLUSION AND FEEDBACK

This guide provides an overview of the key underpinning principles of the delivery of the new BSc (Hons) degree programmes in Healthcare Science for Modernising Scientific Careers. If you identify any errors or omissions, or would like to suggest additional information that could usefully be included, please email: msc.accreditation@wm.hee.nhs.uk

This guide will be subject to regular review, modification and updating.

Modified by Grace Hodgetts – January 2016

Appendix 1

Standards Underpinning MSC Programmes

Professional Standards

- The programme must address the requirements of *Good Scientific Practice* and the professional curriculum related to it
- Within training environments patients/volunteers must not be exposed to undue risk from teaching and learning and teaching activities
- Training programmes must support safe, effective, patient centred and compassionate care at all times
- Successful completion of a programme and conferment of an award leading eligibility for entry to professional registers must ensure fitness to practise in line with GSP
- Equality and diversity policies must be in place, implemented and monitored in all settings for all programmes fostering equality of opportunity and respecting diversity
- The programme must deliver the MSC education and training outcomes
- The delivery of the curriculum must remain relevant to current scientific and clinical practice
- Professional aspects of practice must be integral to the programme and should be clearly visible in assessment procedures
- Quality assurance processes must be in place for all parts of the programme
- The programme must promote self-development, accountability and the personal qualities related required of a healthcare professional
- Approaches to teaching and learning approaches must foster independent, learner centred learning and must develop evidence-based practice in learners
- Learners' and employers' and patients' views must be taken into account in the design, delivery and evaluation and development of the programme.
- The programme must provide opportunities for inter-professional teaching and learning and teaching and support the development of the learner in a multi professional team setting
- The delivery of the curricula must be relevant to the needs of service commissioners, employers and patients

- Academic providers must ensure that exit awards that do *not* lead to eligibility for healthcare science professional status, must be named appropriately to avoid confusion with any approved healthcare science award.
- Knowledge, skills and work based components of the programme must be integrated
- The programme must be effectively managed with sufficient and infrastructure, in order to ensure delivery of the required outcomes of training.

Education and Training Standards

1.1.1 The standards for education and training describe in detail the expectations of the NHS in the delivery of a quality programme by individual or consortia arrangements for all providers of academic or work base education and training. Their delivery in the work base is quality managed by the NSHCS, working as part of the West Midlands Multi Professional Deanery, within the lead LETB and on behalf of HEE. Evidence of adherence to these standards by an HEI is required in order to be an accredited MSC undergraduate programme.

1.1.2 The standards for education and training which incorporate many of the expectations of Good Scientific Practice (GSP) are split into three domains, which define the requirements of the NHS and explain and contextualise the overarching professional standards. These are;

- Domain 1: Patient protection and engagement
- Domain 2: Learner centred approach
- Domain 3: Programme content, management and resources

1.1.3 Domain 1) Patient protection and engagement

- Patients must be treated with respect, compassion and dignity, maintaining confidentiality.
- Patient safety must be protected and patients should not be exposed to risk from learners.
- Patients must be informed when learners will be involved in their care and their consent must be obtained
- Entry requirements for the programme must ensure learners meet essential requirements for patient protection of:
 - English language skills
 - Criminal records checks (CRB)
 - Occupational Health checks
 - Prior knowledge skills and experience

- Admissions procedures must include CRB checks, compliance with health requirements and professional entry and academic standards
- Processes must be in place to handle concerns over trainee/student and their professional suitability throughout the course of the programme.
- Learners must be subject to appropriate supervision at all times and in all settings.
- Assessment processes must be valid, reliable, consistent and equitable.
- Patients must be involved in programme design, delivery, evaluation and development.
- Lay people must be included in recruitment and assessment activities.

1.1.4 Domain 2) Learner-centred approach

- Applicants to a programme must be able to access clear and accurate information about the programme, the entry requirements and application process and information about the programme in all settings.
- Procedures must be in place to evaluate/accredit prior experience and learning for entry to and/or exemption from components of the programme.
- Learners must be appropriately prepared for and supported during the programme, including an appropriate induction to the learning environments and resources available for the programme.
- Learners must be appropriately prepared for the work based setting and have relevant knowledge, skills and experience to practice safely under supervision.
- Learners must be able to access appeal processes.
- Learners must be able to access processes to raise concerns about the quality of the education and training programme.
- Learners must be able to access support and guidance in all settings.
- Learners must have identified educators in both educational and work based settings.
- The supervision model must be appropriate for the learning and teaching activities of the programme and the needs of the learner.
- Systems must be in place to identify and address the needs of learners requiring additional support.
- Protocols must be in place to stipulate maximum durations for the programme and to authorise breaks in study, to ensure learning remains current throughout the course of the programme
- Systems must be in place to gain consent from learners engaging in learning and teaching activities which risk personal injury or disclosure of personal information and reasonable alternative arrangements must be available when consent is not provided.

