CHAPTER 3

RADIOGRAPHY

ROLE OF RADIOGRAPHERS/MAMMOGRAPHY TECHNOLOGIST AND SONOGRAPHERS IN WESTMEAD BREAST CANCER INSTITUTE.......................... 5
RADIOGRAPHY/MAMMOGRAPHIC TECHNOLOGIST STAFF TRAINING
AND CONTINUING PROFESSIONAL DEVELOPMENT............................................. 8
DESIGNATION OF IMAGE QUALITY REVIEW FOR RADIOGRAPHY
STAFF............................................................................................................................... 9
PERFORMANCE FEEDBACK TO STAFF........................................................................ 10
ANNUAL ASSESSMENT OF RADIOGRAPHIC COMPETENCY................................. 11
QA / EVALUATION OF MAMMOGRAPHIC IMAGE.................................................. 13
TECHNICAL PROCEDURES- RADIOGRAPHY CRITERIA FOR
MAMMOGRAPHY........................................................................................................... 14
POSITIONING – CRANIO-CAUDAL (CC)................................................................. 18
POSITIONING – MEDIO-LATERAL OBLIQUE (MLO)............................................ 20
BREAST COMPRESSION IN MAMMOGRAPHY....................................................... 22
VIEW NAME/LATERALITY SELECTION ON GE SENGRAPE DS........................... 23
RADIOGRAPHY- WORK-UP PROTOCOL................................................................. 25
SIGNIFICANCE OF LATERAL VIEW............................................................................ 26
ADDITIONAL VIEWS-CONED COMPRESSION (SPOT)........................................... 27
ADDITIONAL VIEWS-MAGNIFICATION VIEW......................................................... 28
ADDITIONAL VIEW- EXTENDED CRANIO-CAUDAL (CC).................................... 29
FILM FORMAT FOR LARGE BREASTS....................................................................... 30
AUGMENTED BREAST (BREAST IMPLANTS/PROTHESIS) – PART 1.............. 32
AUGMENTED BREAST (BREAST IMPLANTS/PROTHESIS) – PART 2.............. 34
IMAGING OF CLIENTS WITH MASTECTOMY............................................................. 35
MANAGEMENT OF FREE SILICONE INJECTION CLIENTS FOR
BREAST SCREENING.................................................................................................... 36
CLIENTS WHO ARRIVE WITH PRIVATE IMAGES AT SCREENING
SITES............................................................................................................................. 41
STANDARD MAMMOGRAPHY VIEWS.................................................................... 41
PROCESS FOR INCOMPLETE VIEWS FOR SCREENING
MAMMOGRAM........................................................................................................... 45
CORRECT IDENTIFICATION OF PATIENTS/CLIENTS FOR BREAST
IMAGING PROCEDURE(S).......................................................................................... 46
INFORMATION ON HARDCOPY IMAGES................................................................ 47
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANAGEMENT OF EXAMINATION ON CERNER</td>
<td>48</td>
</tr>
<tr>
<td>(COMPLETING/ADDING/INCORRECT ACCESSION)</td>
<td></td>
</tr>
<tr>
<td>HOW TO MANUALLY PUSH IMAGES FROM ACQUISITION MONITOR TO ARCHIVE AND WORKSTATIONS ON GE DS UNIT</td>
<td>51</td>
</tr>
<tr>
<td>STAFF INTRODUCTION AND EXPLANATION OF PROCEDURE TO CLIENTS</td>
<td>52</td>
</tr>
<tr>
<td>PROCEDURE- FOR CLIENTS PRESENTING WITH SKIN LESIONS/</td>
<td>54</td>
</tr>
<tr>
<td>BROKEN SKIN</td>
<td></td>
</tr>
<tr>
<td>CLIENTS WITH DISABILITIES FOR SCREENING MAMMOGRAM</td>
<td>55</td>
</tr>
<tr>
<td>CLIENTS WITH PACEMAKERS FOR MAMMOGRAM</td>
<td>57</td>
</tr>
<tr>
<td>PROCEDURE –FOR CLIENTS ARRIVING LATE FOR APPOINTMENT AT SCREENING SITES</td>
<td>58</td>
</tr>
<tr>
<td>MYER Online INDUCTION AND ORIENTATION COURSE (WHS online course)</td>
<td>59</td>
</tr>
<tr>
<td>MYER RETAIL STORES –Staff Entrance</td>
<td>60</td>
</tr>
<tr>
<td>SCREENING WOMEN FROM DETENTION INSTITUTIONS</td>
<td>61</td>
</tr>
<tr>
<td>PROCESS TO FOLLOW FOR NETWORK FAILURE</td>
<td>63</td>
</tr>
<tr>
<td>RADIOGRAPHERS UNIFORM AND IDENTIFICATION CARD/BADGES</td>
<td>64</td>
</tr>
<tr>
<td>NOTIFYING OFSICK LEAVE FOR RADIOGRAPHERS</td>
<td>65</td>
</tr>
<tr>
<td>ON CALL PHONE PROCESS</td>
<td>66</td>
</tr>
<tr>
<td>NOTIFICATION OF PHONE SYSTEM FAILURE</td>
<td>67</td>
</tr>
<tr>
<td>ORDERING OF CONSUMABLES FOR SUNFLOWER CLINICS</td>
<td>68</td>
</tr>
<tr>
<td>RADIOGRAPHY STAFF MEETINGS</td>
<td>69</td>
</tr>
<tr>
<td>DELETING OF IMAGES FROM GANTRY (GE UNITS)</td>
<td>70</td>
</tr>
<tr>
<td>MAMMOGRAPHIC UNIT IDENTIFICATION NUMBER (SITE ID)</td>
<td>71</td>
</tr>
<tr>
<td>EMERGENCY COMPRESSION RELEASE PROCEDURE- SENOGRAFHE DS UNITS</td>
<td>72</td>
</tr>
<tr>
<td>FAULT LOG AND RECORDING FOR ALL MODALITIES</td>
<td>73</td>
</tr>
<tr>
<td>QA – ACCEPTANCE TESTING ON NEW MAMMOGRAM X-RAY UNITS BY PHYSICIST</td>
<td>74</td>
</tr>
<tr>
<td>ANNUAL CERTIFICATE OF COMPLIANCE CERTIFICATE TESTING BY PHYSICIST</td>
<td>75</td>
</tr>
<tr>
<td>QA - MONTHLY VISUAL CHECKS ON MAMMOGRAPHY UNITS</td>
<td>76</td>
</tr>
<tr>
<td>INFECTION CONTROL – CLEANING THE DETECTOR PLATE</td>
<td>79</td>
</tr>
<tr>
<td>INFECTION CONTROL – CLEANING THE ULTRASOUND TRANSDUCER</td>
<td>80</td>
</tr>
<tr>
<td>INFECTION CONTROL – CLEANING THE BARD BIOPSY GUNS</td>
<td>81</td>
</tr>
</tbody>
</table>
## REPEAT ANALYSIS – PERFORMED QUARTERLY
83

## QA - MAMMOGRAPHY SYSTEM CONSISTENCY CHECK – DAILY
Calibration PROCEDURE
84

## TIME ALLOCATION FOR QUALITY ASSURANCE TESTING & PREPARATION BEFORE START OF SCREENING PROCESSES for Mobile Van 28 (VAN 1)
86

## MOBILE VAN PACK UP & UNPACKING INSTRUCTIONS WITH QA & CLEAN UP PROCESS TIME
88

## COMPRESSION TESTING for GE and Hologic Units
90

## OTHER EQUIPMENT AND ACCESSORY CHECKS – VIEWBOXES
91

## RADIATION MONITORING BADGES
92

## SENORYX ENCOR UNIT AND PRONE VACB SYSTEM SET UP
93

## ASSESSMENT CLINIC Procedure
102

## MT DRUITT BREAST ASSESSMENT CLINIC
104

## MT DRUITT SPECIMEN IMAGING USING TRIDENT UNIT
106

## ULTRASOUND EQUIPMENT – QA TESTS
108

## ULTRASOUND INSTRUMENTATION AND QUALITY CONTROL
110

## PERFORMING BREAST ULTRASOUND
111

## ULTRASOUND GUIDED BIOPSIES
113

## NEEDLE STICK INJURIES
115

## YELLOW Sharps BIN/Yellow Clinical Waste Bag
116

## ASSESSMENT – POST CORE BIOPSY CARE
117

## RADIOGRAPHY – OH&S - SHARPS DISPOSAL
119

## RADIOGRAPHY – OH&S BLOOD SPILLAGE
120

## RADIOGRAPHY – OH&S – USE OF GLOVES FOR MAMMOGRAMS
121

## DATA REQUIREMENTS FOR RADIOGRAPHERS USING THE DIGITAL GE MACHINE FOR DIAGNOSTIC PROCEDURES for all modalities
122

## PROTOCOL FOR UPRIGHT STEREOTACTIC BIOPSY (GE Machine)
125

## TO switch ON/OFF PHILLIPS ULTRASOUND MACHINE
129

## USE OF SENORYX Encor UNIT
130

## PROTOCOL FOR USE OF SENORYX Encor UNIT WITH GE UPRIGHT STEREOTACTIC BIOPSY ATTACHMENT –Mount Druitt Clinic
131

## MAMMOGRAPHY EQUIPMENT –GE Senographe DS
134

## ULTRASOUND EQUIPMENT
137

## HOLOGIC PRONE VACB TABLE
140

## PRONE TABLE COMPRESSION PADDLE CLEANING
141
PROCEDURE FOR REPEATING OR REJECTING IMAGES AND PERFORMING REPEAT/REJECT ANALYSIS- GE UNIT ........................................ 142
SPECIMEN X-RAY FOR HOOKWIRE LOCALISATION AND VACB/CORE BIOPSY, ULTRASOUND OF HOOKWIRE LOCALISATION SPECIMEN ........................................................................................................ 144
CLINICAL PROCEDURE SAFETY ................................................................................................................................. 145
END OF THE DAY PACKUP PROCEDURES ..................................................................................................................... 147
CLOSING AND SECURING THE ENTRANCE DOORS ................................................................................................. 147
HOW TO TURN ON AND OFF THE LIGHTS .................................................................................................................... 149
HOW TO OPERATE THE ENTRY STAIRS – MOBILE VAN 2 .................................................................................... 150
HOW TO TURN OFF THE ALARM SYSTEM – MOBILE VAN 2 .................................................................................. 151
HOW TO EXTEND THE STEPS FOR THE MOBILE VAN 2 ...................................................................................... 152
OPERATING THE EMERGENCY CALL SYSTEM – MOBILE VAN 2 ........................................................................ 153
OPERATING THE SINK(S) – MOBILE VAN 2 .............................................................................................................. 154
HOW TO PACKUP SCREENING MACHINE FOR TRANSPORTATION – MOBILE VAN 2 ......................................................... 155
INAPPROPRIATE REFERRALS ..................................................................................................................................... 158
ROLE OF RADIOGRAPHERS/MAMMOGRAPHY TECHNOLOGIST AND SONOGRAPHERS IN WESTMEAD BREAST CANCER INSTITUTE

SCOPE

All radiographers and Mammographic Technologist

POLICY

All radiographers and mammography technologist employed by Westmead Breast Cancer Institute must have relevant qualifications, licences and training to perform duties as per award and position description.

All accredited radiographers should hold a Statement of Accreditation issued by Australian Institute of Radiography. All mammography technologists should hold Graduate Diploma of mammography certification. All sonographers should be accredited in breast Ultrasound and be registered with Australian Sonographer Accreditation Registry.

1. Hold a current radiation licence issued from Environment Protection Authority of NSW.
   Hold current registration with Australian Health Practitioner Regulation Agency (AHPRA)
   All radiographers to complete the accredited certificate in clinical proficiency in mammography (CCPM) issued by AIR within 12 months of employment.

2. Excellent interpersonal skills including the ability to communicate effectively with screeners and all levels of staff (orally and written)

3. Perform routine high quality standard screening and diagnostic mammograms, ultrasound and complex procedures in a range of Screening service sites and BCI, in order to provide a high quality service to eligible asymptomatic women at risk of developing breast cancer within the catchment of BreastScreen Western Service in accordance to BreastScreen Australia National Accreditation Standards.
4. Perform routine high quality standard screening and diagnostic mammograms, ultrasound and complex procedures in a range of Screening service sites and BCI, in order to provide a high quality service to eligible asymptomatic women at risk of developing breast cancer within the catchment of BreastScreen Western Service in accordance to BreastScreen Australia National Accreditation Standards.

