

## MSc Advanced Clinical Practitioner (Radiographic Reporting) Programme Specification

Academic Year:	2020/21
Degree Awarding Body:	University of Bradford
Final and interim award(s):	[Framework for Higher Education Qualifications (FHEQ) level 7]  MSc in Advanced Clinical Practitioner (Radiographic Reporting)  Postgraduate Diploma Radiographic Reporting  Postgraduate Certificate Medical Imaging (Medical Image Reporting)
Programme accredited by (if appropriate):	College of Radiographers  Not accredited by the Health and Care Professions Council (HCPC)
Programme duration:	Part time 3 years (MSc)
QAA Subject benchmark statement(s):	Not available for healthcare staff at Level 7
Date last confirmed and/or minor modification approved by Faculty Board	January 2021

Please note: This programme specification has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but changes may occur given the interval between publishing and commencement of teaching. Any change which impacts the terms and conditions of an applicant's offer will be communicated to them. Upon commencement of the programme, students will receive further detail about their course and any minor changes will be discussed and/or communicated at this point.

### Introduction

Medical imaging is essential to inform clinical decision making and patient management across most, if not all, disease pathways. Advances in imaging technology have increased both demand for, and breadth of, service provision and this increasing demand trend is anticipated to continue.<sup>1,2</sup>

However, concerns exist with respect to Radiology capacity and ability to deliver a comprehensive reporting service.<sup>3</sup> A number of solutions to address capacity in radiology reporting have been introduced including outsourcing of service, auto-reporting (transfer of responsibility for clinical interpretation to referring clinician) and employment of reporting radiographers.<sup>4</sup>

Reporting radiographers have been employed across UK NHS hospitals for over 20 years. While the reporting workload predominantly focuses on reporting projectional radiographs (X-Rays), radiographers also interpret and report examinations across the range of imaging modalities enhancing capacity and enabling turn around targets to be met. Recognition of the importance of reporting radiographers to service delivery was highlighted in the recent cancer workforce plan<sup>5</sup> which, in addition to proposing investment in over 2000 diagnostic and therapeutic radiographers, recommended developing a further 300 reporting radiographers to enable earlier cancer diagnosis evidencing future demand for reporting radiographer role. However, the reporting of images involves a wider set of skills than reviewing and communicating image appearances.

The health and care workforce strategy for England to 2027<sup>6</sup> emphasises the increasing contribution of Advanced Clinical Practice (ACP) roles to enhance skills and flexibility across clinical teams, work across professional boundaries and support delivery of high-quality clinical services. Importantly, while ACP role across a range of non-medical disciplines have been outlined, the role of the Radiographer ACP was singled out as a new professional role to be developed alongside enhancement of existing consultant roles to provide a structured mid-career opportunity with comprehensive role development towards future consultancy roles. The multi-professional framework for advanced clinical practice in England<sup>7</sup> clearly outlines the capabilities of health professionals working in these roles underpinned by the established four pillars of practice (expert clinical practice; leadership & management; education; research). This aims to address inconsistencies seen nationally in reporting radiographer utilisation and role scope, with many not working at an advance practitioner level.<sup>8</sup>

The University of Bradford has provided postgraduate Radiographer Reporting education since 1996 and has an established national and international reputation in the field. However, the current and changing emphasis within national policy and documentation relating to future health professional roles and greater contribution of radiographers to meet reporting capacity demands means that programme provision requires revision to meet current and future expectations of students, employers and commissioners. The programme team at the University of Bradford are in an advantageous position in terms of being able to meet these expectations and are informing future developments as a consequence of being the academic partner in the Health Education England (HEE) supported pilot 'Radiographer Reporting Academy' which has received national interest in terms delivery and outcomes. Led by Professor Beverly Snaith (University of Bradford 2017 Anniversary Chair and consultant radiographer Mid Yorkshire Hospitals NHS Trust), the pilot academy was developed as part of 'Working Together Programme' NHS Vanguard as a Local Workforce Action Board (LWAB) for South Yorkshire and Bassetlaw project with a consortium of NHS Trusts across Yorkshire to train radiography ACPs specialising in radiographic reporting. The combination of increasing demand, changing expectations and active partnership means that the University of Bradford is in a unique position to respond to future service and workforce demands through development and provision of a

postgraduate radiographer reporting programme that evidence development of ACP capabilities as well as clinical reporting expertise with a pathway through to MSc award.

