Plymouth University

Faculty of Health and Human Sciences

School of Health Professions

Programme Specification

PgCert / PgDip /Master in Clinical Research

Date of Approval: 03 June 2015
Proposed date of Implementation: September 2015
Year of first award: 2016
Special Educational Needs and Disability Act 2001 (SENDA)
## Contents

1. MClinRes ................................................................. 5  
2. Awarding Institution .................................................. 5  
3. Accредiting Body ...................................................... 5  
4. Distinctive Features of the Programme and the Student Experience ........ 5  
5. Relevant QAA Subject Benchmark Group(s) .......................... 6  
6. Programme Structure .................................................. 6  
7. Programme Aims ......................................................... 8  
8. Programme Intended Learning Outcomes ............................. 9  
9. Admissions Criteria, including APCL, APEL and DAS arrangements ...... 10  
11. Exceptions to Regulations ............................................ 14  
12. Transitional Arrangements .......................................... 14  
13. Mapping ..................................................................... 15  
Appendices .................................................................... 21  
Appendix 1: Timeline for 1 year programme .............................. 21  
Appendix 2: Timeline for 2 year programme .............................. 22  
Appendix 3: Optional Modules .......................................... 23  
Appendix 4: Professions eligible for NIHR funding .......................... 24  
Appendix 5: HEE-NIHR Funded MClinRes Application form .......... 25  

Master in Clinical Research – Programme Specification
1. **M ClinRes**

   **Final award title**
   Master in Clinical Research

   **Level 7 Intermediate award title(s)**
   Postgraduate Diploma (PGDip) in Clinical Research

   **Level 7 Intermediate award title(s)**
   Post Graduate Certificate (PGCert) in Clinical Research

   **UCAS code**
   JACS code

2. **Awarding Institution:** University of Plymouth

   **Teaching institution(s):** University of Plymouth

3. **Accrediting body:** Not Applicable

4. **Distinctive Features of the Programme and the Student Experience**

   The MClinRes has been developed in response to a local need within the South West to build research capacity in non–medical and non-dentist healthcare professions and in response to an NIHR call to fund 10 MClinRes places/year over a 3-4 year period (depending on full / part time mix). Following a national call and peer reviewed evaluation the MClinRes at the University of Plymouth is one of 10 NIHR funded schemes within the UK from 2015-2017.

   The distinctive Features of the Programme and the Student Experience are:

   - Multi-disciplinary approach to learning and teaching involving multiple allied healthcare professionals, nurses and midwives as well as representatives from the NHS involved in research management and governance.
   - Strong emphasis on learning and teaching using real clinical research findings delivered by experienced clinical researchers.
   - Student engagement in quality improvement, knowledge creation and dissemination of best practice through publication and presentation.
   - Curriculum enrichment, flexible learning opportunities and support to develop digital literacy.
- Student and alumni involvement in programme management, design and recruitment.
- Support to facilitate progression along the Health Education England / National Institute for Health Research (HEE/NIHR) Integrated Clinical Academic ICA Programme after completion of the MClinRes.
- Shared core and optional modules with health and social care students studying across Faculty MSc pathways which will enrich the student experience.
- Use of blended learning as a mode of delivery incorporating study blocks and distance learning technologies.
- Opportunities to apply knowledge and skills to individual’s area of clinical practice.

5. **Relevant QAA Subject Benchmark Group(s)**


6. **Programme Structure**

The proposed MClinRes programme will offer the awards of Postgraduate Certificate, Postgraduate Diploma or Master in Clinical Research degree.

The full time route will normally take one year and the part time route will normally take two years. The maximum registration period for the full time registrant is three years and 5 years for the part time student. In agreement with NIHR guidance part time students funded by the NIHR receive funding for a 2 year period only.

The programme will include the following core modules:
- Applying Evidence to Practice.
- Project Design for Research
- Applied Qualitative Research Methods
- Applied Quantitative Research Methods
- Research Dissertation.

All 20 credits apart from Research Dissertation which is 80 credits.
Students are also able to select 1 x 20 credit optional module from across MSc pathways offered within the Faculty of Health and Human Sciences. Students may also choose to study modules from wider in the university following liaison with the programme leader.

Applying evidence to practice, project design for research are existing modules running as part of MSc Advanced Professional Practice. The research dissertation will share teaching and learning opportunities with the 60 credit research dissertation which is delivered on the Advanced Professional Practice programme. Advanced qualitative and quantitative research methods are new modules created for this new programme.