The International Society of Radiographers and Radiological Technicians recommend the following guidelines for the role of the radiographer in breast screening:-

1. To produce a mammogram of maximum diagnostic value with the lowest possible dose.

2. To be responsible for the Quality Assurance Program in relation to the entire screening program.

3. To recognise obvious pathological conditions of the breast.

4. To inform the radiologist/medical officer in charge of any significant information with respect to the examination.

5. To attend to the psychological needs of the patient during the procedure.

6. To be an active and integral member of the breast screening team

7. To participate in the training programs of radiographers/radiological technicians in breast screening.

8. To update knowledge related to current developments in breast screening.

9. To actively participate in the research activities related to current developments in breast screening.

All radiographers working for the Program are provided with the opportunity to participate in ongoing training and continuing professional development for staff include:

1. Weekly Tumour Board meetings
2. Continuing education (in-service) is organized to include the mandatory hospital training via HETI online mandatory training
3. Attendance to multi-disciplinary meetings (MDT)
4. Attending seminars and workshops
5. Participation in research
6. Performance Appraisals for individual development planning
7. Competency training and sign off
SCOPE
All Radiography/Mammography Technologist Staff and Breast Sonographers

POLICY
Westmead Breast Cancer Institute ensures that all radiography/mammographic staff are trained in mammographic and mammographic work up views in routine screening and assessment clinics, in order to provide a high quality service in accordance with the National Accreditation Standards.

PROCEDURE
All new radiographers, sonographers and mammographic technologist employed at Westmead Breast Cancer Institute (BCI) – BreastScreen NSW Sydney West who have had previous mammography experience will be required to complete mandatory orientation on HETI.

Orientation will involve department overview, including policy and procedures, mentoring and tutoring on breast imaging, with reference to image quality review as per PGMI.

Radiographers with no mammography experience will attend Breast Cancer Institute for appropriate training/supervision by a nominated tutor

Radiographers working in the Service are encouraged to complete the Breast Imaging Theory and Breast Imaging Clinical Education Program (BICEP) components to attain the Certificate of Clinical Proficiency in Mammography (CCPM). Ideally, they should undertake the course within twelve months of commencing work.

All radiographers /Mammography Technologist are encouraged to participate in extra circular seminars and conferences as well as in-service education.

New staff orientation of Myer sites and overview by a senior staff. Myer online induction compulsory prior to commencement at Myer site. Staff to attend Myer induction orientation organized by Myer management.
CHAPTER 3
Section: Radiography
Original Date Issued: 26/09/02
Created by: Judy Bursle

DESIGNATION OF IMAGE QUALITY REVIEW FOR RADIOGRAPHY STAFF

Reviewed by: Selin Prasad
Last Reviewed: 25/03/2016
Approved by: Harj Bariana

SCOPE
Chief Radiographer, Sonographers, All Radiography/Mammography Technologist Staff

POLICY

To ensure that all aspects of breast imaging quality and radiography services at Westmead Breast Cancer Institute are monitored and maintained to a high level specific roles and responsibilities are allocated to the following radiographers.

1. The Chief Radiographer is responsible for radiography service delivery, and overseeing all aspects of breast imaging. Duties include contribution to development of clinical policies and procedures for screening and assessment; Imaging Quality Review with designated Radiologist, on a quarterly basis; ensuring continuing education programs for the radiographers; keeping up to date with the latest developments in breast imaging; and work in a multidisciplinary team and liaise with other personnel.

2. All technical aspects of breast imaging quality assurance are the responsibility of the Senior Radiographer. Duties will include monitoring and maintaining quality control records; arranging dates for servicing of equipment and physics tests; maintaining a register of radiation licences for radiographers and registration of all mammographic equipment; monitoring of radiation doses of radiographers by way of radiation badges. All QA data are recorded on the shared I:Drive: QA. This is monitored by the appropriate Senior Radiographer and State Physicist.

3. Orientation/mentoring and tutoring overseen by senior radiographers and tutor radiographers. Supervision and tutoring of the clinical module of CCPM, ongoing evaluation, competency record keeping and image quality review feedback in accordance with NAS 2.20.4

4. Trainee sonographers to be supervised and trained by senior sonographers and radiologists. Trainee sonographers to follow the process of training and education as per trainee sonographer training program. Ongoing performance of sonographers for image quality and performance done as per image quality review of static images and radiologist feedback.
SCOPE
Chief Radiographer, All Radiography/ Mammography technologist Staff

POLICY
Implementation of a feedback process ensures that all staff have knowledge and adherence of work practices, in order to provide optimal service at BCI and range of BreastScreen sites.

PROCEDURE
1. The details of all examinations with incorrect annotation or incorrect client details should be sent to the Data team via email.
2. Radiographer/Mammographic Technologist has to complete IIMS online as per policy.
3. The radiographer who incorrectly completed the form or the exam should be notified by email. on the occasion of Data team noting incorrect client detail/and or incorrect annotation, the radiographer to be send notification by data team via email, with the appropriate information.
4. The email should identify the incomplete or incorrect section and have the scanned form attached.
5. On the occasion if client information is incorrect, the radiographer/mammography technologist is to verify details with client via telephone and correct details completed on BIS.
6. The examination with incorrect markers or details should be corrected as per policy.
7. Correction with accurate information will be completed by Data team.
CHAPTER 3  
Section: Radiography  
Original Date Issued: 21/01/02  
Created by: Beverlee Macdonell-Scott

ANNUAL ASSESSMENT OF RADIOGRAPHIC COMPETENCY

Reviewed by: Selin Prasad  
Last Reviewed: 27/03/2016

Approved by: Harj Bariana

SCOPE
Chief Radiographer, All Radiography/Mammography Technologist Staff

POLICY
To ensure all radiographers maintain a high standard of image quality in accordance with the National Accreditation Standards. (NAS 2.10.4)

PROCEDURE
Assessment will be made throughout a twelve (12) month period, by a Senior Radiographer, on at least 50 randomly selected examinations graded against the PGMI checklist. It is envisaged BSSW will assess 50 randomly selected examinations each 6 month period.

Each radiographer and mammography Technologist in the service must obtain 50% or more Perfect & Good rated examinations. If any radiographer scores below 50% a review of a further 20 mammogram will assessed immediately and remedial action taken if necessary.

A checklist will be established for each radiographer in the service. A tutor radiographer will randomly grade films until each individual has had 50 examinations assessed. Dates and numbers will be logged on a coversheet, along with final percentage and comments/actions. Percentage repeat rates will also be documented and reviewed in relation to the PGMI score. These will be kept on file. Individual grading sheets will be given to the radiographer at the end of the assessing period with comments regarding strengths and areas for improvement.

Where the individual does not meet the required standard they will have rostered time with the tutor radiographer to assess technique and grading criteria, then a further random assessment of their work by the tutor radiographer will be performed.

See attached form – PGMI Evaluation Form
<table>
<thead>
<tr>
<th>Radiographer ID:</th>
<th>BREASTSCREEN SYDNEY WEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client PID</td>
<td>PGMI Evaluation of Image Quality</td>
</tr>
<tr>
<td>Criteria for Image Assessment - All Images</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>All breast tissue imaged</td>
</tr>
<tr>
<td>2</td>
<td>Correct ID</td>
</tr>
<tr>
<td>3</td>
<td>Correct exposure</td>
</tr>
<tr>
<td>4</td>
<td>Good compression</td>
</tr>
<tr>
<td>5</td>
<td>Absence of movement</td>
</tr>
<tr>
<td>6</td>
<td>Correct processing</td>
</tr>
<tr>
<td>7</td>
<td>Absence of artefacts</td>
</tr>
<tr>
<td>8</td>
<td>No skin folds</td>
</tr>
<tr>
<td>9</td>
<td>Symmetrical images</td>
</tr>
<tr>
<td>10</td>
<td>Cranio-caudal specific criteria</td>
</tr>
<tr>
<td>11</td>
<td>Whole breast imaged</td>
</tr>
<tr>
<td>12</td>
<td>Nipple in profile</td>
</tr>
<tr>
<td>13</td>
<td>Nipple in midline of imaged breast</td>
</tr>
<tr>
<td>14</td>
<td>Posterior nipple line (PNL) within 1cm of PNL of MLO</td>
</tr>
<tr>
<td>15</td>
<td>Medio-lateral oblique criteria</td>
</tr>
<tr>
<td>16</td>
<td>Pectoral muscle shown to level of nipple</td>
</tr>
<tr>
<td>17</td>
<td>Full width of pectoral muscle</td>
</tr>
<tr>
<td>18</td>
<td>Nipple in profile</td>
</tr>
<tr>
<td>19</td>
<td>Inframammary fold well demonstrated</td>
</tr>
<tr>
<td>20</td>
<td>Machine number</td>
</tr>
<tr>
<td>21</td>
<td>PGMI grading</td>
</tr>
<tr>
<td>22</td>
<td>Initials of radiographer grading images</td>
</tr>
<tr>
<td>23</td>
<td>Date reviewed</td>
</tr>
</tbody>
</table>
QA / EVALUATION OF MAMMOGRAPHIC IMAGE

Reviewed by: Selin Prasad

Last Reviewed: 27/03/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammographic Technologist Staff, Designated Radiologist-BSSW

POLICY

Early detection of breast cancer, mammographic image quality has to be of the highest standard. Image quality will be evaluated by the Designated Radiologist, in conjunction with the Chief Radiographer or a delegated senior radiographer on a regular basis.
**SCOPE**

Chief Radiographer, All Radiography/Mammography Technologist Staff

**POLICY**

A *complete* breast image should include:-

1. Pectoral muscle to nipple line.
2. Nipple in profile.
3. Demonstration of inframammary fold.
4. Adequate compression to breast.
5. Cranio-caudal view is important for examining the medial portion of the breast. The medial portion of the breast **must** be imaged, without comprising the imaging of the lateral aspect of the breast. When possible, demonstration of soft tissue of chest wall or fatty tissue near chest wall (behind breast parenchyma).
6. When possible, elimination of inferior portion of breast from overlapping the inframammary folds on oblique position.
7. Elimination of artefacts on images/skin folds where possible
8. Optimisation of balance between radiation dose and image quality to produce the standard quality of images.- following best practice guidelines -ALARA
9. Legible and correct identification with **Left** and **Right** markers present.
10. Legible and complete client demographic information as provided on the identification label.
APPENDIX M

PGMI EVALUATION OF CLINICAL IMAGE QUALITY

Quality mammography requires dedication, enthusiasm and self-appraisal on the part of the radiographer. The United Kingdom Mammography Trainers Group with the support of the College of Radiographers devised the PGMI (Perfect, Good, Moderate, Inadequate) method of evaluation of clinical image quality. Ongoing evaluation critically looks at each mammographic examination within a quality improvement framework.

The PGMI criteria adapted from the United Kingdom model, are used in Australia in Australian Institute of Radiography accredited training programs to access clinical image quality. The aims of continuing to use this method of evaluation are to ensure the maintenance of a high standard of mammography in BreastScreen Australia and to facilitate a method of external audit.

Criteria for image assessment

1. All breast tissue imaged (fat visualised posterior to glandular tissue)
2. Correct image identification clearly shown:
   - date of examination
   - client identification—name and (number and/or date of birth)
   - side markers
   - positional markers
   - radiographer identification
3. Correct exposure according to workplace requirements
4. Good compression
5. Absence of movement
6. Correct processing
7. Absence of artefacts
8. No skin folds
9. Symmetrical images
<table>
<thead>
<tr>
<th>Cranio-caudal view (CC)</th>
<th>Medio-lateral oblique view (MLO)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specific positioning criteria</strong></td>
<td><strong>Specific positioning criteria</strong></td>
</tr>
<tr>
<td>1. All breast tissue imaged</td>
<td>1. All breast tissue imaged</td>
</tr>
<tr>
<td>• medial border well demonstrated</td>
<td>• pectoral muscle shadow to nipple level</td>
</tr>
<tr>
<td>• nipple in profile-(retro-areolar tissue</td>
<td>• full width of pectoral muscle</td>
</tr>
<tr>
<td>well separated)</td>
<td>• nipple in profile - (retro-areolar tissue</td>
</tr>
<tr>
<td>• nipple in midline of imaged breast</td>
<td>well separated)</td>
</tr>
<tr>
<td>• posterior nipple line (PNL) within</td>
<td>• infra-mammary fold well demonstrated</td>
</tr>
<tr>
<td>1 cm of PNL on MLO view</td>
<td>• PNL within 1 cm of PNL on CC view</td>
</tr>
</tbody>
</table>

**Classification of CC images**

**Classification of MLO images**

<table>
<thead>
<tr>
<th>P = Perfect images</th>
<th>G = Good images</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Both CC and MLO images meet criteria for</td>
<td>• All breast tissue imaged</td>
</tr>
<tr>
<td>image assessment 1–9</td>
<td>• pectoral muscle well demonstrated</td>
</tr>
<tr>
<td></td>
<td>• nipple in profile</td>
</tr>
<tr>
<td></td>
<td>• infra-mammary fold (IMF) well demonstrated</td>
</tr>
</tbody>
</table>

1. All breast tissue imaged*
   • all postero-medial tissue visualised
   (*axillary portion of breast not to be included at expense of medial portion)
   • nipple in profile
   • nipple in midline of imaged breast

2-6. Both CC and MLO images meet criteria for image assessment 2–6 inclusive for categorisation as G

7-9. Both CC and MLO images displaying minor degrees of variation in criteria for imaging assessment 7, 8 and 9 will be accepted for categorisation as G
### M = Moderate images
(Acceptable for diagnostic purposes)

1. Most breast tissue imaged (however, all breast tissue must be imaged on MLO image)
   - nipple not in profile but clearly distinguishable from retro-areolar tissue- (however, nipple must be in profile on MLO image)
   - nipple not in midline (significant bias)

2. Correct(ed) image identification
3. Correct exposure
4. Adequate compression
5. Absence of movement
6. Correct processing
7. Artefacts which do not obscure the image
8. Skin folds which do not obscure the breast tissue
9. Asymmetrical images

### I = Inadequate images (applies to both CC and MLO images)

1. Significant part of the breast not imaged
2. Incomplete or incorrect identification
3. Incorrect exposure
4. Inadequate compression which hinders diagnosis
5. Blurred image
6. Incorrect processing
7. Overlying artefacts
8. Skin folds which obscure the image

### RECOMMENDED STANDARD:

A minimum of 50% of an audit of 50 randomly selected cases should be graded in the P or G categories (75% desirable).