The MSc Advanced Clinical Practitioner (Radiographic Reporting) programme has been designed to facilitate meeting the four pillars of ACP. The awards offer students the opportunity to apply knowledge to a range of clinical and professional situations through reflection and practice experience, supported by an experienced mentor. Learning and teaching is designed to equip students with skills in using a range of information, data, tools and techniques to improve the quality of patient care and health outcomes as well as demonstrate impact and value.

The modules within the MSc Advanced Clinical Practitioner (Radiographic Reporting) pathway focus on research, leadership and competencies to support the student in undertaking an advanced clinical practitioner role. The student will contextualise their learning to fulfil the needs of the Advanced Clinical Practitioner role their employer is supporting them to undertake within Diagnostic Radiography and address the aims and learning outcomes for the programme, outlined in the next section of this document. Modules such as Pursuing a Work Based Dissertation enable students to shape their own focus of study within the modules aims and learning outcomes by learning the principles being taught and applying them to their own professional/employment area.

The proposed programme aligns to the University and Faculty strategy and ambitions. The university has a strong ethos of “Making Knowledge Work”. Inherently, because programmes within the Medical Imaging portfolio are aimed at enhancing and advancing radiographer roles and competencies, students are able to apply their specialist knowledge and academic learning to clinical practice to increase service efficiency and promote a person-centred approach to healthcare service delivery. The programme is also well aligned with the University’s strategic priorities around advancing health care and sustainable societies as it looks to meet the demands and challenges of delivering high quality patient centred care, supporting the development of a capable and dynamic workforce to increase sustainability of healthcare delivery.

Research informed teaching is core to the University strategy. The proposed programme is research informed in terms of content and delivery: an enquiry-based approach to teaching and learning is adopted to enable questioning and decision-making skills alongside knowledge development; the programme team are key researchers in the field of Radiographer Reporting and advanced practice with international credibility in the field; course materials reflect current thinking in terms of radiographer roles and health policy.

It is the University’s vision to be a global leader in educating students from all backgrounds (widening participation and internationalisation) and the Faculty has a strategy for Interprofessional Education to promote cross discipline learning. The proposed programme incorporates modules from the Specialist Skills and Post Registration Development (SSPRD) framework (Faculty of Health Studies taught postgraduate studies framework) to enable students to learn alongside and from other healthcare professionals from the UK and beyond (modules: Leadership for Advanced Practitioners; Preparing for Research; and the final stage dissertation modules). The current postgraduate Medical Imaging portfolio within the SSPRD framework recruits from a national demographic, not just the local Bradford and Airedale area, with radiographers employed in both NHS and

private healthcare organisations. Consequently, the student body is diverse reflecting the strength of the University in supporting the widening participation agenda.

## **Programme Aims**

The programme is intended to:

- Provide a flexible educational framework that is vocationally relevant, which meets the students' professional development needs, as well as the organisational needs of employers.
- Provide opportunities for inter-professional teaching and learning to share the knowledge, skills and experience common to a range of different health and social care disciplines.
- Stimulate students to become autonomous self-directed learners who are motivated to sustain and advance their own continuous professional learning.
- Develop student's clinical skills, knowledge and critical understanding to an advanced level, applicable to their own field of practice.
- Further develop cognitive and practical skills to undertake data synthesis, complex problem solving and risk assessment.
- Prepare students to become autonomous practitioners, to work in advanced and specialist roles with high levels of accountability.
- Develop students as practitioners who will innovate, promote evidence informed practice and improve service user outcomes.
- Develop students as leaders with skills and confidence, to act as role models, supporting the professional development of colleagues and the work within their organisation.
- Develop students as critically reflective, competent leaders who will manage service development towards effective, sustainable, inclusive, fair and ethically sensitive service provision.
- Develop students understanding of the theoretical constructs underpinning research and project management.
- Demonstrate how the findings can influence practice and policy.