**Full time study**

<table>
<thead>
<tr>
<th>Modules (and Credits)</th>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV702: Applying Evidence to Practice (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCR701: Applied Qualitative Research Methods (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCR702: Applied Quantitative Research Methods (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optional Modules (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADV715: Project Design for Research (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCR703: Research Dissertation (80)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Part Time study**

<table>
<thead>
<tr>
<th>Modules (and Credits)</th>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV702: Applying Evidence to Practice (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADV715: Project Design for Research (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCR701: Applied Qualitative Research Methods (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCR702: Applied Quantitative Research Methods (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programme Optional Module (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCR703: Research Dissertation (80)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCR704 Research Management and Mentorship (10 *OPTIONAL)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Optional modules can be taken throughout semester 1 and 2. For part time students ADV715 is taken in year 1 semester 1. This gives them enough time to apply for NHS IRAS ethics permission throughout the rest of that year. This will allow the student to have a timely start to their dissertation in year 2.

*Note: Following the dissertation students can attend a Research Management and Mentorship training module. This allows students to start develop future fellowship applications that seamlessly lead on from their master research. It aims to provide updates of skills and knowledge required for publication, successful grant applications and long term clinical academic career planning. The module attracts 10 credits but passing it is not a requirement for the M ClinRes.

7. **Programme Aims**

The aims of this programme are to equip professionals with clinical research skills allowing them to advance their practice by:

- Taking leading roles in clinical research and in developing research capacity in the clinical arena
- Developing a critical theoretical knowledge base and practical skills relevant to conducting research in clinical practice
- Developing a creative, critical and analytical approach to research in practice
- Basing practice on best available research evidence within the context of a critical understanding of barriers to implementing research findings in the healthcare system
- Conducting clinically based research projects

As such the M ClinRes fulfils the HEE mandate to develop a workforce skilled for research and innovation (6.48-6.56 Delivering high quality effective compassionate care: Developing the right people with the right skills and right values 2014). Further, the optional modules allow students to develop specific skills that, due to the diversity of programmes on offer, are relevant to improving care across the lifespan and in developing a technologically literate workforce.
8. **Programme Intended Learning Outcomes**

8.1. **Knowledge and understanding**

On successful completion graduates will have developed:

8.1.1) A critical understanding of factors that determine the quality of clinical research
8.1.2) A critical understanding of the barriers and enablers to implementing clinical research findings in the healthcare environment.
8.1.3) A critical understanding of the clinical research process from project development through to implementation
8.1.4) A critical understanding of the theoretical underpinnings and practical application of qualitative and quantitative methods and mixed methods research
8.1.5) An understanding of the support networks and research governance structure within the NHS
8.1.6) An understanding of the processes in costing a grant involving patients recruited through the NHS
8.1.7) A critical understanding of approaches in health economics evaluation

8.2. **Cognitive and intellectual skills**

On successful completion graduates should have developed:

8.2.1) Skills of critical reflection when appraising clinical research literature
8.2.2) The ability to plan a research project from conception to implementation
8.2.3) Leadership skills to allow the building of research capacity within the person’s clinical environment
8.2.4) The ability to undertake self-directed learning

8.3. **Key and transferable skills**

On successful completion graduates should have developed the ability to:

8.3.1) Formulate clinical research questions
8.3.2) Systematically review databases using appropriate search terms relevant to the clinical question under investigation
8.3.3) Design a research study
8.3.4) Undertake data collection using qualitative and quantitative methods as appropriate
8.3.5) Write up research findings to a standard appropriate for publication
8.3.6) Write summaries appropriate for a lay audience
8.4. **Employment related skills**

On successful completion graduates should have developed:

8.4.1) The ability to undertake self-directed learning  
8.4.2) Leadership skills to allow the building of research capacity within the person’s clinical environment  
8.4.3) The ability to undertake an analysis of the barriers and enablers to implementing clinical research within the workplace  
8.4.4) Key advanced practitioner skills related to communicating via written oral and pictoral (poster) means.

