SCHOOL OF HEALTH SCIENCES
RADIOGRAPHY

In collaboration with
The Scottish Mammography Education Centre

X-Ray Guided Interventional Breast Procedures (RM025)

Mentors Handbook

2020/2021
# Table of Contents

INTRODUCTION .................................................................................................................. 3  
CONTACTS ......................................................................................................................... 3  
OVERVIEW ........................................................................................................................ 4  
Module Overview.............................................................................................................. 4  
Learning Outcomes......................................................................................................... 4  
ACADEMIC DELIVERY ................................................................................................... 5  
WORK BASED LEARNING ............................................................................................... 5  
WORK PLACE GUIDANCE – MENTORS ........................................................................... 6  
  Criteria for the Role of Mentor ...................................................................................... 6  
  Student Learning Contract .............................................................................................. 6  
  Formative Assessment .................................................................................................... 6  
SUMMATIVE ASSESSMENT ............................................................................................... 6  
APPENDIX 1 - Programme Structure And Pathways ....................................................... 8  
APPENDIX 2 – Equivalency of Awards in the UK ............................................................. 9  
APPENDIX 3 – Workplace Agreement ........................................................................... 10  
APPENDIX 4 – Student Learning Contract ................................................................... 12  
APPENDIX 5 – Formative Assessment - Mentor ............................................................. 14
INTRODUCTION

Welcome, this handbook is designed for mentors of students undertaking the X-Ray Guided Interventional Breast Procedures module.

Thank you for agreeing to be a Mentor for a student undertaking this course of study which is delivered by the Scottish Mammography Education Centre (SMEC) in collaboration with Queen Margaret University (QMU) who are the awarding body.

We are grateful for the support of mentors like yourself, without whom it would be impossible to ensure the clinical competence of the students, which is an essential element of the module. This handbook is written as a guide, but should you have any questions then please contact a member of the academic team identified below.

Contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>Tel./Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head of Education, Scottish Mammography Education Centre, Glasgow</td>
<td>0141 800 8825</td>
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<td>Maureen McAuley</td>
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<td>Education and Training Administrator,</td>
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</tr>
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<td>Scottish Mammography Education Centre, Glasgow</td>
<td></td>
</tr>
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<tr>
<td>Programme Leader MSc Medical Imaging</td>
<td></td>
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<tr>
<td>Queen Margaret University</td>
<td></td>
</tr>
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<td>Jessica Wilkinson</td>
<td>0131 474 0000</td>
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<td><a href="mailto:JWilkinson@qmu.ac.uk">JWilkinson@qmu.ac.uk</a></td>
</tr>
<tr>
<td>Queen Margaret University</td>
<td></td>
</tr>
</tbody>
</table>
OVERVIEW

The X-Ray Guided Interventional Breast Procedures module is designed to meet the needs of radiographers working in breast imaging, giving them the skills to become specialist mammographers who are safe and competent at x-ray guided biopsy or localisation. The programme can be studied independently or used as part of the pathway to Post Graduate Diploma (PgD) or Master of Science (MSc) in Mammography qualifications (Appendix 1)

The module runs for one academic year and equates to 30 credits at Scottish Credit and Qualifications Framework (SCQF) level 11 (master’s).

Comparison of all UK qualification frameworks can be found in Appendix 2.

Module Overview.

Aim
The aim of this module is to provide the student with the appropriate knowledge and skills to develop a high level of expertise in x-ray guided interventional breast procedures

Content

Image interpretation
Breast pathology
Equipment, safety, quality assurance procedures
Information consent and protocols ~ medico-legal issues
Administration of injections and needle stick injury
Tissue handling
Contra-indications and possible complications
Clinical report writing
NHSBSP standards and audit
Effective communication
Practical techniques including: imaging, biopsy techniques, patient handling, use of local anaesthesia: adverse reactions
Understanding decision making and legal responsibilities
Service delivery