## **Programme Learning Outcomes**

The MSc Advanced Clinical Practitioner (Radiographic Reporting) programme learning outcomes are compatible with the Framework for Higher Education Qualifications (FHEQ 2008).

The learning outcomes outlined below are contextualised within the learning outcomes of the modules that students will study.

To be eligible for the award of Postgraduate Certificate at FHEQ level 7, students will be able to:

- LO1 Develop a detailed knowledge and critical understanding of the literature and theoretical concepts that relate to their specialist field of practice.
- LO2 Critically analyse and apply the research evidence that informs the development of policy and service delivery in their specialist field of practice.
- LO3 Demonstrate mastery of clinical or practical skills for the management of complex issues within their field of practice.
- LO4 Reflect upon and demonstrate knowledge of values, ethical thinking, equality awareness, inclusive practice within their specialist field or practice.
- LO5 Develop and demonstrate the ability to articulate sound arguments and justify decisions using a variety of formats including written and oral communication skills.
- LO6 Demonstrate advanced communication skills, problem solving and risk assessment in the student's area of clinical practice.
- LO7 Demonstrate the ability to become an autonomous learner through independent study and critical reflection on continuing development needs.
- LO8 Demonstrate the ability to use IT skills to gather and synthesise information and to access programme materials.

To be eligible for the award of Postgraduate Diploma at FHEQ level 7, students will be able to:

- LO9 Apply knowledge of anatomy and physiology to undertake advanced assessment, diagnosis, complex care plan, health promotion and evaluation appropriate to the student's area of practice.
- LO10 Apply knowledge of service improvement and re-design theory in the students own area of practice.
- LO11 Critically reflect on their leadership skills and apply their knowledge to support the professional development of colleagues and the work within their organisation.
- LO12 Critically analyse clinical governance issues, service improvement and patient safety issues in the context of their area of practice.

Additionally, to be eligible for the award of Degree of Master at FHEQ level 7, students will be able to:

- LO13 Demonstrate understanding of the theoretical constructs underpinning research and project management.
- LO14 Apply research skills to influence and improve practice and policy in the students own area of practice.
- LO15 Apply research and project management skills and demonstrate their ability as an autonomous learner to complete an extended project.

## Curriculum

The three-year part time programme consists of two core (year 1) and two optional 30 credit modules (from a choice of four modules, year 2) and a choice of three 60 credit final stage dissertation modules (year 3): some of these final stage modules have corresponding pre-requisite modules in year 2 which will influence module selection. The programme has a blended learning approach combining university work-based learning. Learning and assessment will be supported through the VLE and portfolio of reporting practice. Students will be expected to work closely with a mentor in their clinical field to support achievement of work-based learning expectations. There is also some flexibility in the choice of learning topic within the clinical portfolio promoting student autonomy in directing learning and permitting learning to reflect clinical working environment. Reflection on practice is also key and supported by a portfolio in the reporting modules.

The programme aligns closely with many aspects of the University vision and corporate strategy as detailed below.

### Excellence

The programme content and delivery has been developed from the long-standing success of The University of Bradford's Medical Image Reporting course, to reflect current policy and Department of Health/HEE vision for future healthcare workforce and success of Reporting Radiographer Academy. Led by Professor Beverly Snaith, a consultant radiographer with international credibility as a reporting radiographer and supported by Professor Maryann Hardy who has extensive experience in the delivery of image interpretation education, the programme provides significant opportunity for growth in student numbers and expansion of academic provision, particularly if the reporting radiographer academy model is to be rolled out nationally as is anticipated.

The proposed programme also complements the Faculty's current taught MSc portfolio of awards and aligns with the University's key themes of advancing practice, management, and research, as well as the University's ethos of 'Making Knowledge Work'.

### Internationalisation

The students on this programme will undertake final stage dissertation modules from the Faculty of Health Studies SSPRD Framework with the opportunity to learn alongside International students on the MSc Medical Imaging International Programme, and MSc students from other health professions. Professor Maryann Hardy and Professor Beverly Snaith have a long-standing research collaboration and an international profile in radiography reporting and advanced practice and the UK leads the way in those advancements in the radiography profession, which this programme further supports. Both professors will be teaching on the programme.