8.5. **Practical skills**

On successful completion graduates should have developed the ability to:

8.5.1) Gather and analyse qualitative and quantitative data using appropriate softwear  
8.5.2) Use PICO and SPIDER to identify clinically relevant questions  
8.5.3) Review papers using CASP  
8.5.4) Write up research findings to a level suitable for publication in a peer reviewed journal  
8.5.5) Write a grant application at a level suitable for progression along the ICA academic pathway  
8.5.6) Write a strategy to include patients, public and carers in the research process

9. **Admissions Criteria, including APCL, APEL and DAS arrangements**

All applications should achieve the following qualifications:

Applicants for the MClinRes will fall into two categories self funded and NIHR funded. In order to commence this programme, all students must meet the University’s entry requirements for study at postgraduate level. Applicants will normally have a first degree, BSc (Hons) at 2.1 or above or European first cycle equivalent. Applicants will be a health care professional with a first degree or people with related academic degrees. People without a degree but with appropriate experience related to the programme or to any of the chosen pathways may be eligible to apply.

Applicants whose first language is not English must also provide evidence of competence in written and spoken English in accordance with the university’s Admissions Code of Practice i.e. International English Language Testing System (IELTS) minimum of 6.5 in each part.
Each potential student will be assessed individually for their ability to study at this level. Candidates will normally be required to submit a short piece of writing as part of the admissions process.

Additional requirements for NIHR funded places are detailed below.

**Additional requirements for NIHR funded places (see flow diagram below):**
Selection: Certain professions are eligible (appendix 4) for funding under the NIHR scheme. This includes course fees as well as costs to cover people’s salary. In addition to the entry requirements listed above, students who are interested in applying for an NIHR funded place will have to complete the following additional assessment:

![Flow diagram indicating the routes for self-funded and NIHR funded students](image)

A call to apply for funded places will be made in May (year 2 onwards) or June (Year 1). Assessment, in line with those used for HEE (Health Education England) internship schemes and Plymouth University standard postgraduate application procedures, will assess (appendix 5):
1) Proposed research proposal and how this relates to their current practice and the priorities of the NHS / HEE.
2) Clinical experience and evidence of working in the context in which they wish to research
3) Previous research experience (including publications / conference proceedings) and long term career plans that involve developing as a leader in clinical research
4) A statement of support from employees/commissioners. This should indicate they will support the continuation of employment and clinical research development on completion of the course.

Applicants will be shortlisted by a cross faculty panel. Short listed applicants will be invited for interview where they will present their proposed project for 10 minutes and undertake an interview exploring their aspirations and potential to become clinical academic leaders. An interview proforma based on the assessment criteria above will ensure parity of process between interviews and allow objective scoring by the panel. The interview panel will consist of faculty representatives and representatives from HEE, patient and carer groups and commissioners/employers. Applicants for NIHR funded places that are unsuccessful at the shortlisting / interview stage can continue their application as self-funded applicants. The University has the final decision on successful applicants/Interviews. Applicants who are not successful will be given an opportunity for feedback following the interview.

We will work with employers to explain the scheme and the longer term advantages to their organisation of supporting clinical academic development. This will ensure that the MClinRes is responsive to workforce demands and the application and the implementation of learning and the dissertation is relevant to current practice needs.

**Accreditation of Prior Experiential Learning AP(E)L:**
Claims for Credit for prior learning, whether certificated or experiential are accepted and will be assessed following university regulations and faculty procedures. [http://www6.plymouth.ac.uk/pages/view.asp?page=28823](http://www6.plymouth.ac.uk/pages/view.asp?page=28823).

A maximum of 80 credits can AP(E)L into the full Master programme this is due to the expectation that students will complete ADV715 (20 Credits: Project Design for Research) and MCR703 (Dissertation 80 Credits) at Plymouth University. APEL is not normally accepted against ADV715 because of the need to work to develop a protocol for ADV716 with the dissertation supervisor. AP(E)L can be used for NIHR funded students. In this case their level of support for salary cover and student fees will be reduced relative to their remaining credits required.
European Credit Transfer and Accumulation System (ECTS)
This programme is equivalent to 90 ECTS credits (second cycle) with 30 ECTS credits at post graduate certificate, 60 credits at postgraduate diploma and 90 credits at Master degree. Each 20 credit module has the equivalent of 10 ECTS credits and assumes a notional student effort of between 200-300 hours.

Disclosure and Barring Service (DBS) Checks
Students undertaking research dissertations involving members of the public (including patients recruited from the NHS or support groups) need to provide evidence of an up to date DBS check. This will be made evident at induction to allow people to undertake DBS checks if required.