Learning Outcomes
On completion of the X-Ray Guided Interventional Breast Procedures module, the student should be able to:

- critically reflect on the importance of good communication skills and be able to demonstrate these appropriately, showing the importance of obtaining informed consent for interventional procedures and be aware of contra-indications for the procedure.
- critically evaluate the theory and practice of stereotaxis.
- critically evaluate a wide range of clinical situations and make informed decisions to ensure that appropriate patient care is assured.
- demonstrate advanced practical skills when performing interventional breast procedures including the safe administration of local anaesthetic (recognising contra-indications and allergic signs) and safe and effective tissue sampling in order to obtain a diagnosis.
- consistently and accurately perform interventional procedures in a safe and proficient manner as a competent practitioner.
- based on critical assessment procedures, make appropriate and informed referrals within the multidisciplinary team.
- review and audit own performance and participate in professional development.
- demonstrate a critical awareness of the importance of operating within the limits of one’s own scope of practice and level of expertise.

ACADEMIC DELIVERY

Students attend the Scottish Mammography Education Centre (SMEC) in Glasgow for one five day academic teaching block; the timing of this block will normally be in October of each year.

WORK BASED LEARNING

In order to ensure that the student’s clinical education is achievable they require the support of a clinical placement site. The clinical placement site is a healthcare unit that is able to provide appropriate experiential learning for the student, usually the student’s workplace.

As part of the application process for the module the student has to provide a completed agreement from their workplace manager /clinical director and mentor. (Appendix 3)

This agreement confirms that the clinical department will:
- Fulfil placement criteria.
- Assist in the appointment of a radiologist mentor and facilitate mentor training and support.
- Provide students with the required clinical time to fulfil the requirements of the course.
- Inform the hospital manager of the change in practice and support the student’s new medico-legal status.

The mentor agrees that they will:
- Work in partnership with Scottish Mammography Education Centre to act as mentor for the named student throughout their course of study.
- Inform the Trust Board of this potential change in practice
- Agree to take responsibility for any medico-legal implications that may arise and provide the student with legal indemnity cover.

It is the responsibility of the student to negotiate an appropriate clinical placement site. The academic team will assist and give advice where possible; however it is not the responsibility of the University or SMEC to allocate a student to a placement.
WORK PLACE GUIDANCE – MENTORS

Criteria for the Role of Mentor

- Agree to undertake the role of clinical mentor for the duration of the module
- Agree a local programme of clinical skills development
- Ensure the student has access to all multidisciplinary resources required to support their learning
- Assess the clinical competency components of the module

Student Learning Contract

At the start of the module students are given a learning contract (Appendix 4) which they are asked to complete with the help of their placement site. This Student Learning Contract defines the agreement between the student, the clinical mentor and the manager. The section entitled Agreed Scope of Practice should reflect the relevant required cases as listed in Table 1.

Workplace Tutorials

The student is expected to negotiate with the mentor arrangements for undertaking the practical learning, including any tutorials. Agreed formats need to be appropriate to both peoples working routine. If required the formats can be discussed with the programme leader.

Formative Assessment

Mentors are asked to complete a formative assessment sheet for their mentee once every 3 months (by the end of February, May & August). (Appendix 5)

SUMMATIVE ASSESSMENT

The assessment for this module is the submission of an e-portfolio. The portfolio contains:
- A log of cases, see Table 1
- 1 x 2000wd case study
- Evidence of achievement of the learning outcomes.

Table 1 – Requirements for Log of Cases.