### Equality and Diversity

The University of Bradford successfully caters for a diverse student body. Programmes undergo equality and diversity impact assessments to ensure all protected groups have a positive learning experience.

## Sustainability

The facilitation of developing advanced clinical practitioner roles through this programme supports sustainable models of patient centred health care delivery, building strong multiprofessional collaborations and optimising skill mix.

## Advanced Health Research and Sustainable Societies

The linking with the 'Working Together' NHS Vanguard, consultant radiography practitioners, and the national profile of Professor Bev Snaith and Professor Maryann Hardy creates multiple opportunities for knowledge transfer, research development and publication as well as ongoing national and international leadership in the clinical field and across the student body, as well as developing the programme team.

The UK profile that will develop from this programme and its evaluation will then offer potential growth and future development in the Radiography career pathways, meeting HEE workforce plans and UK Governmental health targets.

Curriculum Table				Postgraduate Certificate Medical Imaging Medical Image Reporting (MIR)	Postgraduate Diploma Advanced Clinical Practitioner (Radiographic Reporting)	Masters Advanced Clinical Practitioner (Radiographic Reporting)
Module Code	Module Title	Credits	Semester			
RAD7001-C	Principles of Reporting	30	1	C	C	
LEM7011-C	Leadership for Advanced Practitioners	30	1 or 2		O	C
RAD7012-C1	Medical Image Reporting Chest and Abdomen*	30	NSYR	O	O	
RAD7013-C1	Medical Image Reporting MSK*	30	FLYR	O	O	
RES7013-C	Preparing for Research	30	1 or 2		O	
RES7007-E2	Pursuing a Systematic review*	60	1 or 2			O**
RES7008-E2	Pursuing primary research*	60	1 or 2			O**
RES7010-E	Pursuing a Work based Dissertation	60	1 or 2			O

1 the pre-requisite for modules RAD7012-C and RAD7013-C is RAD7001-C

2 the pre-requisite for modules RES7007-E and RES7008-E is RES7013-C

## Learning and Teaching Strategy

The programme has a blended learning approach combining university and work-based learning. Learning and assessment will be supported through the VLE. Students will be expected to work closely with a mentor in their clinical field to support achievement of work-based learning expectations and competencies. Whilst on clinical placement the student will complete a record of clinical experience and reporting practice and undertake work-based projects/case studies as part of the learning process. These work-based tasks will include a critical appraisal of published literature and research, and reflection on their practice.

Lectures and practical activities will be used to cover the key concepts and skills within the modules. These sessions may take place on campus, face to face or online.

Tutorials will be used to facilitate learning from each other and recognised clinical experts and provide opportunities for formative feedback (peer, tutor and self). Technology will be used to support the students learning and to facilitate sharing and collaboration in problem solving whilst they are away from the University.

Directed study activities supported by the VLE will further support the student in exploring the syllabus and addressing the module and programme outcomes.

Completion of the dissertation will be on a one-to-one basis with the project supervisor and the format of that supervision will be mutually negotiated and may take the form of: face to face meetings, email, skype or telephone supervision.

There is optionality within the programme allowing students to choose from optional modules in year 2, and 3 by selecting one of the three dissertation modules by methodological approach (Systematic Review, Primary Research or Work based dissertation). There is also optionality in choosing the focus of the research, in order to achieve the programme outcomes and support development towards Advanced Clinical Practitioner. In the Work based Dissertation modules, clinical competencies can be negotiated tripartite between the student, Programme leader and Mentor.

Ongoing formative feedback and support will be provided through academic review of reporting knowledge and skills from academic staff and clinical mentors. There will be formative assessment points for opportunity for feedback and written assignments with the module leader or project supervisor. Students will be supported to demonstrate their Advanced Clinical Practice meets the learning outcomes of Tier 1 and 2 of the dementia core skills education and training framework.