Disability Assist Services
This programme is designed to enable students through an equitable experience. We work collegiately with expert colleagues in Disability Assist (within the Learning Gateway) to ensure students, who consider studying our MClinRes, received timely advice on the support available. Students can declare a support requirement or disability – via the Disclosure for applicants’ pages.

10. Progression criteria for Final and Intermediate Awards

Progression criteria
There are exit awards as a Postgraduate certificate in Clinical Research and a Postgraduate Diploma in Clinical Research
Postgraduate certificate in Clinical Research: 60 credits: Three 20 credit modules are required: Core module (20); Core module (20) and a core or programme option module (20)

Postgraduate Diploma in Clinical Research: 120 credits are required: 4 core modules (80 credits) + 20 credit optional module. Students taking this route then have two options to make up the additional 20 credits (a) APEL in 20 credits from previous learning (b) Undertake an additional 20 credit optional module from those listed above within the Master Advanced Professional Practice Scheme

Master in Clinical Research 180 credits: 4 core modules (80 credits) + 20 optional module + 80 credit dissertation.
<table>
<thead>
<tr>
<th>Programme</th>
<th>Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>PgCert</td>
<td>Applying Evidence to Practice (20)</td>
</tr>
<tr>
<td></td>
<td>Applied Qualitative Research Methods (20)</td>
</tr>
<tr>
<td></td>
<td>Applied Quantitative research methods (20)</td>
</tr>
<tr>
<td>PgDip</td>
<td>Project Design for Research (20)</td>
</tr>
<tr>
<td></td>
<td>Optional Module</td>
</tr>
<tr>
<td></td>
<td>APEL of 20 credits or additional optional module</td>
</tr>
<tr>
<td></td>
<td>* Additional 20 credits in case students exit at this point</td>
</tr>
<tr>
<td>MSc</td>
<td>Research Dissertation (80)</td>
</tr>
</tbody>
</table>

11. **Exceptions to Regulations**

Normal Plymouth University Regulations will apply to this programme and award.

12. **Transitional Arrangements**

This is a new programme as such there are no transitional arrangements
13. **Mapping:**

For the purposes of mapping the modules are coded A,B,C,D,E,
A Applying evidence to practice
B Project Design for Research
C Applied Quantitative Research Methods
D Applied Qualitative Research Methods
E Dissertation

13.1 **Mapping of intended learning outcomes Skills to individual modules:**

<table>
<thead>
<tr>
<th>Knowledge and Understanding</th>
<th>Related Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>A critical understanding of factors that determine the quality of clinical research outputs</td>
<td>A,C,D,E</td>
</tr>
<tr>
<td>A critical understanding of the barriers and enablers to implementing clinical research findings in the healthcare environment.</td>
<td>A, E</td>
</tr>
<tr>
<td>A critical understanding of the clinical research process from project development through to implementation</td>
<td>B</td>
</tr>
<tr>
<td>A critical understanding of the theoretical underpinnings and practical application of different qualitative and quantitative research methods</td>
<td>C,D</td>
</tr>
<tr>
<td>A understanding of the support networks and research governance structure within the NHS</td>
<td>B,E</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cognitive and intellectual skills</th>
<th>Related Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical reflection when appraising clinical research literature</td>
<td>A,E</td>
</tr>
<tr>
<td>Ability to plan a research project from conception to implementation</td>
<td>B</td>
</tr>
<tr>
<td>Leadership skills to allow the building of research capacity within the person’s clinical environment</td>
<td>A,B,E</td>
</tr>
<tr>
<td>Ability to undertake self directed learning</td>
<td>A,B,C,D,E</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key and transferable skills</th>
<th>Related Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formulate clinical research questions</td>
<td>A,B,C,D,E</td>
</tr>
<tr>
<td>Systematically review databases using appropriate search terms relevant to the clinical question under investigation</td>
<td>A</td>
</tr>
<tr>
<td>Design a research study</td>
<td>B,E</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Undertake data collection using qualitative and quantitative methods as appropriate</td>
<td>B,C,D</td>
</tr>
<tr>
<td>Write up research findings to a standard appropriate for publication</td>
<td>E</td>
</tr>
<tr>
<td>Employment related skills</td>
<td>Related Modules</td>
</tr>
<tr>
<td>Ability to undertake self directed learning</td>
<td>A,B,C,D,E</td>
</tr>
<tr>
<td>Leadership skills to allow the building of research capacity within the person’s clinical environment</td>
<td>A,B,C,D,E</td>
</tr>
<tr>
<td>Ability to undertake an analysis of the barriers and enablers to implementing clinical research within the workplace</td>
<td>A</td>
</tr>
<tr>
<td>Key advanced practitioner skills related to communicating via written oral and pictoral (poster) means.</td>
<td>A,B,C,D,E</td>
</tr>
<tr>
<td>Practical Skills</td>
<td>Related Modules</td>
</tr>
<tr>
<td>Gather and analyse qualitative and quantitative data using appropriate software</td>
<td>A,C,D,E,</td>
</tr>
<tr>
<td>Use PICO and SPIDER to identify clinically relevant questions</td>
<td>A</td>
</tr>
<tr>
<td>Review papers using CASP</td>
<td>A</td>
</tr>
<tr>
<td>Write up research findings to a level suitable for publication in a peer reviewed journal</td>
<td>E</td>
</tr>
<tr>
<td>Write a grant application at a level suitable for progression along the ICA academic pathway</td>
<td>A,B,E</td>
</tr>
</tbody>
</table>
### 13.2 Assessment against modules mapping