### REPEAT RATE:

< 3% of consecutive images to be classified ‘Inadequate’.
# POSITIONING – CRANIO-CAUDAL (CC)

<table>
<thead>
<tr>
<th>Reviewed by: Selin Prasad</th>
<th>Created by: Judy Bursle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Reviewed: 27/03/2016</td>
<td></td>
</tr>
<tr>
<td>Approved by: Harj Bariana</td>
<td></td>
</tr>
</tbody>
</table>

**SCOPE**  
Chief Radiographer, All Radiography/Mammography Technologist Staff

**POLICY**  
The cranio-caudal (CC) view is part of the two (2)-view mammogram examination. In this view, the x-ray beam enters from the superior aspect of the breast (cranio) and exits towards the inferior aspect (caudal). This is a view of the medial aspect of the breast and when properly performed, it will also include the superior, posterior and lateral tissue.

**PROCEDURE**

1. The client may be x-rayed either standing or sitting.

2. Radiographer may stand on the medial/lateral aspect of the breast being examined.

3. Using the flat of the hand elevate the inframammary fold as high as its natural mobility allows (usually 1.5 to 6 cm).

4. Raise the detector plate to this level for optimal imaging. The compression plate travels less distance, and more breast tissue will be included in the field of view.

5. Either place your hand gently on the client’s back or on her opposite shoulder to keep her from pulling back. Do not use force.

6. Turn the client’s head towards the medial/opposite side of the breast being examined.

7. Gently pull the breast forward onto the detector plate making sure that the inframammary fold is smooth at the chest wall edge, and there are no skin folds under the breast.
8. Place one hand gently on top of the breast and with the opposite hand smooth out any loose skin over the clavicle.

9. Bring the paddle down in a steady smooth motion. As the paddle touches the breast release the loose skin near the clavicle, this allows the skin to move with the compression and makes it easier for the client to tolerate the compression. Slide your fingers around the breast to bring in as much lateral tissue as possible without losing medial tissue.

10. The arm on the side of the examination may either be placed on the side or on the hip with shoulder relaxed. Externally rotate the elbow to move the head of the humerus out of the way.

11. Care should be taken to ensure that nothing is overlapping the breast being examined.

12. If the woman has substantial breast tissue, the opposite breast should drape over the corner of the detector plate to ensure that all of the medial area of breast tissue is included or ask the client to hold the opposite breast.

13. Apply compression until the breast is taut (a minimum of 10daN)

14. It may be necessary to suspend respiration during the x-ray exposure.
CHAPTER 3

Section: Radiography

Original Date Issued: 20/08/93
Created by: Judy Bursle

POSITIONING – MEDIO-LATERAL OBLIQUE (MLO)

Reviewed by: Selin Prasad
Last Reviewed: 27/03/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologist Staff

POLICY

The mediolateral oblique view is part of the standard two view (2) mammogram. The x-ray beam enters the medial side of the breast and exits through the lateral side. When correctly done the MLO view demonstrates the superior, inferior, posterior and lateral aspects of the breast. It will also demonstrate some of the medial aspects and the pectoralis muscle.

PROCEDURE

1. Rotate the detector plate to 45°. This may vary according to the lady’s body habitus.

2. Stand the client next to the detector plate with arms hanging loosely by her side.

3. Raise the detector plate so that the top corner nearest the client is level with the posterior axillary crease.

4. Rotate the client and move her forward so that the lower costal angle is at 2cm from the bottom corner of the detector plate.

5. Raise the arm on the side being examined, and ask the client to lean across the detector plate so that the top corner is into the hollow of the axilla. When the woman puts her hand on the handlebar, you can see the angle of the pectoralis muscle, and thus determine the degree of obliquity (30°-60° from horizontal). The usual angle is 45°. The pectoralis muscle should be in front of the detector plate and the latissimus dorsi behind.
6. Keep one hand on the shoulder opposite to the side being examined and with your free hand slide between the breast and the detector plate to feel the lateral border. Gently pull the breast and pectoralis muscle forward onto the detector plate making sure there are no creases or folds behind the breast.

7. Hold the breast firmly up and out, while steadily bringing the compression paddle down onto the tissue in front of the ribcage, taking care not to scrape across the ribs. At this stage do not let go of the breast. Bring the compression paddle down past the sternum, and then continue to rotate the client towards the bucky. Ensure that the paddle does not hit the clavicle or head of humerus.

8. Compress until taut (or with a minimum of 10daN). Make sure the breast tissue is held firmly into place and the breast is not drooping.

9. Gently smooth the abdomen back to clear the inframammary angle.

10. Take exposure as quickly as possible.

11. It may be necessary to suspend respiration during the exposure.
BREAST COMPRESSION IN MAMMOGRAPHY

SCOPE
Chief Radiographer, All Radiography/Mammography Technologist Staff

POLICY
Compression of breast during a mammography examination is one of the important components in production of an optimal diagnostic mammogram. Breast compression optimizes image quality by allowing equal distribution of breast tissue and reduction in breast thickness hence enabling visualization of small lesions.

1. Other reasons on importance of compression: Minimises geometric unsharpness
2. Improves contrast
3. Diminishes motion unsharpness
4. Reduces x-ray dosage
5. Allows more accurate density assessment of masses - differentiates benign low density lesions such as cysts, and higher density lesions such as carcinomas.

PROCEDURE
Amount of Compression

Proper compression must be individually based on each woman’s particular breast tissue. Do not compress the breast until it is white from lack of blood flow. Do not compress until the breast is a certain size.

1. Compress the breast until taut. Tap one finger on the side of the compressed breast. If it does not give, it is taut.

2. Pressure should not be put on the breast beyond the point where tissue will no longer spread out.

On the occasion of incomplete examination, due to client's inability to tolerate compression, client can be rebooked for another day as per radiographers/mammography technologist discretion. Otherwise, the examination is to be classed as incomplete, email send to breast care nurses and chief radiographer for follow up with client.
SCOPE

Chief Radiographer, All Radiography/Mammographic Technologist Staff

POLICY

To ensure correct patient details and correct annotation is reflected on all images

PROCEDURE

1. The side of the breast being examined is selected by pressing the button on the console button marked “laterality”.
   When a cranio caudal view is being x-rayed the side selected with a CC will mark the image on the axillary side of the breast image.

2. The same applies for when a medial lateral oblique view is being performed.

Please see attached for the selection of view names that may be used.

Spot compression and spot magnification will be marked in the same manner.
The markers will be displayed on the axillary side of the breast in correct orientation automatically when the correct laterality is selected at the console

Each Radiographer/mammography technologist to put in either the BreastScreen State ID or initials for identification of radiographer on images.

Date and time of mammogram is automatically selected and displayed on the image.
### View Names

View names used by the Senographe DS systems are shown here. They are based on the ACR (American College of Radiology) standardized abbreviations for mammography projection position codes.

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prefixes selected by operator (laterality):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right</td>
<td>R</td>
<td>Laterality selected by operator</td>
</tr>
<tr>
<td>Left</td>
<td>L</td>
<td>Laterality selected by operator</td>
</tr>
<tr>
<td><strong>Prefix selected automatically (magnification):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magnification</td>
<td>M</td>
<td>Selected automatically magnification attachment is in place</td>
</tr>
<tr>
<td><strong>View Names selected automatically (applicable only to standing or sitting patients):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CranioCaudal</td>
<td>CC</td>
<td>Inferior side of breast against receptor</td>
</tr>
<tr>
<td>MedioLateral Oblique</td>
<td>MLO</td>
<td>Inferior lateral side of breast against receptor</td>
</tr>
<tr>
<td>Mediolateral (90°)</td>
<td>MLO</td>
<td>Lateral side of breast against receptor</td>
</tr>
<tr>
<td>LateroMedial (90°)</td>
<td>LM</td>
<td>Medial side of breast against receptor</td>
</tr>
<tr>
<td>LateroMedial Oblique</td>
<td>LMO</td>
<td>Superior medial side of breast against receptor</td>
</tr>
<tr>
<td>CaudoCranial (from below)</td>
<td>FB</td>
<td>Superior side of breast against receptor</td>
</tr>
<tr>
<td>Superolateral to Inferiormedial Oblique</td>
<td>SIO</td>
<td>Inferior medial side of breast against receptor</td>
</tr>
<tr>
<td><strong>View names selected manually:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exaggerated CranioCaudal</td>
<td>XCCM</td>
<td>As CC with breast rotated medially</td>
</tr>
<tr>
<td>Exaggerated CranioCaudal</td>
<td>XCCL</td>
<td>As CC with breast rotated laterally</td>
</tr>
<tr>
<td>Cleavage</td>
<td>CV</td>
<td>As CC but inferior side of both breasts against receptor</td>
</tr>
<tr>
<td>Axillary Tail</td>
<td>AT</td>
<td>As MLO; axillary breast medially and anteriorly onto receptor</td>
</tr>
<tr>
<td><strong>Suffixes selected manually:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implant Displaced</td>
<td>ID</td>
<td>Implant pushed back and flattened against chest wall</td>
</tr>
<tr>
<td>Tangential</td>
<td>TAN</td>
<td>Area of interest projected close to skin surface – also used for uplift view</td>
</tr>
<tr>
<td>Spot Compression</td>
<td>S</td>
<td>Spot compression with or without magnification</td>
</tr>
<tr>
<td>Roll Lateral</td>
<td>RL</td>
<td>Roll the breast slightly in lateral direction</td>
</tr>
<tr>
<td>Roll Medial</td>
<td>RM</td>
<td>Roll the breast slightly in medial direction – also used for nipple view</td>
</tr>
</tbody>
</table>

Prefixes and suffixes are used with the main view names; for example, RMMLO equals Right Magnified MedioLateral Oblique, and LCRL equals Left CranioCaudal with upper breast tissue Rolled Laterally.
SCOPE
Chief Radiographer, All Radiography Staff and Mammography Technologists

POLICY
Screening mammogram can involve subsequent recall to assessment for work up views to determine a final screening diagnosis. As a routine practice, the following additional/supplementary views are performed. However, the final decision is at the discretion of the radiologist.

PROCEDURE

1. A full field lateral view (90) view (Latero-Medial (LM)) or Medio-Lateral (ML)) is performed for all recall cases. Lateral view are useful in determining the exact location of an abnormality in the breast. ML view is best for lesions located in the central or lateral breast. LM view is best for evaluating medial lesions.

2. For Mass lesions, non-specific and asymmetrical densities CONED COMPRESSION views will be imaged in Cranio-caudal (CC) and medio-lateral (MLO) view and a coned compressed lateral if required.

3. For Microcalcifications a MAGNIFICATION CONED COMPRESSION view will be imaged in the CC and lateral projections. Try and include behind the nipple in the films.

4. If a lesion is seen in only one image – The view with abnormality is repeated, with a coned compression view in that projection and a true lateral view is performed. However, it is advisable to consult the radiologist whether to repeat the view in keeping with ALARA principle.

5. Other additional/supplementary views:
   - Cleopatra View - Extended CC or lateral bias
   - Rolled, angled or biased views
   - Repeat contact views.
   - Repeat view with breast marker.
SIGNIFICANCE OF LATERAL VIEW

Reviewed by: Selin Prasad
Last Reviewed: 27/03/2016
Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography Staff and Mammography technologists

POLICY

The 90° lateral is the most commonly used additional view. The lateral is used in conjunction with standard views to triangulate the exact location of lesions within the breast. It is particularly useful in the demonstration of gravity dependent calcifications e.g. milk of calcium. Also useful for ultrasound, mammotome and upright stereo procedures.

PROCEDURE

Medio-Lateral
1. Rotate tube arm 90° with client facing mammography machine.
2. Arm of side being examined is raised 90° and placed across top of machine. Lateral aspect of breast is placed next to detector plate.
3. Lift breast up and out while gently pulling breast away from chest wall. When compression has been applied, the compression plate should be just below the clavicle. The side of the compression plate should touch the sternum.