1.1.5 Domain 3) Programme content, management and resources

Programme Delivery

- The range of learning, teaching and assessment methods must be appropriate to the intended learning outcome.

- The number of educators must be appropriate for the number of learners and associated teaching, learning and assessment and support roles.
- Educators must be appropriately trained to undertake their teaching and assessment and support roles.
- The learning, teaching and assessment environments must be appropriate for the effective delivery of the programme.
- Educators must be appropriately professionally qualified and/or members of the relevant professional register/body.
- The physical resources and the learning resources, including electronic materials, must be appropriate for the effective delivery of the programme.
- The human resources must be adequate for the delivery of the programme.

Assessment

- Assessment must be conducted against objective and documented outcomes.
- Assessment should include both formative and summative approaches.
- The delivery of the assessment should ensure that learners are enabled and supported to successfully meet the learning outcomes upon completion of the programme.
- Feedback following assessment must be learner centred, timely and linked to the assessment outcomes.

Programme Management

- An appropriately qualified professional lead for each programme must be named.
- The respective roles and responsibilities for all parties in the design, delivery, assessment and evaluation of the programme must be documented.
- Educators in the work based setting must have their role in education and training stipulated in their job descriptions.
- The programme must have a secure place in the education provider's business plan.
- The details of how the programme delivery is managed must be documented and accessible.
- Channels of communication between all parties must be agreed and documented.
- A documented evaluation of the programme delivery must take place at least on an annual basis.
- Work based teaching and learning for undergraduates must be subject to education provider approval, monitoring processes or formal agreements must be in place.

Appendix 2

**Self- Assessment Accreditation Proforma for Practitioner Training Programme (PTP)
BSc (Hons) Healthcare Science**

This proforma is your electronic submission in support of your Expression of Intent to provide a PTP programme. The information you supply will be used by the Accreditation Unit and its Panel and forms the starting point for the accreditation of your programme.

Note: When asked for brief statements, please keep them simple. You may if you wish use tables or bullet-pointed lists. Please do not send any attachments unless specified.

*For completion by the Course Director
Please return completed form to msc.accreditation@wm.hee.nhs.uk by [date]*

HIGHER EDUCATION INSTITUTION	
FACULTY	
SCHOOL	
TITLE OF PROGRAMME	
SPECIALISM (S) (Please list	

each of the specialisms your programme will offer)	
MODE OF DELIVERY	Full time
	Part time
	Other (Please specify)

Information and Evidence Required	Attachments required	For NSHCS staff only
Diagram showing how your programme matches the MSC programme structure	Attachment 1	S.1.1
Map showing where, in your programme, the learning outcomes in the PTP learning guidance are met	Attachment 2	
Diagram showing structure of Department/School/Faculty and brief description of study environment in terms of classroom facilities and specialist equipment.	Attachment 3	S.1.1, S.2.1, S.2.1
Provide a hyperlink to your up-to-date Reading list	Hyperlink	S.1.1
A statement in no more than 200 words of the principles on which you have Details of Prior Learning/Experiential achievements credit exemptions guidance		S.1.1

Condonment/Compensation Statement	Yes	No	S.2.3
Confirm by ticking the relevant box whether you allow –			
• condonment/compensation between modules			
• aggregation of marks in the research or clinical or work-based modules			
• List the modules where aggregation of marks is used			S.2.3

<p>Summarise your rules for the following:- (Provide a hyperlink to the regulations if necessary)</p> <p>Reassessment/re-sit_(no more than 100 words)</p>	S.2.3
<p>Deferral_(no more than 100 words)</p>	S.2.3

Exit awards_(no more than 100 words)	S.2.3
Explain in no more than 200 words the measures you take to ensure course content is refreshed to reflect up-to-date scientific and clinical practice	S.2.5