<table>
<thead>
<tr>
<th>Module</th>
<th>Cred</th>
<th>Formative Assessment</th>
<th>Summative</th>
<th>Mapping module outcomes to programme outcomes (see table below)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CORE MODULES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applying Evidence to Practice</td>
<td>20</td>
<td>500 word outline of literature review and EBP action plan</td>
<td>4,000 word report including critical review of literature and 500 word action plan for implementation in the workplace</td>
<td>8.1.1 8.1.2 8.2.1 8.2.4 8.3.2 8.4.1 8.4.3 8.4.4 8.5.2 8.5.3</td>
</tr>
<tr>
<td>Project Design for Research</td>
<td>20</td>
<td>Peer feedback on presentation of research idea</td>
<td>4,000 word report including: 2,000 word research proposal and 2,000 critical review of study design</td>
<td>8.1.3 8.1.6 8.1.7 8.2.2 8.2.4 8.3.1 8.3.3 8.3.6 8.4.1 8.4.4 8.5.5 8.5.6</td>
</tr>
<tr>
<td>Applied Qualitative Methods</td>
<td>20</td>
<td></td>
<td></td>
<td>8.1.4 8.2.4 8.3.4 8.4.1 8.4.4 8.5.1</td>
</tr>
<tr>
<td>Applied Quantitative Methods</td>
<td>20</td>
<td></td>
<td>Assignment (2000 words) based on analysing and interpreting data from real world survey</td>
<td>8.1.4 8.2.4</td>
</tr>
</tbody>
</table>

**Mapping module outcomes to programme outcomes (see table below):**

- 8.1.1
- 8.1.2
- 8.2.1
- 8.2.4
- 8.3.2
- 8.4.1
- 8.4.3
- 8.4.4
- 8.5.2
- 8.5.3
<table>
<thead>
<tr>
<th>Module</th>
<th>Credits</th>
<th>Component</th>
<th>Assessment</th>
<th>Reference(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment (2000 words) based on analysing and interpreting data from real world RCT</td>
<td></td>
<td></td>
<td></td>
<td>8.3.4, 8.4.1, 8.4.4, 8.5.1</td>
</tr>
<tr>
<td>Research Dissertation</td>
<td>80</td>
<td>Peer and tutor feedback on presentation to peers and academics</td>
<td>Poster and structure 500 word abstract of research findings</td>
<td>8.1.5, 8.2.3, 8.2.4, 8.3.1, 8.3.5, 8.4.2, 8.4.4, 8.5.4</td>
</tr>
<tr>
<td>Optional Modules examples</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluating Outcomes in Practice</td>
<td>20</td>
<td>Brief critical appraisal of a selected outcome measure</td>
<td>4000 word critical appraisal of a selected outcome measure</td>
<td>8.2.1, 8.2.4, 8.4.1, 8.1.1, 8.3.3</td>
</tr>
<tr>
<td>Health and Social Care Futures</td>
<td></td>
<td></td>
<td></td>
<td>8.2.1, 8.2.4, 8.4.1</td>
</tr>
<tr>
<td>Developing Self and Others</td>
<td>20</td>
<td>Feedback on essay outline</td>
<td>4,000 word reflective learning plan</td>
<td>8.2.1, 8.2.4, 8.4.1</td>
</tr>
<tr>
<td>Supported Independent Study</td>
<td>20</td>
<td>Feedback on outline essay plan</td>
<td>4,000 word reflective report</td>
<td>8.2.1, 8.2.4, 8.4.1</td>
</tr>
<tr>
<td>Cognition, Perception and Behaviour in Neurological Practice</td>
<td>20</td>
<td>Tutor feedback on draft of presentation and essay</td>
<td>Presentation 40% and Essay 60% (2,500 words)</td>
<td>8.2.1, 8.2.4, 8.4.1</td>
</tr>
<tr>
<td>Research management and mentorship</td>
<td>10</td>
<td>Peer and tutor feedback on presentation of action plans to peers and academics</td>
<td>1) 1000 Word plan for future clinical research development / application for NIHR research internships &amp; Gannt chart for planned research 2) 500 word structured abstract of their research dissertation suitable for submission to a conference.</td>
<td>8.1.5, 8.2.3, 8.2.4, 8.3.5, 8.4.2, 8.5.5</td>
</tr>
</tbody>
</table>
### 8.1. Knowledge and understanding