Latero-Medial
1. Rotate tube arm 90° and have client face machine.
2. Adjust height of detector plate; its top edge is at the level of the suprasternal notch.
4. Extend chin to rest on detector plate.
5. Left arm of side being examined and ask client to hold column handle.
6. Apply compression while breast is being lifted up and out.

The true lateral view is required on clients that have had mastectomy, also on clients with implants where push back views are not possible.
ADDITIONAL VIEWS-CONE COMPRESSION (SPOT)

Reviewed by: Selin Prasad
Last Reviewed: 27/03/2016
Approved by: Harj Bariana

SCOPE
Chief Radiographer, All Radiography/Mammography Technologist Staff

POLICY
A Spot/Coned compression view is done to distinguish between the presence of a true lesion and an overlap of tissues, as well to better show the margins of an abnormality or questionable region of interest

PROCEDURE
This view is done by applying compression to the region of interest using a small compression paddle, thereby resulting in better separation of tissue and allowing better visualization of breast parenchyma in that area. Attach small spot compression paddle. As per radiographer/mammography technologist preference on method of performing work up views, position and apply adequate compression. One of the methods for work up view is as follows:

a. With original mammogram measure distance (depth) from nipple to lesion, with fingers placed parallel to the chest wall.
b. Second distance is measured from nipple to lesion by placing fingers at right angles to the chest wall.
c. Place breast in required position.
d. Transpose co-ordinates, as measured on original contact mammogram, and mark skin with a felt pen. It is at the intersection of these co-ordinates that the compression plate is centred.

Select the appropriate laterality

DIAGRAM OF CONED COMPRESSION FILM

Set exposure factors as per machine specifications.
SCOPE

Chief Radiographer, All Radiography/Mammography Technologist Staff

POLICY

A magnification view is performed to assess microcalcification and its extension, by using a magnification device/plate that brings the breast tissue closer to x-ray source and away from detector, allowing acquisition of magnified images of the region of interest.

PROCEDURE

Attach magnification device/plate. Machine has been pre-programmed to switch to fine focus. Attach small or large compression paddle. Full compression paddle is used on the advice of the radiologist

1. For full plate magnification expose as for contact cranio-caudal and medio-lateral views.

2. For coned magnification, select the appropriate laterality as for coned compression view.

   Set exposure factors as per machine specifications

   SET-UP FOR FULL PLATE MAGNIFICATION
CHAPTER 3  
Section: Radiography  
Original Date Issued: 02/06/98  
Created by: Judy Bursle

ADDITIONAL VIEW- EXTENDED CRANIO-CAUDAL (CC)

Reviewed by: Selin Prasad  
Last Reviewed: 27/03/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammographic Technologist Staff

POLICY

An extended CC view/Lateral bias/Cleopatra view is a additional view for better imaging of the lateral portion of the breast to the axillary tail. See diagram below

PROCEDURE

An optimal extended CC view requires the display of the most lateral portion of the breast including the axillary tail, as well the pectoralis muscle and the nipple in profile

1. Position client in CC position, then turn the client in oblique position (45° or more if required), to achieve the optimal image. Have client drop shoulder of relevant side.

Apply compression as for normal mammogram view.

NORMAL C.C.  

EXTENDED C.C.
FILM FORMAT FOR LARGE BREASTS

Reviewed by: Selin Prasad

Last Reviewed: 27/03/2016

Approved by: Harj Bariana

SCOPE
Chief Radiographer, All Radiography/Mammographic Technologist Staff

POLICY

For clients who require more than the normal format imaging, the following film format procedure will be implemented. This is to ensure that the breast is adequately covered in a reproducible manner. Where available and appropriate the larger detector field should be used.

PROCEDURE

For breast that overlaps at the nipple, supplementary views will be required.
When breast overlaps medially, laterally and at the nipple the following film format will be implemented. This process may need to be extended to allow for the breast that is not covered in these views e.g. 2 nipple views may require to image the whole breast.
**SCOPE**
Chief Radiographer, All Radiography/Mammography Technologists

**POLICY**

In order to visualize as much breast tissue as possible, women with implants undergo four additional views, as well as the four standard views. The additional images are called Eklund views or implant displaced (ID) views. These additional views allow better imaging of the anterior portion of the breast. The implants is pushed back against the chest wall and the breast is pulled.

**PROCEDURE**

- The routine craniocaudal and mediolateral oblique views are performed. These will require auto/ manual set exposure factors, and minimum compression, to stabilise the breast. See diagram below

![Diagram](Imaginis.com)

Standard mammography views are performed first, the breast and implant are minimally compressed- Imaginis.com
2) Exposure can be taken on arrested inspiration  3) Additional views using the ‘pinch-back’ technique (Eklund) or implant displaced (ID)
   a. modified craniocaudal
   b. modified mediolateral oblique

In these views the prosthesis is displaced posteriorly and superiorly against the chest wall while gently pulling the breast tissue anterior to the prosthesis onto the detector plate and holding in place with the compression paddle.

For the craniocaudal view the tissue superior and inferior to the prosthesis will be pulled forward with the anterior tissue. This procedure can greatly improve the amount of breast tissue that can be visualized.
SCOPE

Chief Radiographer, All Radiography/Mammography Technologists

POLICY

This policy is a follow up on augmented breasts-Part 1. The Eklund or Implant Displaced views are not as successful in women who have contractures (formation of hard scar tissue around implants), Therefore, the following views are performed.

PROCEDURE

Views FOR RIGID ENCAPSULATED IMPLANTS

1. Cranio-caudal - implant included
2. Medio-lateral oblique - implant included
3. Latero-medial (LM) or Medio-lateral (ML) implant included
CHAPTER 3

Section: Radiography

Original Date Issued: 28/03/95
Created by: Judy Bursle

IMAGING OF CLIENTS WITH MASTECTOMY

Reviewed by: Selin Prasad
Last Reviewed 09/04/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologist

POLICY

Clients with mastectomy on one side, the opposite side will is imaged with crano-caudal, medio-lateraloblique and lateral views. The mastectomy side is not imaged.

PROCEDURE

Standard views performed are:

- Cranio-caudal (CC)
- Medio-Lateral Oblique (MLO)
- Latero-medial (LM) or Medio-Lateral (ML)

Where a client has had a SUBCUTANEOUS MASTECTOMY with implant and preservation of nipple and areolar, there may be remaining breast tissue in the sub-areolar region. The referring physician may request imaging behind the nipple or request ultrasound of the mastectomy side.
CHAPTER 3

Section: Bookings & Reception, Radiography, Data and Information, BCN

Original Date Issued: 04.03.2014
Created by: Dr Natasa Borecky

MANAGEMENT OF FREE SILICONE INJECTION CLIENTS FOR BREAST SCREENING

Reviewed by: Selin Prasad
Last Reviewed: 10.04.2016

Approved by: A/Prof Nirmala Pathmanathan/ Harj Bariana

SCOPE

All BCI radiography and Mammography technologist staff

POLICY

Women with free injection of Silicone in their breasts should be discouraged to attend the Program as screening mammograms are not suitable to detect breast cancer in this condition. For technical reason due to the injection of free silicone, it is not possible to image properly the breast tissue, which is obscure by the density of the silicone, and then to exclude the presence of a breast cancer.

The aim of this policy is to ensure that women who have had silicone injections into the breast receive the most appropriate screening and care.

PROCEDURE

**Before screening**

1. Identifying women with silicone injections at booking:
   When a woman contacts a BreastScreen service to make an appointment for screening, the Booking staff member will ask her if she has breast implants or “free silicone injected in her breast”.

   If the woman responds affirmatively to the free silicone injection, the appointment will not be made and she will be redirected to a breast care nurse or other appropriate clinician for counselling.

2. Counselling provided by breast care nurse (or other appropriate clinician):
   The clinician will explain to the woman why women who have had free silicone injections are discouraged from having a screening mammogram. For example “The silicone which has been injected in your breast masks the breast tissue and the radiologist will not be able to detect a breast cancer by the mammogram.”
She will be advised to contact her GP for referral to a multidisciplinary breast clinic or to a breast surgeon to discuss the option for follow up.

3. Record of exclusion in BIS:
The data manager will be notified by the clinician after discussion with the woman to exclude her from the Program in BIS as Client excluded by BreastScreen NSW - P with reason as “Free silicone injection”. No report or reminder letter will be sent to the woman.

4. Letter of exclusion from Program:
A letter explaining the reason for exclusion and gives advice for follow up will be sent to the woman and her GP with a copy of her last mammogram if available. The Data team will issue the exit letter and mail the film copies.

**After Screening:**

1. Injected silicone identified by the radiologist:
Some women do not know the nature of the product which has been injected in their breasts or will not disclose it when they book their appointment especially if they have been previously invited and screened. They will then have their screening mammogram taken.

The radiographer **SHOULD NOT** cancel the mammogram if she recognises free silicone in the breast at the time the first image is taken unless there is a clinician available to provide counselling and support to the woman.

- The decision to exclude the woman from the Program will be taken by the designated radiologist after reviewing the mammograms on the reading workstation.

The radiographer will inform the senior radiographer and the Data team so that the screening images are NOT hung for screen reading.

2. Identified at QA workstation by a Data Team member:
If a Data Team member identifies a mammogram with possible free injection of silicone in the breast on the QA workstation, the screening mammogram will be withdrawn from the reading list and kept on the QA workstation to be reviewed by the designated radiologist.

3. Identified at reading workstation by the reader:
If a reader identifies a mammogram with free injection of silicone he/she should not read or report as Technical Recall; instead contact the Project Officer – Digital to retrieve the screening mammogram from the reading list and reading workstation, and to keep it on the QA workstation to be reviewed by the designated radiologist.
4. Review by designated radiologist:
The designated radiologist will review all screening mammograms with possible free injection of silicone to determine if the breast is suitable for screening and to confirm the exclusion of the woman from the Program for technical limitation. The breast care nurse or other appropriate clinician will be notified to contact the woman to provide counselling and support.

5. Counselling provided by breast care nurse/other appropriate clinician:
The breast care nurse or other appropriate clinician will contact the woman and explain to why women with free silicone injected into their breasts are discouraged from having screening mammograms.
   - For example “The silicone which has been injected into your breast masks the breast tissue and the radiologist will not be able to detect a breast cancer by the mammogram.”

She will advise the woman to contact her GP for referral to a multidisciplinary breast clinic or to a Breast surgeon to discuss the option for follow up and let her know that BSNSW will not reinvite her in the future for screening mammogram.

6. Record of exclusion in BIS:
The data manager will be notified by the clinician after discussion with the woman to exclude her from the Program in BIS as Client excluded by BreastScreen NSW - P with reason as “Free silicone injection”. No report or reminder letter will be sent to the woman.

7. Letter of exclusion from Program:
A letter explaining the reason for exclusion and gives advice for follow up will be sent to the woman and her GP with a copy of her last mammogram if available. The Data team will issue the exit letter and mail her film copies.

How to remove from reading list and workstation for radiologists review

Follow P&P HOW TO COMPLETE A TASK WITHOUT PERFORMING A “READ” in the Data and Information Section

How to complete the episode in BIS
1. In the Episode History screen, click in to Screening hyperlink
2. Change the Status field from Completed to Not Completed – other
   a. Click Save
   b. Select OK when message box “Do you intend the Mammogram Completion Status to be Not completed – other?”
   c. Select YES when message box “Do you want a repeat screening visit?”
d. Click **OK**

3. Proceed to the Booking tab > Follow Up > Appointments
   a. The client will appear on the list under *Other Screening Recall* appointment category
   b. Click on the **Make Appointment** hyperlink
   c. Select a date in her preferred screening venue to create an artificial appointment to complete her episode
   d. Do not select appointment confirmation letter

4. The appointment should be made and ensure the appointment visit type says *Other Screening Recall* on the appointment screen
   a. Arrive the appointment
   b. Click in to **Mamm** hyperlink
   c. In the Radiographer field - enter RADIOGRAPHER, Unknown
   d. In the Screening Machine field – select the default machine listed
   e. For the number of images taken – enter “0”
   f. For the number of images rejected – enter “0”
   g. Status field – Select from list *Not completed - other*
   h. Comments field – enter *Free Silicone injection Not for screening, exit from the program*

   ![Appointment Screen](image)

   i. Select **OK** when message box “Do you intend the Mammogram Completion Status to be Not completed – other?”
   j. Select **NO** when message box “Do you want a repeat screening visit?”
   k. Click **OK**
5. Proceed to the Booking tab > Follow Up > Notifications
   a. The client will appear at the top of the list under notification category type Exit-Inc
   b. Click on the Set date icon and in the message box enter today’s date
   c. Select OK

6. Proceed to Client Details page and add exclusion from drop down list Client excluded by BreastScreen NSW – P. Reason Free Silicone injection
   a. Add a General note to record that the Exit Letter and film copes have been mailed out to Client and GP.
   b. 17/4/2014, SW, marcelao – Exit letter and Film copies sent
   c. Click on Save, then OK

7. Template letter found in F:\Data\Exit from the Program\BSSW Free Silicone Injection letter
   a. Complete template using the specific client’s details (Name, address, appointment date and GP details)

8. Save as Free Silicone Injection <PID>, SURNAME, Firstname
   a. Print letter for Client and GP
   b. Send client letter plus the film copies
   c. Photocopy original client letter and place in file
   File track back to Parramatta Storage and place for transport
CLIENTS WHO ARRIVE WITH PRIVATE IMAGES AT SCREENING SITES

Reviewed by: Selin Prasad
Last Reviewed: 09/04/2016
Approved by: Harj Bariana

SCOPE

Bookings and Reception staff, All Radiography/Mammography Technologist, Data and Information staff

POLICY

To maintain a high quality reading service and to reduce anxiety to the client and ensure recall rates will be kept to minimum. In line with BSNSW Operating Standards 2.3.1 ‘Clients who arrive with previous mammographic images’

PROCEDURE

A client may arrive with ‘non-BreastScreen’ mammographic images. The radiographer on site will determine:

Private Mammograms less than 12 months old

If the date of these images is within 12 months of the date of the appointment the client shall not have a screening mammogram at this time. The client can be referred to an appropriate member of staff (e.g. counsellor or radiographer on site).