<table>
<thead>
<tr>
<th>Clinical Practice If preforming:</th>
<th>Required cases for log</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biopsy alone</td>
<td>65 biopsy (a minimum of 30 must be unaided) and observation of 5 localisation cases.</td>
</tr>
<tr>
<td>Wire localisations only</td>
<td>70 wire localisations (a minimum of 30 must be unaided)</td>
</tr>
<tr>
<td>Biopsy &amp; wire localisations</td>
<td>55 biopsy (a minimum of 30 must be unaided) and 15 unaided localisations</td>
</tr>
</tbody>
</table>
**Mentor Training**
Mentor training days are organised at SMEC 2/3 times a year please contact the Programme Administrator if you wish to attend one of these.
The Mentor training session is delivered by the programme leader & Queen Margaret University partners and covers:
- The programmes’ structure;
- The learning, teaching and assessment strategy;
- The role of the Mentor;
- Communication and feedback;
- Dealing with the failing student;
- The assessment process.

**STUDENT SUPPORT**

**Programme Leader**
The Programme Leader is responsible for the overall management of the programmes and monitoring the progress of all students.

**Module Leader**
The Module Leader is responsible for the organisation and delivery of the module(s) and in conjunction with the module team will provide academic guidance. The Module Leader is responsible for providing the student with feedback on module assessments.

**Practice Mentor**
The Practice Mentor will guide the student throughout their practice training and be an invaluable source of support, providing constructive, formative feedback through continuous dialogue.

**Peer Support**
Peers can be an invaluable source of support. From the start of a programme’s delivery we encourage and provide opportunities for peer support to occur.
APPENDIX 1

PROGRAMME STRUCTURE AND PATHWAYS

MSc Mammography

The MSc programme offers a variety of pathways for study, examples of which are given below. The credits noted are all at the Scottish Credit and Qualifications Framework (SCQF) Level 11.

In addition SMEC in collaboration with QMU offer a HE Certificate in mammography for a qualification that is recognised by the Society of Radiographers for accreditation as an assistant practitioner in mammography.
## UK Qualification Comparison Chart

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Professional or postgraduate education, research or employment</td>
<td>Vocational Qualifications Level 8</td>
<td>Doctoral Degrees</td>
<td>Doctoral Degree Higher Doctorate</td>
<td>Professional Development Awards Doctoral Degrees</td>
<td>Doctoral Degrees</td>
</tr>
<tr>
<td>Higher education Advanced skills training</td>
<td>Fellowships NVQ Level 5 Vocational Qualifications Level 7</td>
<td>Master’s Degrees Integrated Master’s Degrees Postgraduate Diploma Postgraduate Certificate in Education (PGCE) Postgraduate Certificates</td>
<td>SWQ Level 5 Professional Development Awards Postgraduate Diploma Master’s Degrees Integrated Master’s Degrees Postgraduate Certificates</td>
<td>Master’s Degrees Integrated Master’s Degrees Postgraduate Diploma Postgraduate Certificate in Education (PGCE) Postgraduate Certificates</td>
<td>Master’s Degrees Integrated Master’s Degrees Postgraduate Diploma Postgraduate Certificate in Education (PGCE) Postgraduate Certificates</td>
</tr>
<tr>
<td>Entry to professional graduate employment</td>
<td>Vocational Qualifications Level 6</td>
<td>Bachelor’s Degree with Honours Bachelor’s Degree Professional Graduate Certificate in Education (PGCE) Graduate Diplomas</td>
<td>Honours Bachelor Degree Higher Diploma</td>
<td>Bachelor’s Degrees with Honours Professional Development Awards Graduate Diploma Graduate Certificates</td>
<td>Bachelor’s Degrees with Honours Professional Development Awards Graduate Diploma Graduate Certificates</td>
</tr>
<tr>
<td>Specialised education and training</td>
<td>NVQ Level 4 Higher National Diplomas (HND) Higher National Certificates (HNC) Vocational Qualifications Level 5</td>
<td>Foundation Degrees Diplomas of Higher Education (DipHE) Higher National Diplomas (HND)</td>
<td>Ordinary Bachelor Degree</td>
<td>Foundation Degrees Diplomas of Higher Education (DipHE)</td>
<td>Foundation Degrees Diplomas of Higher Education (DipHE)</td>
</tr>
<tr>
<td>Progression to skilled employment Continuation of secondary education</td>
<td>NVQ Level 3 Vocational Qualifications Level 3 GCSE AS and A Level Advanced Diplomas</td>
<td>NVQ Level 3 Vocational Qualifications Level 3 GCSE AS and A Level Welsh Baccalaureate Qualification Advanced</td>
<td>Level 5 Certificate Leaving Certificate</td>
<td>Professional Development Awards Higher National Certificates (HNC) Certificates of Higher Education (CertHE) SWQ Level 3 Advanced HNCs</td>
<td>Professional Development Awards Higher National Certificates (HNC) Certificates of Higher Education (CertHE) SWQ Level 3 Advanced HNCs</td>
</tr>
<tr>
<td>Secondary education initial entry into employment or further education</td>
<td>NVQ Level 2 Vocational Qualifications Level 2 GCEs at grade A* - C ESOL skills for life Higher Diplomas Functional Skills Level 2 (English, mathematics &amp; ICT)</td>
<td>NVQ Level 2 Vocational Qualifications Level 2 Welsh Baccalaureate Qualification Intermediate GCSEs grade A* - C</td>
<td>Level 4 Certificate Leaving Certificate</td>
<td>Intermediate 2 Credit Standard Grade SWQ 2 National Progression Awards National Certificates</td>
<td>Intermediate 2 Credit Standard Grade SWQ 2 National Progression Awards National Certificates</td>
</tr>
<tr>
<td>Qualifications can be taken at any age in order to continue or return to training</td>
<td>Entry Level</td>
<td>Entry Level Certificate (sub levels 1 – 3) ESOL skills for life Functional Skills Entry Level (English, mathematics &amp; ICT)</td>
<td>Level 1 Certificate</td>
<td>Access 3 Foundation Standard Grades National Progression Awards National Certificates</td>
<td>Access 3 Foundation Standard Grades National Progression Awards National Certificates</td>
</tr>
</tbody>
</table>