Reports on Professional suitability for practice (S.2.3) <ul style="list-style-type: none"> • Provide template or evidence of ability to confirm students' suitability for practice 	Attachment 4
Provide evidence of the opportunities for inter-professional learning and teaching, with a brief explanation of each, and list the modules where inter-professional learning and teaching occur.	S.4.1

--	--

Handbooks

Information and Evidence Required	Attachments required	
Please attach .pdf copies of the following:- Student Handbook	Attachment 5	S.1.1
Programme Specification	Attachment 6	S.1.1
Module Handbooks	Attachment 7	S.1.1

Quality Assurance

Information and Evidence Required		
Explain in no more than 250 words how you ensure the programme is aligned with relevant QAA subject statements		S.1.3

<p>Information about the quality assurance measures in place including:-</p> <ul style="list-style-type: none"> • Please provide information on the following subjects below:- <p>Admissions (entry requirement and selection criteria) (no more than 50 words)</p>	S.2.2
<p>Attendance monitoring, student support_ (no more than 50 words)</p>	S.2.2
<p>Quality assurance/audits or work-based placements (no more than 50 words)</p>	S.2.2

<p>Staff development:-</p> <p>Briefly describe requirements for staff development for HEI 's own staff (no more than 50 words)</p>	S.2.2
<p>NHS clinical staff engaged in teaching on the programme (no more than 50 words)</p>	S.2.2
<p>NHS Work-based Trainers (no more than 50 words)</p>	S.2.2

<p>Student Support and mentoring processes, including information on the links between HEI and work-base (no more than 50 words)</p>	<p>S.2.2</p>
<p>Describe the processes for collection of, and response to, student feedback including staff/student consultative committees (no more than 50 words)</p>	<p>S.2.2</p>
<p>Student representation on programme and faculty committees (no more than 50 words)</p>	<p>S.2.2</p>
<p>Employer liaison meeting minutes - describe who attends and summarise the terms of reference (no more than 50 words)</p>	<p>S.2.2</p>

Disability, equality and diversity policies (no more than 50 words)	S.2.2
Pastoral care (no more than 50 words)	S.2.2
Summarise processes for conducting and reporting on programme evaluation (no more than 50 words)	S.2.2

Assessment

Information and Evidence Required			
A brief statement of the overarching assessment strategy for the programme (no more than 200 words)			S.2.3
Confirm here if details of each assessment within each module are listed in the Module Handbooks	Yes	No	S.2.3
For any five of the PTP learning outcomes, list the assessments			S.2.3

--	--

Work-based Learning

Information and Evidence Required	Attachments required	
Evidence of the relationship between academic and work-based learning as follows:-		S.1.2
<ul style="list-style-type: none"> • Placement plan for each year of the Programme 	Attachment 8	S.1.2
<ul style="list-style-type: none"> • Delivery plan demonstrating the timing of module delivery (showing underpinning of knowledge is delivered before practice placements) 	Attachment 9	S.1.1
<ul style="list-style-type: none"> • List of work-based centres with name, address and contact number 	Attachment 10	S.1.2, 2.5

<p>Evidence of teaching and learning in other areas, such as Clinical and/or Laboratory Skills Labs that contribute to work-based learning (no more than 200 words)</p>	<p>S.2.1</p>
<p>Explain (maximum 200 words) your contact arrangement with the health service and your quality assurance of work-based trainers</p>	<p>S.1.5</p>

--	--

Patient and Public Involvement

To provide evidence on how patients and the public contribute to each programme as part of a working partnership with academic staff, clinical staff and work-based supervisors.

Information and Evidence Required	Attachments required	
Please provide your strategy for Patient and Public Involvement	Attachment 11	

	Current Engagement Max 50 words	Planned Engagement with time lines Max 50 words
1. Please describe how you recruit and select patients and the public		
2. How are patients and/or the public:		

	Current Engagement Max 50 words	Planned Engagement with time lines Max 50 words
2a) actively involved in the initial selection of students to the programme?		
2b) actively involved in any further selection process, for example choice of work placements?		
2c) actively involved in teaching activities?		
2d) actively involved in providing formative feedback to students?		

	Current Engagement Max 50 words	Planned Engagement with time lines Max 50 words
2e) actively involved in providing formative feedback to staff?		
2f) actively involved in the formative assessment of students?		
2g) actively involved in the summative assessment of students?		

	Current Engagement Max 50 words	Planned Engagement with time lines Max 50 words
2h) current representation on the BSc programme teams/meetings?		
3. What contribution do patients with disabilities make to the teaching, learning and assessment programme?		
4. How do patients and the public contribute to the Quality Assurance process that underpin the BSc programme?		