For more information, refer to Operating Standard 2.2.4 - Women who have had a mammogram within the last 12 months.

Private Mammograms 12 months or older

If a client arrives with “non-BreastScreen” mammographic images 12 months or older from the date of their appointment the Screening and Assessment Service shall:

- Advise the client that large films or doubled up images will need to be trimmed or cut to fit the scanner. If the client does not agree, the images cannot be accepted.

---

1 Australian Radiation Protection and Nuclear Safety Organisation 2008, Radiation Protection Series Publication No. 14 section 2.2.1
• Accept the most recent mammogram images from the client, including work-up mammogram views (not ultrasound), if the woman is a new client,

• Images that are older than the recent rescreen BreastScreen images are not accepted e.g. private on 3/5/2010, last rescreen 3/5/2011

• Accept the most recent mammogram images from the client, including work-up mammogram views if the woman is an existing client and the “non-BreastScreen” mammographic images are more current than the most recent BreastScreen images.

Accepted images are forwarded to the BreastScreen SW Data & Information Team at Westmead for scanning and subsequently returned to the client.

1. At Booking confirm with client if they have had a private mammogram within the last 12 months; if so exclude using “client has had previous mammogram within the last 12 months – T” until 12 months is up. If over 12 months remind client to bring images to appointment.

2. At Reception; accepted prior mammogram images will require 2 extra barcode labels to be printed; one placed on an envelope (images will be placed in this envelope) and the other in the Private Images log book kept at each venue

   • Place images in a separate envelope for each client; do not place all the private images in one envelope
   
   • Only accept most recent images, returning older images to client.

   • Place all separate envelopes in Lockable case / Internal Mail satchel for transport

3. Note on the Daily appointment List that the private images have been accepted next to the client’s name

4. Add Note in BIS on the Client Details screen at ‘Previous Film’ above the exclusion code area

   e.g. Previous Film (private images) = Yes at PRP Castle Hill and Date of the private mammogram

   Previous Film Location * PRP Castle Hill Previous Film Date * 21/7/2012

Refer to procedure - ‘Reception Procedure’
5. Place 2nd barcode label in the Private Images log book and bracket all those picked up / mailed on the same date. Hospital sites will require Date and Time of the Internal mail.

6. Images collected by ISO are to be delivered to Data and Information Dept at Westmead for scanning on the same day as pick up, to allow for timely reading of the screening mammogram.

**Hospital Sites**

- Place envelope with Barcode label in the an Internal Mail envelope and send to:

  WESTMEAD HOSPITAL  
  BCI / BREASTSCREEN  
  Susan Gooding  9845 5410  
  Data and Information  
  Level 1 Block F  
  Westmead NSW 2145

- Seal flap securely with Sticky tape
- Images will also be picked up by ISO on the hospital visit as per the Pick up and Delivery Schedule

**Myer Sites and Mobile Van**

- Place envelope/s in lockable case for collection by ISO as per delivery schedule:
  - ISO to sign off images collected on Private Images log book

7. Once images arrive at Westmead they are signed in by ISO in the Receiving Log book and scanned by Data Staff and routed to the STATE PACS for Image QA & Hanging.

Refer to procedure – ‘Digitizing of prior analogue images for digital comparison reading’

Refer to procedure – ‘QA and Hanging of Digital Images’

8. Following scanning of images the originals are to be returned to the client and noted in the BIS record as per procedure - ‘Returning Client’s Private Films’
CHAPTER 3  
Section: Radiography  
Original Date Issued: 30 January 1995  
Created by: Judy Bursle

<table>
<thead>
<tr>
<th>STANDARD MAMMOGRAPHY VIEWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewed by: Selin Prasad</td>
</tr>
<tr>
<td>Approved by: Harj Bariana</td>
</tr>
</tbody>
</table>

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

Standard views are those that are performed on routine screening/diagnostic mammograms. The views are generally performed for all routine screening/diagnostic clients. Unless there is a contraindication, screening/diagnostic mammograms consist of 4 views:

- Cranio-caudal view (right and left side)
- Medio-lateral oblique (right and left side)

Mastectomy Clients - see policy on clients with mastectomy.
PROCESS FOR INCOMPLETE VIEWS FOR SCREENING MAMMOGRAM

Reviewed by: Selin Prasad, Summer Ning
Last Reviewed 09/04/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologist, Breast Care Nurses, Data and Information Staff

POLICY

To ensure all documentation relating to a client visit is completed regardless of the outcome of the examination.

If a client:

- Arrives at Breastscreening site and does not wish to have a mammogram (no images taken)
- Arrives at Breastscreening site and cannot wait to have a mammogram
- Arrives and declines to have mammogram in mammography in x-ray room (no images taken)
- Arrives and only 1 or more images are taken but the procedure is not completed

PROCEDURE

1. When the above situations occur, ensure that the client is entered as Incomplete Examination
2. In the comment section on BIS, describe the situation and state the reason for incomplete examination
3. Following the prompt, you will be asked “Do you wish to book another appointment? Select YES. This allows the service to coordinate the client’s visit and does not produce a letter saying Return to Rescreen-Incomplete. If we do not select YES, the client details and her attendance record will disappear from the program
4. Then DEPART the client
5. After an incomplete examination has been done, email the client details and the reason for incomplete examination to the following staff:

- Harj Bariana
- Breast Care Nurses
- Susan Gooding
- Chandra Wati
CHAPTER 3
Section: Radiography
Original Date Issued: Created by: Harj Bariana

CORRECT IDENTIFICATION OF PATIENTS/ CLIENTS FOR BREAST IMAGING PROCEDURE(S)

Reviewed by: Selin Prasad Last Reviewed 09/04/2016
Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologist staff

POLICY

Patient identification and the matching of a patient to an intended examination is an activity that is performed routinely by this service, in accordance with the NSW Health Policy Directive.

PROCEDURE

1. VERIFICATION- of patient information. Ask the patient the 4 W's
   - What is your name
   - What is your date of birth
   - What is your address
   - What are you here for?

2. MATCHING- the information against the request/referral form
   - Ensure the request/referral form or consent form is clear and legible and contains
   - Patient's first and family name, date of birth and MRN/PID or full address
   - Procedure requested
   - Clinical history

3. TIME OUT (if applicable)

Information adopted from Australian Commission on Safety and Quality in Health Care (2008)
CHAPTER 3
Section: Radiography
Original Date Issued:
Created by: Harj Bariana

INFORMATION ON HARDCOPY IMAGES

Reviewed by: Selin Prasad
Last Reviewed 09/04/2016
Approved by Harj Bariana

SCOPE
Chief Radiographer, All Radiography/Mammography Technologist staff

POLICY
To ensure that all hard copy images have the relevant information, for correct identification purposes.

PROCEDURE
All hard copy images must be clearly and correctly contain the appropriate client/client and radiography/sonography information. It is the responsibility of the radiographer/mammography technologist/sonographer taking the images to ensure that all relevant information is contained in the hard copy.

The following information must be on every image:

1. Client’s full name
2. MRN/PID number
3. Accession number
4. Date of birth
5. Correct laterality marker (R or L)
6. Date of examination

In addition:

1. Radiographer identification (radiographer initials- for diagnostic imaging)
2. BreastScreening State ID number (to be used for screening mammograms)
3. X-ray unit identification (and relevant radiation information)
SCOPES
Chief Radiographer, All Radiography/Mammography Technologist staff

POLICY
To ensure that all patient examination details are correct when completing procedures on Cerner.

PROCEDURE
1. All exam management should be completed by the radiographer who performed the examination. To launch Cerner application, go to Western Sydney Health link and under ‘application’ select Cerner from the drop down menu. Once Cerner is launched log in using your stafflink login details.

2. Click on Appbar. In the dialog box put in ‘bci’ as username and ‘bcinsw’ as password. Menu bar will appear after this log in, select online worklist from this menu bar.

3. Using the right hand button on the mouse, select exam management.

4. If changing an examination (unilateral ultrasound to bilateral for example) highlight the examination.

5. Click on the replace icon at the top of the page which appears as a red and a blue arrow in a circle – this show as replace exam when mouse arrow hovers over it.

6. In the drop down window that appears type in ma and press return.

7. Scroll down the options until the required examination is found, highlight the examination and choose replace.

8. A warning will appear asking if you want to replace the examination, select yes.
9. This will replace the incorrect examination with the new selection. The screen will refresh and the new examination will show in the exam management window and new labels will be printed.

10. Replace the labels on the request form and the outside of the imaging envelope with the new labels.

11. The examination can then be completed by adding the radiographers name and the radiologist name in the panel at the top of the exam management window.

12. Then press complete to complete the examination. Please ensure all details are correct (including laterality and other examinations that have been added) before selecting complete.

13. To add another examination, (to add an ultrasound to a mammogram) repeat step 1 and 2 and then highlight the examination.

14. Click on the add icon at the top of the page (two trays above one another, this shows as add on exam when mouse arrow hovers over it.

15. In the drop down window that appears type in ma and press return.

16. Scroll down the options until the required examination is found, highlight the examination and choose submit.

17. The screen will refresh and the new examination will show in the exam management window and new labels will be printed.

18. Replace the labels on the request form and the outside of the main manila imaging envelope with the new labels.

19. The examination can then be completed by adding the radiographers name and the radiologist name in the panel at the top of the exam management window.

20. Then press ‘Complete’ to complete the examination. Please ensure all details are correct (including laterality and other examinations that have been added) before selecting complete.

21. If an examination such as a biopsy has been performed on two sites, the examination should be changed to reflect this. Repeat steps 1-3.

22. Click on the icon at the top left hand corner of the page, folder icon (this shows as bill only when mouse arrow hovers over it).
23. In the drop down window that appears type in ma and press return

24. Scroll down the options until the required examination is found, highlight the examination and in the small window to the right increase the number to the number required and then press the arrow pointing right this will change the number of exams performed

25. Select submit and complete the examination by following steps 18 and 19.
CHAPTER 3

Section: Radiography

Original Date Issued: 19/02/2009
Created by: Harj Bariana/Susan Doran

HOW TO MANUALLY PUSH IMAGES FROM ACQUISITION MONITOR TO ARCHIVE AND WORKSTATIONS ON GE DS UNIT

Reviewed by: Selin Prasad
Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE
Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY
To ensure that all patient examinations are accessible on the archive and other workstations.

PROCEDURE
To manually push images to archive and other destinations

1. In the main page browser window on the thumbnail patient list on the left-hand side of the monitor select the name of the patient whose examination you wish to push.

2. Select the ‘push’ icon below this list that is a small monitor with a line connected to and beneath it (when the mouse arrow hovers over this icon it reads (push selected pt.)

3. A dialog box will appear titled - push selected pt. on. In the dialog box it states - List of remote hosts and lists the host labels (destination) available

4. Select the destination for the examination – At Sunflower Clinics select Dicom shuttle and this will send the images to the archive and the appropriate workstations. If at BCI select - bci 229 (archive) and bciws17 (main workstation)

5. Highlight your selection and press OK

6. The images are being pushed when the icon in the top left hand corner of the browser window (three TV monitors with a pathway connected to and beneath them) has a pulse moving along the pathway. If you select this icon it will also show you the status of the series being pushed.

7. In the browser window the status of the images will change to S (meaning they have been sent)
CHAPTER 3
Section: Radiography
Original Date Issued: 14 December 1993
Created by: Judy Bursle

STAFF INTRODUCTION AND EXPLANATION OF PROCEDURE TO CLIENTS

Reviewed by: Selin Prasad
Last Reviewed: 09/04/2016
Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

To ensure that clinical communication and optimal care is delivered by the service to all clients.