On successful completion graduates will have developed:

- 8.1.1) A critical understanding of factors that determine the quality of clinical research
- 8.1.2) A critical understanding of the barriers and enablers to implementing clinical research findings in the healthcare environment.
- 8.1.3) A critical understanding of the clinical research process from project development through to implementation
- 8.1.4) A critical understanding of the theoretical underpinnings and practical application of qualitative and quantitative methods and mixed methods research
- 8.1.5) An understanding of the support networks and research governance structure within the NHS
- 8.1.6) An understanding of the processes in costing a grant involving patients recruited through the NHS
- 8.1.7) A critical understanding of approaches in health economics evaluation

### 8.2. Cognitive and intellectual skills

On successful completion graduates should have developed:

- 8.2.1) the skills of critical reflection when appraising clinical research literature
- 8.2.2) the ability to plan a research project from conception to implementation
- 8.2.3) leadership skills to allow the building of research capacity within the person’s clinical environment
- 8.2.4) the ability to undertake self directed learning

### 8.3. Key and transferable skills

On successful completion graduates should have developed the ability to:

- 8.3.1) formulate clinical research questions
- 8.3.2) systematically review databases using appropriate search terms relevant to the clinical question under investigation
- 8.3.3) design a research study
- 8.3.4) Undertake data collection using qualitative and quantitative methods as appropriate
- 8.3.5) Write up research findings to a standard appropriate for publication
- 8.3.6) Write summaries appropriate for a lay audience
8.4. Employment related skills

On successful completion graduates should have developed:

8.4.1) the ability to undertake self directed learning
8.4.2) leadership skills to allow the building of research capacity within the person’s clinical environment
8.4.3) the ability to undertake an analysis of the barriers and enablers to implementing clinical research within the workplace
8.4.4) Key advanced practitioner skills related to communicating via written oral and pictoral (poster) means.

8.5. Practical skills

On successful completion graduates should have developed the ability to:

8.5.1) Gather and analyse qualitative and quantitative data using appropriate softwear
8.5.2) Use PICO and SPIDER to identify clinically relevant questions
8.5.3) Review papers using CASP
8.5.4) Write up research findings to a level suitable for publication in a peer reviewed journal
8.5.5) Write a grant application at a level suitable for progression along the ICA academic pathway
8.5.6) Write a strategy to include patients, public and carers in the research process