	Current Engagement Max 50 words	Planned Engagement with time lines Max 50 words
5. How are patients and the public prepared for their role, and what key issues are covered with respect to:		
5a) student recruitment		
5b) teaching activities		
5c) providing feedback to students		

	Current Engagement Max 50 words	Planned Engagement with time lines Max 50 words
5d) providing feedback to staff		
5e) formative assessment		
5f) summative assessment		

	Current Engagement Max 50 words	Planned Engagement with time lines Max 50 words
5g) programme committees and/or quality assurance		
6. How is feedback collected from patients and the public contributed to each activity and the response to the feedback discussed with them?		
7. What is your practice on the expenses of the patients and public who contribute to the programme		

	Current Engagement Max 50 words	Planned Engagement with time lines Max 50 words
8. How do you evaluate your PPI Engagement Plan?		
9. Briefly summarise examples of good practice from PPI engagement to date		
10. Briefly summarise any examples where your PPI engagement requires improvement		

Personnel

Information and Evidence Required		
<p>List of all staff contributing to the programme and title of their contribution including</p> <ul style="list-style-type: none"> • HEI staff named in module specifications • NHS specialist teaching staff contributing to programme with details of their specialist area of expertise and teaching qualification • Lead trainers in each department including details of their experience, teaching and assessment qualifications and commitment to continuing professional development • Key delivery staff currently research-active in the relevant curriculum areas. 		<p>S.2.4</p> <p>S.2.5</p> <p>S.2.5</p>
Information and Evidence Required	Attachments required	
Biography/Synopsis of Career Experience (no more than 250 words for each person)	Attachment 12	
<p>Details of external examiner (s)</p>		

--	--

Continuing Professional Development

Information and Evidence Required		
<p>Provide brief details of programme staff’s attendance at local and national Modernising Scientific Careers meetings, LETB, (equivalent for Northern Ireland, Scotland and Wales), or the National School of Healthcare Science (no more than 200 words)</p>		<p>S.1.6</p>

Give brief details of staff CPD requirement (no more than 100 words)		S.2.4
Give brief information to show that programme leaders have an on-going relationship with professional body relevant to each specialism (no more than 100 words)		S.4.1

Research

Information and Evidence Required	Attachments required
Describe what you would anticipate as a typical third year project (no more than 200 words)	S.1.1

Please forward this completed proforma to the Accreditation Unit via msc.accreditation@wm.hee.nhs.uk by close of play on the date of the deadline given.

Appendix 3

Accreditation Standards for Practitioner Training Programme (PTP) BSc (Hons) Healthcare Science

We are looking for focussed, direct information

* **Aligned to Liberating the NHS: Developing the Healthcare Workforce: Education Outcomes Framework**

Key Domains	Excellent Education = 1	Competent and Capable Staff = 2	Adaptable and flexible workforce = 3	NHS values and behaviours =4	Widening participation =5
----------------	-----------------------------------	---	--	--	--------------------------------------

Overarching requirement The degree programme aligns with, and is mapped to, the MSC educational and training standards (appendix 5) and those of the Health and Care Professions Council Standards of Education and Training and relevant QAA subject statements. (See S.1.3)	
*EOF Domain(s)	Accreditation Standard
S.1 PROGRAMME CONTENT	
Competent and capable staff (2)	S.1 .1 The academic content of the degree complies with the Modernising Scientific Careers (MSC) curriculum; with the learning outcomes for each module and their relative credit ratings,

	including procedures for accreditation of Prior Learning and/or Prior Experiential achievements and maximum credit exemption allowed, clearly mapped to the MSC curriculum framework
Competent and capable staff (2) Adaptable and flexible workforce(3) NHS values and behaviours (4)	S.1.2 The content and timing of the work-based learning programme complies with the MSC curriculum and framework, educational and training standards, ensuring that theory and clinical placements and/or classroom practical components have synergy using a blended learning approach.
Excellent education (1)	S.1.3 The degree programme aligns with, and is mapped to, the MSC educational and training standards (appendix 5) and those of the Health and Care Professions Council Standards of Education and Training and relevant QAA subject statements.
Competent and capable staff (2) Adaptable and flexible workforce (3) NHS values and behaviours (4)	S.1.4 The degree programme content reflects the rights and pledges of the NHS Constitution
Competent and capable staff (2) Adaptable and flexible workforce (3)	S.1.5 The programme content is based upon current subject specific practice, regular contact with subject specialists, advances in technology and on-going internal/external institutional research/activity which contributes to the programme.
NHS values and behaviours (4) Adaptable and flexible workforce (3)	S.1.6 There is a commitment to ensuring continued compatibility with the evolving MSC strategy and communication with the MSC team (or successor body).