PROCEDURE

1. Greeting
2. Introducing yourself
3. Verification and matching of client details to the referral or consent form
4. Seeking consent/ asking permission
5. “Giving instructions/explanation of procedure
6. Verify clinical information as per referral /consent forms
7. Before starting procedure ask client if they have any further questions
8. Request client to undress from the waist up. A gown is given at BCI after examination
9. Inform client she may stop the examination at any stage. Explain that she may either wish to rest, have a breather or terminate the examination.
10. Continue to chat to the client to help put her at ease while performing the mammogram.
11. If a repeat image is required, stress to the client that the repeat is purely for technical reasons and there is no need for concern.
For BreastScreen clients after the examination is complete, explain that the results will be forwarded to her and to her Doctor, if that is her wish, within fourteen (14) working days and she will receive a reminder letter at the appropriate time for a rescreen. For clients outside the target age group (50-74 yrs) explain that they will not get a reminder letter but they are able to phone and make an appointment when their next screening is due. The client is also provided with a copy of the “What Happens After Your Mammogram” brochure. Explain to the client that in the event that they might get a call to come back, not to panic or stress. It could be just tech recall or that doctors would like them to come back for double check.

For clients that have had a diagnostic imaging performed, confirm that the client has an appointment with the referring doctor for follow up of results.

**NOTE:** If a client experiences severe pain or distress during screening mammogram, remove compression immediately and offer her the option to cease the examination. You may offer to have a nurse counsellor contact her if she wishes.
## SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

## POLICY

To ensure infection control procedure is adhered, by staff t, where a client may have a skin lesion or broken skin.

## PROCEDURE

1. Most skin lesions are not infectious therefore examination can go ahead.

2. At end of procedure the detector plate and compression paddle must be cleaned as per normal protocol.

3. Clients with open sores may be rebooked to a time when the condition has improved.

4. Client who present with broken or inflamed skin under their breasts should be advised that there is a small likelihood of some tearing of the as the breast is lifted and compression applied.

5. If this should occur advise client to keep clean and dry until the skin is healed. If any problems arise they are to go to their General Practitioner.

6. Disposable gloves are always available to be used by the radiographer if requested.
CHAPTER 3  
Section: Radiography, Bookings & Reception  
Original Date Issued: 24 February 2000  
Created by: Judy Bursle

CLIENTS WITH DISABILITIES FOR SCREENING MAMMOGRAM

Reviewed by: Selin Prasad  
Last Reviewed 09/04/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologist, Bookings staff, breast care nurses

POLICY

To provide customer focused high quality mammograms with minimal anxiety to women and to provide a safe working environment for radiographers, it is necessary to book clients who have a disability at a fixed unit when two radiographers are available or at BCI if the ‘pink chair’ is necessary for optimal imaging and safety of clients.

PROCEDURE

Clients who identify themselves as having a disability at the time of booking
1. When clients identify themselves as having a disability, the bookings clerk will check that the Unit of choice has two radiographers available on the day of appointment.
2. The bookings clerk will book a double appointment time for the client.
3. Only Wheelchair clients will only be booked no later than 4pm.
4. Check that the carer or relative attending is not pregnant before allowing them in the x-ray room.

Clients who present for screening with a disability and did not notify the bookings clerk at the time of booking

1. If a client with a disability presents for screening and a double appointment has not been booked, sites with two radiographers should make every effort to screen the client.
2. If a client with a disability presents for screening and there is only one radiographer present, the radiographer should explain to the client that she will need to be re-booked when there are two radiographers present. Suggested wording for explaining this to the client is as follows:
“Because we would like to provide you with the best possible care while you are having your mammogram, we will need to re-book you when there are two radiographers present. For your safety and for mine, I am unable to undertake your mammogram without another radiographer to assist. Please wait while I contact the bookings department to make a new appointment for you. I apologise for the inconvenience this has caused you.”

3. The Radiographer or Receptionist should contact the bookings department and client should be re-booked when there are two radiographers. A double appointment will be allocated.

4. If there are not two radiographers available at the Unit of choice, the client should be offered an appointment at an alternative site and the Unit should organise transportation for this client upon request.
CLIENTS WITH PACEMAKERS FOR MAMMOGRAM

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

Women with pacemakers are eligible for a mammogram but care must be taken not to cause undue stress by compressing the area of the pacemaker.

PROCEDURE

1. The radiographer should attempt to obtain optimal images.

2. On the pacemaker side, it may be necessary to include an MLO with pacemaker but using minimal compression for the pectoral region and a second well compressed view in front of the pacemaker to demonstrate the breast tissue i.e.: an uplift view.

The radiographer should document any technical difficulties on BISor referral form.
### CHAPTER 3

<table>
<thead>
<tr>
<th>Section: Radiography, Reception</th>
<th>Original Date Issued: 12 August, 2000</th>
<th>Created by: Judy Bursle</th>
</tr>
</thead>
</table>

#### PROCEDURE – FOR CLIENTS ARRIVING LATE FOR APPOINTMENT AT SCREENING SITES

<table>
<thead>
<tr>
<th>Reviewed by: Selin Prasad</th>
<th>Last Reviewed: 09/04/2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved by: Harj Bariana</td>
<td></td>
</tr>
</tbody>
</table>

#### SCOPE

Chief Radiographer, All Radiography/Mammography Technologist, and Reception Staff

#### POLICY

To ensure all clients are attended to in a timely manner and late clients are screened wherever possible.

#### PROCEDURE

1. If a client arrives more than 15 mins late for an appointment the receptionist will ask the client to take a seat, explaining to the client that she will be slotted in between clients (this should be done in a private manner that does not make the client feel uneasy).
2. The receptionist will then advise the radiographer that the client has arrived.
3. The receptionist is to keep the radiographer informed if there are problems with client leaving to go to toilet etc. Communication is vital for this process to work for the good of both client and staff.
4. If there is an issue fitting the client in that day, contact with the Chief Radiographer or Senior Radiographer should be made in the first instance to discuss what strategies could be made.

All staff should try and accommodate clients wherever possible. Clients may have experienced problems with transport, parking etc. which they had no control over. Once a client has reached the site they have gone to a lot of effort and it is our responsibility to assist where possible to save the client having to return on another day. Often this would be quite inconvenient.

(Staff are not, in any circumstances, permitted to tell the client they can’t be fitted in because it is past their morning tea or lunch break.)

If another appointment is necessary the receptionist should, where possible, make that appointment for the client.
CHAPTER 3

Section: Office Administration, Radiography

Original Date Issued: Created by: Vanessa Sands

MYER Online INDUCTION AND ORIENTATION COURSE (WHS online course)

Reviewed by: Selin Prasad  Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

All radiographers employed by BCI and rostered to work at Myer Sunflower Clinics, must ensure that they complete the online Myer Induction Program and attend the Myer Induction Orientation Course.

PROCEDURE

1. All staff must complete the Myer Online Induction course before attending the one day Orientation.
2. The followings steps are a guide:
   - Go to :http://myercontractor.southrock.com
   - Enter all your details into the form. Remember your log in details
   - Complete the Safety Induction Course
   - Successfully complete the assessment
   - Printout you safety Induction Card
   - Safety Induction Card must be taken to site.
4. The Induction card is to be carried at all times while on the premises of Myer Stores during work hours.
5. It is the radiographers’ responsibility to ensure that they complete the on-line Induction when their current induction certificate expires.
6. Senior Radiographers will enrol new staff into the Myer Induction Orientation Course held at the Parramatta Myer Store.
7. Staff working at the Retail Myer Sunflower Clinics will attend the one day Orientation Course.
8. Staff will be orientated by the Myer Supervisor to each site.
CHAPTER 3

Section: Office Administration, Radiography
Original Date Issued: 22/02/2010
Created by: Vanessa Sands

MYER RETAIL STORES – Staff Entrance

Reviewed by: Selin Prasad
Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

Ensuring all BCI staff comply with each Myer store policies and procedures on entering and exiting the store before, during and after Myer Business hours.

PROCEEDURE

1. Senior Radiographers will ensure that all staff complete site specific orientation.
2. Each store will specify staff entry and exit points.
3. Each store will indicate when staff are required to sign the Visitor Book at the Layby Counter upon entry and exit.
4. All staff must have the Myer Induction Card to present to Myer Supervisors when signing the visitors’ book.
CHAPTER 3
Section: Radiography
Original Date Issued:
Created by: Vanessa Sands

SCREENING WOMEN FROM DETENTION INSTITUTIONS

Reviewed by: Selin Prasad
Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

To ensure a fair and equitable service to all eligible women BSSW has introduced a system to facilitate the screening of inmates. Women from Detention Institutions will only be screened at the Hospital Sunflower Clinics. To ensure there is effective and efficient client workflow procedures and to ensure the safety of all staff and clients at the time of exam.

PROCEDURE

1. Women from Detention Institutions will be screened at the following Hospital Sunflower Clinics:
   - Mount Druitt Hospital Sunflower Clinic
   - Auburn Hospital Sunflower Clinic
   - Katoomba Hospital Sunflower Clinic
   - Lithgow Hospital Sunflower Clinic.

2. Screening appointments to be negotiated between the Detention Institution Facilitator and Bookings.

3. Inmates will be informed on the morning of the appointment therefore it is important that NO confirmation letter is sent to the inmate.

4. If an interpreter is required, the Detention Centre will inform ISM, Senior Radiographer at the time of appointment. The ISM and/or Senior Radiographers will check availability of interpreter with bookings and change their appointment if necessary.

5. Paperwork will be completed prior to appointment. All paperwork will be stamped with the contact address of the Facilitator.
6. The inmate will be escorted to the site with an Officer of the Detention Facility.

7. The Officer is to remain with the prisoner at all times during the screening process.

8. The Sunflower gift bag will not be handed to the prisoner from the Detention Facility.

9. Multi-skilled Administrative Officers ensure that for every Mulawa client the GP is entered as (regardless of whether the client has nominated her or not):
   Dr Di Lawrence,
   Mulawa Clinic
   Locked Bag 130
   Australia Post Business Centre
   Silverwater 1811

10. Chief Radiographer, Senior Radiographers will inform Multi-skilled Administrative Officers and bookings staff on the negotiated day of appointment.

11. On completion of mammogram, the file is given to Research & Information for fast tracking.

12. Normal results are only sent to referring doctor. The client does not receive results. (Destroy the produced letter and note it on result summary). Staff at Mulawa will ensure that the client has a copy of the results on leaving the correctional environment.

13. If the client is to be recalled the Data Support Coordinator clerk will ensure that the referring doctor, and not the inmate, is contacted.

14. Assessment visits are co-coordinated between the Breast Care Nurses and referring doctor.

15. Radiographers must convey that any further information required by the Radiologists, will be communicated with the Detention Facilitator.
SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

To ensure that all staff follow a standard process to report the network failure to BCI IT support, GE/Hologic and the on-call radiographer, for continued patient care.

PROCEDURE

1. Radiographers will observe a failure in network transfer of images when an error message appears on the mammographic monitor.
2. The radiographers are required to log a call with BCI IT support, GE/or Hologic and the on call radiographer.
3. The faults must be recorded in the online QA spreadsheet.
4. The radiographers are required to liaise with the support staff to establish network connections.
5. The radiographers are required to follow policy to manually enter customer details and continue screening.
6. Once network connections are established, the radiographers are required to manually push exams that have queued in the system browser.
7. Radiographers are not permitted to delete any exams from the mammographic unit until advised.
SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

All Radiographers employed by BCI are required to wear the specified uniform and Employee ID badges.

PROCEDURE

1. All staff are required to wear the specified uniform Staff can order uniform online via Western Sydney Health link
2. All staff are required to wear the supplied BreastScreen badge at screening sites
3. Staff that at BCI are required to wear the uniform and the Employee Identification badge while on work premises.
NOTIFYING OF SICK LEAVE FOR RADIOGRAPHERS

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

All Radiographers employed by BCI are required to call the On-call Radiographer when unable to attend work on the occasion of illness or, experiencing delays in transit to a site.

PROCEDURE

1. Radiographers are required to call the On-Call Radiographer on the On-Call Mobile on 0438 056 083 when unable to attend work on the day by 6:30am., and before 7am.

2. If the On-Call Radiographer is not available, a call must be placed to the Chief Radiographer on 044 8252 619. A call has to be made in the first instance, text message is NOT acceptable.

3. A Medical Certificate is required when staff are unable to attend work for two or more days.

4. If staff do incur delays in transit to a work site, the On–Call Radiographer must be contacted on the On-Call Mobile.

5. The On-Call Radiographer will communicate with the site affected.

6. The Radiographer will notify the On-Call Radiographer of their arrival on site.
CHAPTER 3

Section: Radiography

Original Date Issued: 22/02/2010
Created by: Vanessa Sands

ON CALL PHONE PROCESS

Reviewed by: Selin Prasad
Last Reviewed 09/04/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

To ensure all staff can communicate with the on call radiographer, regarding issues that will impact on the delivery of the service and for management and rostering of staff at all sites seven days a week.