* Adapted from a table produced by Ofqual, QAA, SCQF, CCEA, CfW and The National Qualifications Authority of Ireland.*
APPENDIX 3 – Workplace Agreement
Scottish Mammography Education Centre (SMEC)
AGREEMENT

Course: X- Ray Guided Interventional Breast Procedures

SECTION A to be completed by Clinical Director

<table>
<thead>
<tr>
<th>Name of Student</th>
</tr>
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<tbody>
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</table>

<table>
<thead>
<tr>
<th>Name of Clinical Director</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department / Hospital Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Department / Hospital Address</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

The above named student has applied for a place on the X-Ray Guided Interventional Breast Procedures Course, delivered by the Scottish Mammography Education Centre (SMEC) in collaboration with Queen Margaret University. Acceptance is subject to agreement by the department to provide a suitable clinical education environment.

The clinical department will:-
- Fulfil placement criteria (a copy of these is attached).
- Assist in the appointment of a radiologist mentor and facilitate mentor training and support, provided by SMEC.
- Provide students with the required clinical time to fulfil the requirements of the course.
- Inform the hospital manager of the change in practice and support the student’s new medico-legal status.

I agree to work in partnership the Scottish Mammography Education Centre and to undertake to comply with the conditions set out for student education and training in the course document of the X-Ray Guided Interventional Breast Procedures Course.

Signed ………………………………………………………………………. Clinical Director

Date ……………………………………………
SECTION B  to be completed by Mentor

<table>
<thead>
<tr>
<th>Name of Student</th>
<th></th>
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<tbody>
<tr>
<td>Name of Mentor</td>
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</tr>
<tr>
<td>Mentor e-mail</td>
<td>Mentor Tel. no.</td>
</tr>
</tbody>
</table>

I agree to work in partnership with Scottish Mammography Education Centre to act as mentor for the above named student throughout their course of study.