S.2 PROGRAMME DELIVERY AND ENVIRONMENT

<p>Excellent education (1)</p>	<p>S.2.1 Resources to support learning/ teaching and practical /clinical space, including IT and e-learning facilities must be appropriate to the curriculum; support student numbers and the subject specialism;</p>
<p>Excellent education (1) Widening participation (5) (admissions procedures, APL/APEL)</p>	<p>S.2.2 Rigorous Quality Assurance measures are in place across all systems including</p> <ul style="list-style-type: none"> i) admissions procedures; ii) record keeping; iii) staff recruitment; iv) staff training and development; v) student progression and feedback; vi) programme maintenance and development; vii) internal and external institutional monitoring, audit and evaluation; viii) work-base placement centres, ix assessment
<p>Excellent education (1)</p>	<p>S.2.3 All assessment policies and procedures are valid, reliable, consistent and equitable utilising a spread of assessments; clear module mark descriptors, assessment criteria, credit weightings, module mark determination, deferrals, reassessments, failures and exit routes</p>
<p>Excellent education (1)</p>	<p>S.2.4 The programme team is appropriately staffed with an adequate number of qualified and experienced staff to deliver the programme. Delivery of specialist modules should have subject</p>

	specialist knowledge and be members of the relevant professional register and/or professional body; where appropriate are undertaking continuing professional development (CPD);
Excellent education (1)	S.2.5 The work-base placement plan has LETB/Strategic Health Authority (or and NHS partner approval ⁵ , providing high quality learning environments and where appropriate accredited by the National School of Healthcare Science, with an adequate number of qualified and subject experienced staff who are fully prepared for the placements;
Excellent education (1) Competent and capable staff (2)	S.2.6 The degree programme is taught in a research active academic environment, and is informed by recent research findings
S.3 PUBLIC, PATIENT AND SERVICE USER INVOLVEMENT	
NHS values and behaviours (4) Adaptable and flexible workforce (3)	S.3.1 There is an appropriate involvement/interface with patients, carers, NHS policy and the public in the design, delivery, quality assurance and development of the programme.
S.4 LIAISON WITH PROFESSIONAL BODIES	
Excellent education (1) Competent and capable staff (2)	S.4.1 There is appropriate involvement/interface with professional bodies ensuring the programme requirements takes account of any subject registration requirements

⁵ Or equivalent health service bodies in Northern Ireland, Scotland and Wales.

Appendix 4

Typical Agenda for Accreditation Visit

Meeting title:	BSc (Hons) Healthcare Science Proportionate Touch Review Visit
Date:	
Location:	

Please note the NSHCS Panel require a private room, separate to the main meeting room, for the duration of the visit

	Agenda items:	Time:	Room:	Personnel:
1.	Panel to meet and discuss the proposal Agree themes for discussion, areas to be addressed, allocate roles and responsibilities	30 mins 9.30-10am		
2.	Presentation by the development / teaching team to provide overview and address areas identified by panel members	30 mins 10-10.30am		

	Agenda items:	Time:	Room:	Personnel:
3.	Questions from the Panel To address all members of the development team	45mins-1hour 10.30-11.30am		
4.	Meeting with students Discussion of academic and practice support mechanisms/concerns	30-45 mins 11.30-12.15pm <i>(ideally this should be just before lunchtime so they can share lunch with the panel)</i>		
5.	Lunch and private panel meeting to discuss findings and clarify further requirements	1 hour 12.15-1.15pm		
6.	Discuss with senior clinical managers / LETB representatives, relevant strategic issues and organisational commitment to the proposed programme and student placements. Explore how the service provider will work with the Education Provider to deliver the programme and effective practice learning.	30 mins 1.15-1.45pm		
7.	Meeting with mentors/placement supervisors Discussion of practice issues, supervision and assessment processes	30-45 mins 1.45-2.30pm		