PROCEDURE

1. On Call Radiographer is available seven days a week on a mobile phone 0438056083.

2. The On Call Radiographer is responsible for the management of the service, sites and the daily management of staff.

3. Whilst responsible for the on-call phone, the On Call- Radiographer must be accessible to communicate with staff on the phone within 10 minutes of receiving the initial call.

4. It is the responsibility of the Senior Radiographer to ensure that the on-call phone is in working order and charged at all times.

5. Whilst on-call, the On Call- Radiographer must be accessible to attend to radiographers concerns.

6. Staff that are unable to attend work as a result of illness must communicate with the On Call- Radiographer on-call between 6:30am and 7:00am.
SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

The service must ensure that all staff working at screening sites follow a process to report a failure in the phone system and communicate this system failure to the On-call radiographer, ISM and Operations Manager.

PROCEDURE

1. The phone systems must be tested before the first appointment each morning.

2. When a failure in the phone system does occur, staff are required to log a call using the Emergency Mobile phone to the BCI IT support.

3. Staff are also required to log a call with the on-call radiographer notify the on call radiographer and email the relevant staff. The BCI IT support person will liaise with staff at the site to establish operation.
CHAPTER 3
Section: Radiography

ORDERING OF CONSUMABLES FOR SUNFLOWER CLINICS

Reviewed by: Selin Prasad
Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

To ensure that all sites have adequate supplies of consumables on hand at all times. To ensure effective and efficient customer service procedures and infection control in the outer Sites.

PROCEDURE

1. A delivery is scheduled weekly or monthly for each site.

2. An agreed amount of consumables is delivered at this time.

3. The amount of consumables being delivered is available for review at each site. The consumables list is on the desktop, on the customer room computer.

4. If this delivery needs adjusting- the instructions should be faxed to Jeffery House.

5. The adjustment should be faxed on Friday before the delivery day.

6. Instruction should be clearly marked –Site Deliveries

7. Instructions should be clear, dated, site identified and signed.

8. Example –Increase delivery of Med gloves to 3 boxes for Castle Hill 2/01/2013 signed Jane Smith

9. The amount of consumables delivered should only be reduced if storage space is inadequate.
SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

Workshop Training Day and Staff Meeting

A workshop training day and general staff meeting is held twice yearly.

Image Quality Evaluation Meeting

The image quality evaluation meeting is held six monthly with designated radiologist, Chief Radiographer, Senior Radiographers and interested radiographers.

Tumour Board Meeting

The Tumour Board meeting is held every Monday morning (7.30am-8.30am) in the Education Block except school holidays.
DELETING OF IMAGES FROM GANTRY (GE UNITS)

Reviewed by Selin Prasad

Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

To ensure that the examinations are deleted from the mammography unit in a timely manner.

PROCEDURE

1. Once the disk space on a mammographic unit has reached 98% a warning appears on the unit, which advises how many images there is space for.

2. The automatic delete should be enabled at the installation of the unit.

3. Images may be deleted manually. This enables a faster response from the unit and prevents the warning box from appearing repeatedly.

4. Images are only deleted on the advice from the data team.

5. Only delete images up to 2 days before the date of images that have been reported. Example – Images taken on the 4th January have been reported. Images up to and including the 2nd January are now safe to delete from the unit.

6. Delete the images as per policy - manually deleting images from the mammography unit.
CHAPTER 3
Section: Radiography
Original Date Issued: 5 November 2008
Created by: Harj Bariana

MAMMOGRAPHIC UNIT IDENTIFICATION NUMBER (SITE ID)

<table>
<thead>
<tr>
<th>Site</th>
<th>SITE ID</th>
<th>Machine Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myer Parramatta</td>
<td>504</td>
<td>29</td>
</tr>
<tr>
<td>Myer Penrith</td>
<td>508</td>
<td>32</td>
</tr>
<tr>
<td>Myer Castle Hill</td>
<td>509</td>
<td>33</td>
</tr>
<tr>
<td>Myer Blacktown</td>
<td>510</td>
<td>34</td>
</tr>
<tr>
<td>Lithgow</td>
<td>501</td>
<td>26</td>
</tr>
<tr>
<td>Mt Druitt</td>
<td>506</td>
<td>31</td>
</tr>
<tr>
<td>Katoomba</td>
<td>507</td>
<td>25</td>
</tr>
<tr>
<td>Auburn</td>
<td>505</td>
<td>30</td>
</tr>
<tr>
<td>Westmead 1</td>
<td>503</td>
<td>27</td>
</tr>
<tr>
<td>Westmead 2</td>
<td>503</td>
<td>28</td>
</tr>
<tr>
<td>Mobile Van 1510</td>
<td>1510</td>
<td></td>
</tr>
<tr>
<td>Mobile Van 28</td>
<td>28</td>
<td></td>
</tr>
</tbody>
</table>

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

To ensure that all machines have an identification number (Site ID) on all images for site identification, for BIS data entry.

PROCEDURE

Each machine is allocated a machine number that is given by Research and Information Section. This number is to be clearly identified on the mammographic image as well as recorded on the radiography bag.
EMERGENCY COMPRESSION RELEASE PROCEDURE-SENOGRAPHE DS UNITS

Reviewed by:  Selin Prasad  Last Reviewed:  09/04/2016

Approved by:  Harj Bariana

SCOPE

Chief Radiographer,  All Radiography/Mammography Technologists staff

POLICY

To ensure staff are aware of how to release the compression in the event of loss of power to the x-ray machine during compression so that the wellbeing of the client is not compromised.

PROCEDURE

1. Using the manual compression/decompression knobs located on either side of the compression paddle arm, hand wind the paddle upwards until the breast is released and the client can step away from the bucky.

2. The paddle may be moved by 3-4 mm by placing fingers under the paddle and gently but firmly pushing upward

3. Reassure client
SCOPE
Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY
To ensure proper process is adhered to when logging a machine fault, for proper maintenance of machines.

PROCEDURE
1. All machine faults and QA failed results should be recorded on the online QA spreadsheet. This will enable any trends that are developing to be detected early enough for prompt rectification. Please note that each time a machine fault or QA fails, it has to be notified as per normal protocol and online fault log updated.

2. All QA spreadsheet at every site has the machine serial number and GE/Hologic service desk number under the ‘fault log’ tab. As well all contact details and machine serial numbers are saved in I: Drive: QA: Contact and Machine Details Sunflower Clinic. In addition this contact list is also saved in I: Drive: Imaging: Contact List.

3. For ultrasound machine faults, record all faults in the ultrasound fault spreadsheet, located in I: Drive: QA: Ultrasound Unit Fault Log.

4. The action taken to repair these faults should be documented.

5. All faults, that affect the quality of the images or the dose to the client, should be immediately assessed by service personnel.

6. Ring the Service number quoting the site, SWAHS, and serial number of equipment if required. Leave your contact number, and the service engineer will return call ASAP to inform when he/she is available.

7. Contact the on call radiographer to update the progress. Email chief radiographer, on call radiographer, all radiographers and bookings team leader with all information.

8. Update online fault log on progress or once fault has been rectified.
# QA – ACCEPTANCE TESTING ON NEW MAMMOGRAM X-RAY UNITS BY PHYSICIST

<table>
<thead>
<tr>
<th>Reviewed by: Selin Prasad</th>
<th>Last Reviewed: 09/04/2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved by: Harj Bariana</td>
<td></td>
</tr>
</tbody>
</table>

## SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

## POLICY

The Physicist will perform the acceptance tests on all equipment prior to use:
1. ensure all equipment meets program standards
2. provide a baseline standard of performance for comparative purposes during ongoing quality control testing

## PROCEDURE

Acceptance testing will include assessment of:
1. kVp accuracy & reproducibility
2. mAs consistency
3. timer accuracy
4. phototimer (AEC) consistency
5. beam quality (half value layer measurement)
6. focal spot size
7. radiation, light field
8. output consistency & reproducibility
9. image quality
10. mean glandular dose

Plus will also include checks on:
1. mammography unit
2. detector calibration
3. compression device
ANNUAL CERTIFICATE OF COMPLIANCE CERTIFICATE TESTING BY PHYSICIST

Reviewed by: Selin Prasad  
Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists

POLICY

To ensure optimum high quality mammograms are produced at all times and to maintain patient and staff safety.

PROCEDURE

1. Perform quality of imaging audits.

2. Quality control testing of mammography x-ray unit by Program Physicist.

3. The Physicist will perform quality control testing on mammography unit which will include assessment of:

4. kVp accuracy & reproducibility
5. mAs consistency
6. timer accuracy
7. phototimer (AEC) consistency
8. beam quality (half value layer measurement)
9. focal spot size
10. radiation, light field
11. output consistency & reproducibility
12. image quality
13. mean glandular dose
14. Plus will also include checks on
15. mammography unit
16. grid
17. compression device
SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

To provide a high quality service to women at the lowest possible radiation dose (ALARA) all mammography equipment should be in optimal operating condition.

PROCEDURE

1. A visual checklist is available on QA spreadsheet

2. In the end of the month a radiographer will inspect the mammography unit according to the items on the checklist. The radiographer completing this task will initial checklist. Task will be performed as part of weekly QA at beginning or end of each month.

3. Where the unit complies with checklist a tick will be placed in the corresponding box.

4. If a particular component of the unit does not comply with the checklist a cross will be placed in the corresponding box.

5. If a particular component of the unit requires attention, the radiographer performing the checking will log the fault and urgency of the repair. The radiographer will then notify the on call radiographer

6. Email on call radiographer and senior radiographer of any discrepancies.

See Online Submission developed by State Physicist
### WESTMEAD BREAST CANCER INSTITUTE - BREASTSCREEN NSW SYDNEY WEST

**Site:** NOT APPLICABLE

**MAMMOGRAPHY UNIT MONTHLY VISUAL CHECKS**

Undertaken to note problems on unit, which may need immediate attention or can be noted for next service date. Chief Radiographer or Senior Radiographers to be notified if any problems.

<table>
<thead>
<tr>
<th></th>
<th>JAN</th>
<th>FEB</th>
<th>MARCH</th>
<th>APRIL</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUG</th>
<th>SEPT</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vertical movements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- smooth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Angulation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- smooth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- with ease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>All column controls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Compression device</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- smooth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- auto release</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Compression limit 20N</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- foot / hand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Paddle condition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- uncracked etc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bucky</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- connection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- cassette clips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Accessory magnification</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>assembly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Good condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Control Panel</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- lights, switches, buttons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Accuracy of Breast thickness reading</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Foot pedals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- operating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AEC device moves easy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Initials</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
INFECTION CONTROL – CLEANING THE DETECTOR PLATE

Reviewed by: Selin Prasad  Last Reviewed: 09/04/2016
Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

To prevent cross infection the mammography machine must be cleaned after each examination

PROCEDURE

1. Use disposable wipes provided

2. Wipe down the detector plate, compression paddle and the face shield after every client.

3. Discard the cloth after use
CHAPTER 3
Section: Radiography
Original Date Issued:
Created by: SueDoran /Harj Bariana

INFECTION CONTROL – CLEANING THE ULTRASOUND TRANSDUCER
Reviewed by: Selin Prasad
Last Reviewed: 09/04/2016
Approved by: Harj Bariana

SCOPE
Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY
To prevent cross infection the ultrasound transducer has to be cleaned after every examination

PROCEDURE
1. After ultrasound examination of each client the transducer should be cleaned with neutral wet wipe to remove any gel.
2. Dispose of the wipe into the appropriate rubbish bin.
3. Remove the paper towel from the ultrasound bed and place in the appropriate rubbish bin.
4. Ensure that new paper towel is placed on the bed and that the ultrasound room and equipment is clean and tidy before bringing the next client into the room.
INFECTION CONTROL – CLEANING THE BARD BIOPSY GUNS

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

To prevent cross infection, bard gun is send for sterilization to the sterilization unit after each use. The bard gun is sprayed with the lubricating spray, and placed in the container available in the utility room.

PROCEDURE

1. Following use- the biopsy guns should be wiped inside and out using wipes provided.

2. The biopsy guns should be lubricated with lubricating spray as per manufacturer’s instructions.

3. The biopsy gun should then be placed inside the container provided in the Utility Room

4. The container should be closed at the end of the clinic.

5. The guns should be returned to the consumable cupboard
Maintenance
Instructions for
Bard® Magnum® Biopsy
Instrument

(Product number: MG1522)

Precautions:
• DO NOT use 2% glutaraldehyde or other bactericidal solutions.
• DO NOT sterilize by irradiation.
• DO NOT clean with concentrated chlorhexidine gluconate or any other agent containing alcohol.