I have checked with management that the Trust / Board is aware of this change in practice and that they have agreed to take responsibility for any medico-legal implications that may arise and provide the student with legal indemnity cover.

Signed  

Position  

Date  

11
This Student Learning Contract defines the agreement between the student, the clinical mentor and the manager in relation to the student’s postgraduate study of module: X-Ray Guided Interventional Breast Procedures.

The agreement below sets out the core responsibilities expected of each participant and all additional locally agreed conditions.

Manager’s responsibilities
- Allocate a local clinical mentor
- Agree a local programme of clinical skills development
- Allocate the student an adequate allowance of clinical practice time
- Allocate the student an adequate allowance of independent study time

Clinical mentor’s responsibilities
- Agree to undertake the role of clinical mentor for the duration of the module
- Agree a local programme of clinical skills development
- Ensure the student has access to all multidisciplinary resources required to support their learning
- Assess the clinical competency components of the module

Student responsibilities:
- Agree a local programme of clinical skills development
- Complete the required amount of independent academic study
- Undertake all additional self-directed study required to fulfill the module learning outcomes
- Undertake adequate clinical practice necessary to develop the required clinical competencies
- Complete all assessments required to fulfill the module learning outcomes

Following discussion between the student, the clinical mentor and the programme leader, this agreement will reflect the student’s range of clinical practice. This will identify the number of phantom, supervised, aided and unaided cases that should be carried by the student.

The scope of practice agreed for this module is:
A learning contract will be negotiated and agreed between the student, the clinical mentor and the programme leader which will reflect the student's range of clinical practice. This will identify the number of phantom, supervised, aided and unaided cases that should be carried by the student.

<table>
<thead>
<tr>
<th>Student’s name</th>
<th>signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position within the organisation</td>
<td></td>
<td></td>
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<table>
<thead>
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<th>Clinical Manager’s name</th>
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<tbody>
<tr>
<td>Position within the organisation</td>
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</table>

<table>
<thead>
<tr>
<th>Clinical Mentor’s name</th>
<th>signature</th>
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<tbody>
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<td>Position within the organisation</td>
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<table>
<thead>
<tr>
<th>Module Leader’s name</th>
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<tbody>
<tr>
<td>Position within the organisation</td>
<td></td>
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</table>
APPENDIX 5 – Formative Assessment - Mentor  
X-Ray Guided Interventional Breast Procedures

FORMATIVE ASSESSMENT

NAME OF STUDENT _______________________________

NAME OF MENTOR _______________________________

NOTES TO MENTOR AND STUDENT

This formative assessment is to provide feedback to the student on the progress and areas of need to date. This assessment will be submitted to the Programme Leader when completed.

The following skills will be assessed:

- Communication skills
- Consistency in performing accurate interventional breast procedures in a safe and proficient manner
- Review and audit of own performance
- Make suitable informed decisions to ensure appropriate patient care.
- Operates within the limits of own scope of practice and level of expertise.

This assessment should be completed three times during the course. The assessments to be submitted in February, May & August (Dates will be confirmed on academic block).
## ASSESSMENT SUMMARY

**SKILLS ASSESSED (Full detail on pg1)**

<table>
<thead>
<tr>
<th>Skill</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNICATION SKILLS</td>
<td></td>
</tr>
<tr>
<td>PERFORMANCE OF INTERVENTIONAL PROCEDURES</td>
<td></td>
</tr>
<tr>
<td>AUDIT OF PREFORMANCE</td>
<td></td>
</tr>
<tr>
<td>APPROPRIATE PATIENT CARE</td>
<td></td>
</tr>
<tr>
<td>OPERATES WITHIN SCOPE OF PRACTICE</td>
<td></td>
</tr>
</tbody>
</table>

Please score the above sections on a scale of 1-4

1. Unable to achieve the required level
2. Achieves required level on occasion and/or with help
3. Consistently achieved required level
4. Exceeds required level

**MENTOR’S COMMENTS**

15