The aims of the teaching and learning strategies have been designed so that students will be given the opportunity to develop theoretical understanding, research informed knowledge and critical thinking (Programme LOs 1, 2, 5, 6, 8, 13), to develop a range of skills appropriate to their professional field (Programme LOs 3, 4, 7, 10, 11, 12), their organisation and workplace setting. Students will also develop their skills and knowledge of research and application to their practice area (Programme LOs 9, 13, 14 and 15).

The Programme will expose students to a range of different teaching, learning and assessment strategies required to achieve the learning outcomes. The teaching

approaches that are used across the Faculty of Health Studies are informed by the University and Faculty core values which are for teaching and learning to be: Research informed, Reflective, Adaptable, Inclusive, Supportive, Ethical and Sustainable. Therefore, the programme delivery includes the following:

- Lectures: to a group of students where information will be presented and discussed whilst informed by the core values.
- Facilitated seminars and group discussion: where learning will be through the interpretation and critical application of information and group learning.
- Tutorial where small group number of students reflect and discuss issues related to their learning.
- Work-based learning: where learning is directed within the work environment and is reflected upon and then reported on, and where skills are taught in relation to theory and best practice enabling students to advance their competent in their field of practice.
- Use of virtual learning environments and e-portfolio, to support learning and personal development.
- Directed reading: where set reading may be recommended.
- Self-Directed learning: Where students are expected to develop their own learning by identifying areas of interest and areas in which knowledge needs to be developed.
- Undertaking a work-based project which is shaped by the student's own self-directed learning needs and the learning outcomes at MSc level.

Students will be expected to develop an autonomous learning style and become self-directed as a learner. UK and International Students from other programmes may also be undertaking the modules which are accessible to other students within the Faculty of Health Studies Specialist Skills and Post Registration Development (SSPRD) framework: Leadership for Advanced Practice; Preparing for Research; Pursuing a Systematic Review; Pursuing Primary Research; and Pursuing a Work Based Dissertation: This allows for multi-disciplinary learning with perspectives beyond UK practice.

## **Assessment Strategy**

Learning will be assessed against the learning outcomes and programme aims through the use of a range of different assessment techniques which may include one or more of the following approaches depending on the optional modules selected:

- Written essay
- The development of a reflective portfolio
- Completion of clinical audit
- Computer based examination

- Seminar presentation
- Written project report
- Completion of a dissertation
- Research paper/executive summary

*NB.* Some of these teaching and assessment strategies may change over time and through the ongoing development of the programme and or modules.

The competencies document for the Leadership for Advanced Practitioners allows students to submit a range of evidence, observed and countersigned by a mentor, to demonstrate competency in the areas of

Leadership and collaborative practice

Improving quality and developing practice

Developing self and others

## Assessment Regulations

This Programme conforms to the standard University Assessment Regulations which are available at the link: <https://www.bradford.ac.uk/regulations/>

However, there are three exceptions to these regulations as listed below:

1. Students must achieve 40% in each module which make up an award of which all components and elements of assessment are achieved at 40%.
2. For modules RAD7012-C Medical Image Reporting chest and abdomen and RAD7013-C Medical Image Reporting Musculoskeletal the examination component of assessment has a pass mark of 90%

Students are offered reassessment (supplementary assessment as a second attempt) prior to a Board of Examiners meeting.

## Admission Requirements

The University welcomes applications from all potential students and most important in the decision to offer a place is our assessment of a candidate's potential to benefit from their studies and of their ability to succeed on this particular programme. Consideration of applications will be based on a combination of formal academic qualifications and other relevant experience.

The standard entry requirements for the programme are as follows:

- Hold a BSc Hons Diagnostic Radiography qualification.
- Registration as a radiographer with the Health and Care Professions Council (HCPC).

- Students for whom English is not their first language must have at least IELTS 7 with no element below 6.5.
- Have managerial support for their studies, including a commitment that appropriate facilities, relevant clinical experience, and time (15 hours per week) will be made available to support the student's studies.
- Remain in employment with the relevant clinical experience and support for the duration of their Masters Studies.
- Have an identified mentor in practice that can support them in their role.