	Agenda items:	Time:	Room:	Personnel:
8	Panel meet to discuss findings and agree conditions/recommendations	30 mins 2.30-3pm		
9	Feedback to the development/teaching team. Clear outline of findings and any conditions and recommendations, agree realistic timescales for achievement of conditions	30 mins 3-3.30pm		

Appendix 5
Change notification form

Change notification form

A separate form must be completed for each MSC accredited programme

Section 1 – About your programme	
Name of education provider	
Programme title	
Mode of delivery	<input type="checkbox"/> Full time <input type="checkbox"/> Part time <input type="checkbox"/> Other (please provide details)
Contact details for person responsible for submitting the change proposal	
Name	
Job title	
Telephone number	
Email address	

Section 2 – Outline of change(s)
<p>Please indicate which areas of your programme you feel the change is likely to affect from the list below (delete as appropriate)</p> <ol style="list-style-type: none"> 1. Academic Content 2. Teaching Method(s) 3. Work-based learning 4. Admissions 5. Programme management 6. Programme resources 7. Curriculum 8. Assessment 9. Other (please state)
<p>Please provide a detailed description of the change being proposed. In order to assess how the change will impact on our standards, it is useful if changes are put in the context of our standards (see page 7 of the 2012 Guidelines).</p>

Section 3 – Your review of the change(s)

Is there an event already scheduled to assess the change to the programme or is there a periodic review meeting upcoming?

Yes No

If yes, what are the intended dates and format for this event / meeting?

When do you wish to introduce any changes? (specify academic year)

Is documentation available now to evidence the change to the programme?

Yes No

If no, when will evidence of the change and how MSC standards continue to be met become available?

Section 4 – Discussion with Stakeholders

Have you discussed the proposed change(s) with stakeholders (where applicable)?

Yes No

Please provide details

--

Section 5 – Confirmation

I confirm that all information relating to the proposed programme changes which have been submitted, and the information provided on these changes, is correct.

Name	
Job title	
Date	

Appendix 6
Annual monitoring declaration form

Annual Monitoring Declaration Form
Practitioner Training Programme

Please note that a separate form must be completed for each MSC Accredited Programme

HIGHER EDUCATION INSTITUTION	
FACULTY	
SCHOOL	
TITLE OF PROGRAMME	
SPECIALISM (S) (Please list each of the specialisms your programme offers)	
MODE OF DELIVERY	Full-time
	Part-time
	Other (please specify)

Contact Details for person responsible for submitting the form	
Name	
Job Title	
Telephone Number	
Email address	

Information and Evidence Required	Attachments required
Latest non-completion rates with indicative reasons	Attachment 1
Information about graduate destinations for the last academic year	Attachment 2
Narrative of progress to date against any outstanding conditions and recommendations	Attachment 3
Up-to-date Progress/Action Plan for Patient and Public	Attachment 4

Involvement (Service Users) showing what has already been achieved and dates planned to achieve future goals	
<p>Details of all placement providers to include:-</p> <ul style="list-style-type: none"> • Lead Training Officer's name and email address • Trust and Department • Trust postal address 	Attachment 5
Latest external examiner's report	Attachment 6
Details of any changes to external examiners and short biography/CV of new appointees	Attachment 7
Detailed information about any changes that you have made or plan to make to the programme including module content, delivery, assessment and staffing, using the Change Notification Form	Change Notification Form if appropriate
Typical UCAS points offer for new entrants	
Provide a note of any issues raised in student feedback in the last year and the measures taken to address them	
Provide at least one example of research-led teaching introduced or planned as part of programme in no more than 250 words	

Declaration

Declaration to be completed by Head of School/Dean of Faculty or Programme Leader

I confirm that the Programme continues to meet the MSC accreditation criteria
I confirm that the information given on this annual monitoring form is correct and failure to disclose relevant information could result in the programme no longer being accredited.

I confirm that any future significant changes to the programme will be reported to the MSC accreditation team via the major change process and failure to disclose relevant information could result in the programme no longer being accredited.

Signature (electronic) _____

Date _____

Please return this form to msc.accreditation@wm.hee.nhs.uk

Appendix 7

Template for a PPI Plan

MODERNISING SCIENTIFIC CAREERS ACCREDITATION: PATIENT AND PUBLIC INVOLVEMENT

This template is designed to enable Higher Education Institutions applying for MSC Accreditation of BSc (Hons) programmes to provide evidence of how patients and the public contribute to each programme as part of a working partnership with academic staff, clinical staff and work-based supervisors.