Table 2.2 Programme outcome
Appendices

Appendix 1: Timeline for 1 year programme

<table>
<thead>
<tr>
<th>Month/Week</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept</td>
<td>Applying Evidence to Practice</td>
<td>Journal clubs / Peer support group sessions</td>
<td>Project Design for research</td>
<td>Applying Evidence to Practice</td>
</tr>
<tr>
<td>Oct</td>
<td>Project Design for research</td>
<td>Journal clubs / Peer support group sessions</td>
<td>Project Design for research</td>
<td>Start of Ethics / R&amp;D application Process</td>
</tr>
<tr>
<td>Nov</td>
<td>Optional Modules</td>
<td>Journal clubs / Peer support group sessions</td>
<td>Journal clubs / Peer support group sessions</td>
<td>Journal clubs / Peer support group sessions</td>
</tr>
<tr>
<td>Dec</td>
<td>Applied Quantitative</td>
<td>Journal clubs / Peer support group sessions</td>
<td>Applied Quantitative</td>
<td>Applied Quantitative</td>
</tr>
<tr>
<td>Jan</td>
<td>Applied Quantitative</td>
<td>Optional Modules</td>
<td>Applied Quantitative</td>
<td>Applied Quantitative</td>
</tr>
<tr>
<td>Feb</td>
<td>ADV716 Dissertation</td>
<td></td>
<td>ADV716 Dissertation Student Feedback</td>
<td></td>
</tr>
<tr>
<td>Mar</td>
<td></td>
<td></td>
<td>ADV716 Dissertation Student Feedback</td>
<td></td>
</tr>
<tr>
<td>Apr</td>
<td></td>
<td></td>
<td>ADV716 Dissertation Student Feedback</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td></td>
<td></td>
<td>ADV716 Dissertation Student Feedback</td>
<td></td>
</tr>
<tr>
<td>Jun</td>
<td></td>
<td></td>
<td>ADV716 Dissertation Student Feedback</td>
<td></td>
</tr>
<tr>
<td>Jul</td>
<td></td>
<td></td>
<td>ADV716 Dissertation Student Feedback</td>
<td></td>
</tr>
<tr>
<td>Aug</td>
<td>Allocation of Supervisors</td>
<td>Estimated submission of IRAS and R&amp;D forms</td>
<td>ADV716 Dissertation Student Feedback</td>
<td>Research management and Mentorship</td>
</tr>
</tbody>
</table>
### Appendix 2: Timeline for 2 year programme

**Year 1: 60 credits + ethics application**

<table>
<thead>
<tr>
<th>Month</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept</td>
<td>Applying Evidence to Practice</td>
<td>Journal clubs / Peer support group sessions</td>
<td>Project Design for research</td>
<td>Applying Evidence to Practice</td>
</tr>
<tr>
<td>Oct</td>
<td>Project Design for research</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td>Applied Quantitative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan</td>
<td>Applied Qualitative</td>
<td>Applied Quantitative</td>
<td>Applied Qualitative</td>
<td></td>
</tr>
<tr>
<td>Feb</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr</td>
<td>Start of Ethics Process</td>
<td>Ethics approval</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jul</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Year 2: 100 credits (optional module + dissertation)**

<table>
<thead>
<tr>
<th>Month</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept</td>
<td>Journal clubs / Peer support group sessions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov</td>
<td>Optional Modules</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb</td>
<td>Dissertation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jul</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug</td>
<td>Dissertation hand in</td>
<td></td>
<td>Research management and Mentorship</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 3: Optional Modules

These include optional modules from Advanced Professional Practice, Contemporary Healthcare master and MSc in Psychological Research Methods within the Faculty of Health and Human Sciences as well as modules from the MSc in biomedical sciences within the School of Biomedical Sciences. These courses are aimed to attract people from the wide array of professions that are eligible for NIHR funded places (appendix 4).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCH503</td>
<td>Health and Social Care futures</td>
<td>20</td>
<td>All</td>
</tr>
<tr>
<td>ADV705</td>
<td>Evaluating Outcomes in Clinical Practice</td>
<td>20</td>
<td>All</td>
</tr>
<tr>
<td>ADV706</td>
<td>Management of Long Term Conditions</td>
<td>20</td>
<td>All</td>
</tr>
<tr>
<td>ADV708</td>
<td>Injection Therapy for Health Professionals (Botulinum Toxin)</td>
<td>20</td>
<td>Qualified physiotherapists, podiatrists &amp; OTs only</td>
</tr>
<tr>
<td>ADV709</td>
<td>Injection Therapy for Health Professionals (Corticosteroid)</td>
<td>20</td>
<td>Qualified physiotherapists, podiatrists &amp; OTs only</td>
</tr>
<tr>
<td>ADV710</td>
<td>Pathomechanics and Rehabilitation of Gait and Balance</td>
<td>20</td>
<td>All</td>
</tr>
<tr>
<td>ADV711</td>
<td>Cognition Perception &amp; Behaviour in Neurological Practice</td>
<td>20</td>
<td>All</td>
</tr>
<tr>
<td>ADV712</td>
<td>Supported Independent Study</td>
<td>20</td>
<td>All</td>
</tr>
<tr>
<td>LDR501</td>
<td>Leadership in Action</td>
<td>20</td>
<td>All</td>
</tr>
<tr>
<td>LDR506</td>
<td>Contemporary Issues in Leadership</td>
<td>20</td>
<td>All</td>
</tr>
<tr>
<td>BIOM5010</td>
<td>Medical genomics and personalised medicine</td>
<td>20</td>
<td>Biomedical oriented 1ST degree</td>
</tr>
<tr>
<td>BIOM5012</td>
<td>Clinical Biochemistry</td>
<td>20</td>
<td>Biomedical oriented 1ST degree</td>
</tr>
<tr>
<td>PSY567</td>
<td>Designing for Behaviour change</td>
<td>20</td>
<td>All</td>
</tr>
<tr>
<td>PSY568</td>
<td>Issues in behaviour change</td>
<td>20</td>
<td>All</td>
</tr>
<tr>
<td>PSY570</td>
<td>Issues in Cognitive and Brain Science</td>
<td>20</td>
<td>All</td>
</tr>
</tbody>
</table>
### Healthcare Science professions
Healthcare scientists who are either statutory regulated by the Health and Care Professions Council or with recognised voluntary regulatory arrangements via the Academy for Healthcare Science in the following broad areas of practice covering over 45 different professional specialisms:
- Life Sciences/Clinical Laboratory Sciences;
- Physiological Sciences;
- Clinical Bioinformatics; and
- Physical Sciences (incorporating Medical Physics) and Clinical Engineering.