The University of Bradford has computers with internet and word processing facilities available to students across a number of locations therefore students do not need to own their own computer or have a home internet service. Computer literacy courses are available for people new to information technology and both the Learner Development Unit and the Disability Office can provide support to students who have a disability. Dyslexia screening is also available. For further information please see <http://www.brad.ac.uk/about/structure-and-organisation/faculties-and-departments/student-support-and-professional-services/#d.en.139100>

## Recognition of Prior Learning

If applicants have prior certificated learning or professional experience which may be equivalent to parts of this programme, the University has procedures to evaluate and recognise this learning in order to provide applicants with exemptions from specified modules or parts of the programme.

### Minor Modification Schedule

Version Number	Brief description of Modification	Date of Approval (Faculty Board)
1	Specification reformatted and made accessible	January 2021

## References

1. Maskell G. The demand for radiology services. *British Journal of Healthcare Management* 2015; 21: 11-1.
2. The Royal College of Radiologists. *Our patients are still waiting ...* London: RCR. 2016.
3. The Royal College of Radiologists. *Clinical radiology UK workforce census 2016 report.* London: The Royal College of Radiologists. 2017.
4. Johnson P. Image management: handling rising demand for diagnostics [online]. *Health Serv J* 2013. Available at: <https://www.hsj.co.uk/technology-and-innovation/image-management-handling-rising-demand-for-diagnostics-/5061175.article> [accessed 21 December 2017].

5. Health Education England. Cancer workforce plan 2017. Available at: <https://www.hee.nhs.uk/sites/default/files/documents/Cancer%20Workforce%20Plan.pdf> [accessed 10 December 2017].
6. Health Education England. Facing the Facts, Shaping the Future – a draft health and care workforce strategy for England to 2027. Available from: <https://www.hee.nhs.uk/sites/default/files/documents/Facing%20the%20Facts%20Shaping%20the%20Future%20%E2%80%93%20a%20draft%20health%20and%20care%20workforce%20strategy%20for%20England%20to%202027.pdf> [accessed 21 December 2017].
7. Health Education England. Multi-professional framework for advanced clinical practice in England. Available from: <https://www.hee.nhs.uk/sites/default/files/documents/HEE%20ACP%20Framework.pdf> [accessed 21 December 2017].
8. Milner RC, Culpan DG, Snaith B. Radiographer reporting in the UK: Is the current scope of practice limiting plain film reporting capacity? *British Journal of Radiology* 2016; 89: DOI: 10.1259/bjr.20160228
9. Maskell G. The demand for radiology services. *British Journal of Healthcare Management* 2015; 21: 11-1.
10. The Royal College of Radiologists. Our patients are still waiting ... London: RCR. 2016.
11. The Royal College of Radiologists. Clinical radiology UK workforce census 2016 report. London: The Royal College of Radiologists. 2017.
12. Johnson P. Image management: handling rising demand for diagnostics [online]. *Health Serv J* 2013. Available at: <https://www.hsj.co.uk/technology-and-innovation/image-management-handling-rising-demand-for-diagnostics-/5061175.article> [accessed 21 December 2017].
13. Health Education England. Cancer workforce plan 2017. Available at: <https://www.hee.nhs.uk/sites/default/files/documents/Cancer%20Workforce%20Plan.pdf> [accessed 10 December 2017].
14. Health Education England. Facing the Facts, Shaping the Future – a draft health and care workforce strategy for England to 2027. Available from: <https://www.hee.nhs.uk/sites/default/files/documents/Facing%20the%20Facts%20Shaping%20the%20Future%20%E2%80%93%20a%20draft%20health%20and%20care%20workforce%20strategy%20for%20England%20to%202027.pdf> [accessed 21 December 2017].
15. Health Education England. Multi-professional framework for advanced clinical practice in England. Available from: <https://www.hee.nhs.uk/sites/default/files/documents/HEE%20ACP%20Framework.pdf> [accessed 21 December 2017].
16. Milner RC, Culpan DG, Snaith B. Radiographer reporting in the UK: Is the current scope of practice limiting plain film reporting capacity? *British Journal of Radiology* 2016; 89: DOI: 10.1259/bjr.20160228