	Current Engagement	Planned Engagement with time lines
9. Please confirm you have an up-to-date Patient and Public Involvement Strategy for this BSc (Hons) programme in place (<i>this should be submitted as part of your evidence</i>)		
10. Please describe how you recruit and select patients and the public (<i>please include copies of any advertisements, interview process, role outlines</i>)		
11. How are patients and/or the public:		
3a. actively involved in the initial selection of students to the programme?		
3b. actively involved in any further selection process, for example choice of work placements?		
3c. actively involved in teaching activities?		
3d. actively involved in providing formative feedback to students?		
3f. actively involved in providing formative feedback to staff?		
3g. actively involved in the formative assessment of students?		
3h. actively involved in the summative assessment of students?		
3i. currently representation on the BSc programme teams/meetings?		
12. What contribution do patients with disabilities make to the teaching, learning and assessment programme?		
13. How do patients and the public contribute to the Quality Assurance process that underpin the BSc programme?		
14. How are patients and the public prepared for their role, and what key		

	Current Engagement	Planned Engagement with time lines
issues are covered with respect to:		
6.1 student recruitment		
6.2 teaching activities		
6.3 providing feedback to students		
6.4 providing feedback to staff		
6.5 formative assessment		
6.6 summative assessment		
6.7 programme committees and/or quality assurance		
15. How is feedback collected from patients and the public contributed to each activity and the response to the feedback discussed with them? <i>(Please provide examples of the feedback and course team response)</i>		
16. Do you cover the expenses of the patients and public who contribute to the programme? <i>(Please provide details of the expenses paid, any honorarium or other expenses)</i>		
17. How do you evaluate your PPI Engagement Plan? <i>(Please provide a typical example)</i>		
10. Could you briefly summarise examples of good practice from PPI engagement to date		
11. Could you briefly summarise any examples where your PPI engagement requires adaptation to improve the outcome for patients, the public, staff and/or students		

Appendix 7

GLOSSARY

Term	Definition
Competence	The ability of an individual to perform a role consistently to required standards combining knowledge, understanding, skills and behaviour.
Curricula	An outline of the expected educational outcomes across a subject area The learning that is expected to take place during the Scientist Training Programme described in terms of knowledge, skills and attitudes
Division	A high level description of an area of practice within healthcare science. There are four divisions: Life Sciences, Physical Sciences and Biomedical Engineering and Physiological Sciences, Informatics.
Good Scientific Practice (GSP)	Non-statutory guidance on the minimum requirements for good practice for the healthcare science workforce.
Key Learning Outcome	A defined learning outcome linked to relevant competence(s) within the workplace Learning Guide
Knowledge and understanding	The knowledge and understanding that must be applied in the work place to achieve the stated competence.
Learning Framework	The specification for work based learning contained within the Learning Guide
Learning Outcome	A high level, outcome based statement that describes what a trainee will be able to do at the end of the module
Local Education and Training Board (LETB)	LETBs are the forum for providers and professionals to work collectively to improve the quality of education and training outcomes within their local area, and to meet the needs of service providers, patients and the public.
Practical Skill	A cognitive, psychomotor, physical or communicative ability that supports performance of required role.

Term	Definition
Programme	The package of learning, teaching assessment and quality assurance leading to an award
Programme specification	A concise description of the intended learning outcomes of an HE programme, and the means by which the outcomes are achieved and demonstrated
Programme structure	Content of the programme, including mandatory and optional modules, rules for combining units and any specified pathways.
Provider	An organisation that delivers required training and learning activities, to specified quality assurance requirements
QAA	The Quality Assurance Agency for higher education responsible for maintaining standards across UK HEIs.
Quality Assurance	A range of review procedures designed to safeguard academic standards and promote learning opportunities for students of acceptable quality.
Specialism	A focused area of practice within a theme of healthcare science
Subject benchmark (UK)	This is overseen by QAA in England, and provides a reference point against which outcomes can be measured. Subject benchmark statements provide a means for the academic community to describe the nature and characteristics of programmes in a specific subject. They also represent general expectations about the standards for the award of qualifications at a given level and articulate the attributes and capabilities that those possessing such qualifications should be able to demonstrate.
Theme	A cluster of related specialisms within a division of healthcare science.
Work-based Learning	Learning that takes place in a real work setting and involves the application of academic learning to real work activities
Work Place	A real work setting in which the trainee can apply learning