These include clinical scientists, biomedical scientists, clinical physiologists and clinical technologists.

### AHP Professions
- Art therapist
- Podiatrist
- Dietician
- Occupational therapist
- Orthoptist
- Orthotist and Prosthetist
- Paramedic
- Physiotherapist
- Radiographer (diagnostic and therapeutic)
- Speech and language therapist
- Dramatherapist
- Music therapist

### Nurse/Midwife
- Nurse
- Midwife
- Health Visitor

### Wider Dental team Professions
- Dental hygienist
- Dental nurse
- Dental therapist

### Operating department practitioners

### Clinical Psychologist

### Pharmacy professions
- Pharmacist
- Pharmacy technician
Appendix 5: HEE-NIHR Funded MClinRes Application Form

HEE-NIHR Funded MClinRes
Plymouth University
2015/2016

This form is to be completed by individuals who wish to apply for funding to undertake the M ClinRes at Plymouth University. Funds are available to cover course fees and salary. Applicants are asked to indicate whether they would like to study full time (1 year Sept – Aug) or part time (2 years). You are required to obtain a statement of support and signature from your employer.

Applications close 29th June 2015 at 12 midday

Please send applications to xxxxxxxxxxxxxxx School of Health Professions Peninsula Allied Health Centre Derriford Road PL6 8BH

Applicants will be informed of whether they have been accepted for interview following shortlisting by 2/07/15

Interviews are on the 16/07/15. Prospective candidates are expected to undertake a 10 minute presentation on their proposed project and their career aspirations in clinical research.

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Job Title</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Employer and Work Address</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>E-mail</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Contact Telephone No</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Professional Registration</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Grade</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Full Time or Part Time (Please delete)</th>
<th>Full Time</th>
<th>Part Time</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Academic Qualifications (Degree )</th>
</tr>
</thead>
</table>

Master in Clinical Research – Programme Specification
The applicant must show evidence of the following

1. The ability to meet the entry criteria for the programme they wish to study (first degree ≥2:1 or equivalent)

2. An outline proposal for an area of investigation for their dissertation (it is recognised that this may change as they progress through their studies). Within the 200 words applicants should provide context as to why this area needs investigating in their practice, what impact the research may have and discuss possible methodologies.

3. Clinical experience and evidence of working in the context in which they wish to research

4. Previous research experience (including publications / conference proceedings) and long term career plans that involve developing as a leader in clinical research

5. A statement of support from their employer which will include comment on their clinical expertise

Please describe below your proposal for investigation as part of your study – this would usually be a proposal for a dissertation (200 words maximum)

How will you ensure the information from your dissertation is integrated into your practice (100 words maximum)
Clinical experience and evidence of working in the context in which they wish to research (100 words maximum)

Long term career plans (100 words max)

Previous Research Output (papers, conference proceedings or grants)

Statement of support from your employer (100 words max)

Signed(employer): Dated:

Signature (applicant) Date