Cleaning Instructions:
• Inspect Instrument for signs of deterioration or damage. DO NOT use if signs of damage or deterioration are observed.
• Thoroughly wash the instrument in a mild, warm detergent. Bard recommends hand dishwashing detergent.
• Rinse all parts well with hot water.
• Thoroughly dry the product inside and out.

Lubrication Instructions:
• Use a quality medical grade instrument lubricant compatible with the sterilization methods identified below. Bard recommends the use of the Bard® Magnum® Lubrication Pack, product number L.P.-1522.
• Thoroughly dry the product inside and out.

Bard recommends that the instrument be cleaned and lubricated after every use. The cleaner and lubricant are ETO and steam sterilizable, and will enhance the performance and longevity of the instrument.

Sterilization Instructions:
• The instrument should first be cleaned (see above instructions) and lubricated, then placed in the appropriate packaging materials.
• Sterilization by either ETO at 500mg/l. ethylene oxide, 50%-70% relative humidity (RH) and 120°-130°F, with exposure time dependent on type of vessel OR steam at 250°F for 30 minutes. Flash autoclave conditions are 273°F ± 4°F (134°C ± 2°C) for 18 minutes.
• To ensure effectiveness, sterilization processes should be properly validated and monitored with the proper biological controls. Sterilization operations should proceed according to sterilizer manufacturer’s instructions.
SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

As a regular feedback on the performance of a radiographer a repeat/reject analysis report is performed on each machine. To ensure the radiation dose to clients is kept to a minimum. The number and cause of repeated mammograms will be analysed and a feedback of this information is given to radiographers. Analysis of the data will help identify ways to improve efficiency and reduce costs, as well as reduce patient exposures.

PROCEDURE

- Repeat analysis is done 3 monthly on GE and Hologic Units as per ONLINE instructions

Pitfalls

There is a real danger that radiographers may alter their routine procedures or criteria for accepting films if they know that rejected films will be analysed. This should be avoided. Rejected films are all the films that are in the reject bin. Repeated films are those client films that had to be repeated and resulted in additional exposure to the client.

Performance Criteria

The overall repeat rate ideally should be less than 3%. Percentage rates in each category should be analysed and if any one category is significantly higher than the others this would indicate improvement could be made.
CHAPTER 3
Section: Radiography
Original Date Issued 02/06/98
Created by: Judy Bursle

QA - MAMMOGRAPHY SYSTEM CONSISTENCY CHECK – DAILY Calibration PROCEDURE

Reviewed by: Selin Prasad
Last Reviewed: 09/04/2016
Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

PROCEDURE

1. Switch machine on.

GE Unit:

Switch unit on by pressing the on button on the left hand side of the console

- Log in –user name sdc
- Press enter and log in dialog box will appear
- Type in clinical in lower case for both username and password
- In the next box type - clinical ( lower case )
- Press enter
- Put on cap locks

Daily mammography consistency output check

- Position 4cms of triangular lucite blocks centrally on the receptor. with the long axis centred along the long axis of the image receptor and flush with the chest wall edge
- Compress the blocks to 5dan
- Use Std Auto as the exposure selection
- Expose the Lucite blocks
- Record the kVp mAs and the target filter combination in the online QA submission folder and initial
- Close the case
- In the browser window select the QA exam
- click on the raw data line of the exam
- click on the monitor icon in the right hand side of the screen
- when the image is displayed on the acquisition monitor, select the pencil icon in the image window
- Choose the circle.
• select the + in the middle of the circle (region of interest ROI)
• Using the middle button on the mouse click and drag the circle to the midline of the image approx. 60mm back from the chest wall (Use the default circle size.)
• Record the mean pixel value displayed at the bottom of the images (mean) in the online QA folder and initial

Daily monitor cleaning

• gently clean monitor using a soft lint free (microfibre) cloth
• do not apply pressure to monitor
• record that it has been cleaned on the online QA submission and initial.
TIME ALLOCATION FOR QUALITY ASSURANCE TESTING & PREPARATION BEFORE START OF SCREENING PROCESSES for Mobile Van 28 (VAN 1)

SCOPE
Director Clinical Services, All Radiography/Mammography Technologist, Team Leader Bookings & Reception

POLICY
To ensure that adequate time is provided for performance of Quality Assurance Testing and cleaning preparation for start of Screening Processes

PROCEDURE
If Screening commencing on day of arrival (Allow 1.5 hours)

1. Turn mammography unit on allowing for one hour for coolant to settle.

2. Whilst waiting unpack, tidy and clean mobile van with assistance from receptionist

3. After the hour, turn gantry to the correct position ready for performing mammography. Please refer to the transportation sheet from GE for further information

4. Commence daily and weekly QA including Noise Check

5. Report any issues to On Call Radiographer / GE

If Screening commencing after day of arrival and mammography machine has been turned on by other staff (Allow 45 mins)

1. Unpack, tidy and clean with assistance from receptionist

2. Turn unit on and turn gantry to the correct position ready for performing mammography. Please refer to the transportation sheet from GE for further information
3. Commence daily and weekly QA including Noise Check

4. Report any issues to On call Radiographer and GE
MOBILE VAN PACK UP & UNPACKING INSTRUCTIONS WITH QA & CLEAN UP PROCESS TIME

Reviewed by: Harj Bariana  Selin Prasad  
Last Reviewed: 09/04/2016

Approved by:  Susan Hamill

SCOPE
Team Leader Bookings & Reception, Director Clinical Services, Booking & Reception Staff, All Radiography/Mammography Technologists staff

POLICY
Mobile Van pack up and unpack instructions with QA and clean-up process time

PROCEDURE
Pack Up Instructions

1. Remove all items from Reception desk, and place in draws on side of desk
2. Band all brochures together and together with caddy place in draw under seat, ensuring all brochures are secure with bands
3. Pack all items in cupboards firmly so items cannot move around
4. Bundle client details forms together and place in tub with confidential envelopes
5. Place visitor book in the tub
6. If a tub is not provided please leave items on seat in reception area and the Courier will take items back to BCI head office
7. Remove magazines from bench and place in draws under seat
8. Remove all items from fridge
9. Remove all items from kitchen bench, wrap cups in tea towels / plastic bags and place in draws under seat
10. Pack all movable items in mammography room into the cupboards ensuring they are secure minimizing movement when mobile van is in motion

11. Radiographers to refer to transportation sheet from GE for further information

12. Clean all benches and vacuum and mop floor

13. Turn off lights and air conditioning. NB: Keep the Mammo unit air conditioning ON

14. Place all sprays and cleaning items in green bucket and place in draw under the microwave

15. Place reception desk chair and radiographer stool, mats, rubbish bin and mop in change room and ensure door is locked on both sides

16. IT manager will disconnect and pack away printers, laptop, scanner and phone

Unpacking Instructions

1. If mammography machine has been turned on the day before allowing the coolant to reach optimum temperature Allocate 45 mins for Mammo machine QA processes and clean up time before starting allotting screening appointments.

   If mammography machine is turned on the same day as the move and screening processes are to operate on the same day Allocate 1.5 hrs for Mammo machine QA processes.

2. Place all the stationary items on the Reception desk.

3. Place the magazines and visitor book on the client seat

4. Clean all benches and vacuum and mop floor

5. IT manager will come the day before or few hours before to set up the computer, scanner and phones. Also turn main switch on, on mammo machine

6. Spare Stair case screws are kept in the last drawer of the Reception
CHAPTER 3
Section: Radiography
Original Date Issued: 20/09/02
Created by: Jolan Korompay

COMPRESSION TESTING for GE and Hologic Units

Reviewed by: Selin Prasad
Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY

To ensure that the mammographic system can provide consistent and adequate compression in the manual and auto-power compression modes and that the maximum motorized compression force is within limits. This procedure will be carried out semi-annually and documented in the online QA Spreadsheet.
### OTHER EQUIPMENT AND ACCESSORY CHECKS – VIEWBOXES

<table>
<thead>
<tr>
<th>Reviewed by</th>
<th>Selin Prasad</th>
<th>Last Reviewed: 09/04/2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved by</td>
<td>Harj Bariana</td>
<td></td>
</tr>
</tbody>
</table>

**SCOPE**

Director Clinical Services, All Radiography/Mammography Technologists staff

**POLICY**

To ensure optimum viewing conditions of images.

**PROCEDURE**

1. Clean periodically every week
   
   Any fault report to the maintenance department.
CHAPTER 3
Section: Radiography, Lithgow
Original Date Issued: 25/10/02
Created by: Judy Bursle

RADIATION MONITORING BADGES

Reviewed by: Selin Prasad             Last Reviewed: 09/04/2016
Approved by: Harj Bariana

SCOPE
Director Clinical Services, All Radiography/Mammography Technologists staff

POLICY
To ensure both staff and the public receive the lowest radiation dose achievable x-ray systems and premises will be registered and monitored

PROCEDURE
Radiographers are to wear the personal monitoring device at all times. Radiation is monitored in accordance with WSLHD Radiation safety and NSW EPA Policy. Ensuring this occurs is the responsibility of the Senior Radiographer.

All units are to be registered in accordance with the NSW EPA (Environment Protection Authority) rules and regulations.

Mammography units are registered through Physicist of WSLHD.

The Director Clinical Services and Senior Radiographer are responsible for ensuring all units are registered.

Re-registration and physics testing must be done at each x-ray tube change.
SENORYX ENCOR UNIT AND PRONE VACB SYSTEM SET UP

Reviewed by: Selin Prasad
Last Reviewed 09/04/2016

Approved by: Harj Bariana

SCOPE
Director Clinical Services All Radiography/Mammography Technologists staff

POLICY

The Senoryx Encor system is used in conjunction with the Hologic prone table for the biopsy of non-palpable lesions especially calcifications.

PROCEDURE

Hologic Prone Vacb Unit:

1. To start the system, press the “On” button on the hard drive under the desk.

2. The system will take 10 minutes to get ready for use. A dialog box will appear indicating time lapsed, if any icon is selected, before the 10 minutes is up. Use this time to assemble the compression paddle, stage, phantom, needle guides and needle for the QA.

3. After ten (10) minutes has passed, ‘stereo 512’ mode icon, enter details and make an exposure for the QA.

EQUIPMENT CALIBRATION (QAS TEST)

Tools
- QC needle
- QC needle guide mount and front post adaptor
- Air phantom
- (2) 14g non-sterile needle guides
- Tape
Image Set-up

1. Ensure technique on generator is 8mas at 28vp
2. DIS—acquire STEREO 512 mode
3. Enter annotation
4. Press enter – “WAITING FOR X-RAY TO BEGIN” on DIS and “READY” on generator

Stage Set-up

1. Check compression by manually bringing compression paddle to just touching breast tray – should read within 1mm of 0.0mm
2. Roll QC NEEDLE ON FLAT SURFACE – (if the needle does not roll smoothly the needle may be bent.
3. Set breast tray to 4.5cm
4. Place air phantom in compression to 45-50mm
5. Place needle guide mouth and front post adaptor on stage
6. Place needle guides and QC needle into proper position – ensure that hub of needle rests against the rear needle guide – TAPE HUB
7. Press “MOTOR ENABLE” and “Z POSITION”
8. Set stage so that X and Y read 0.0 on the stage line (dial y to 0.0)
9. Advance needle so that ball touches the reference hole – press “Z-ZERO”
10. Pull back Z just a few mms from paddle
11. Drop Y down just a few mms so that needle can advance into window
12. Advance Z to +0.5mm on stage line – press “Z-ZERO”
13. Set stage line –X = 10mm Y = 20mm Z = 30mm
14. Advance movable needle guide all the way forward
15. Make exposure at POSITIVE 15 degrees first – select “CONTINUE”
16. Make exposure at NEGATIVE 15 degrees – select “CONTINUE”
17. Select “stereo Target” and it will ask “REFERENCE CURSORS OK?”
18. Place cursors on images at centre of ball on QC needle – values should be within 1mm
19. Select “TRANSMIT”
   o If not within 1mm, first select ”STEREO” and then “RE TARGET”, then repeat positioning of cursors
   o If X error – check that movable needle guide is all the way forward
   o If Z error – check that hub of QC needle rests against rear needle guide
   o Then repeat QAS TEST
Trolley Set Up for Vacb procedure:

- Dressing pack
- 20ml Xylocaine 1% with Adrenaline
- Scalpel blade
- Betadine solution for skin prep or Chlorhexidine Acetate for patients with an iodine allergy
- 25G injection needle
- 18G drawing up needle
- Forceps
- 10ml syringe
- Specimen jar with formalin
- Steri strips
- Op-site dressing
- Filter paper
- Needle Guide
- Specimen Cage
- Gauze

For Senoryx Encor Unit

- Vacuum canister
- Vacuum tubing
- Probe -10 gauge
- Vacuum cassette

X-Ray Protocol

- Scout, LT or RT, mass or calcifications and approach
- Stereo compression value
- Needle position
- Marker/Clip (if required)
- Post exam (specimen)
PROCEDURE

Positioning the patient and targeting:

1. Procedure and consent form explained and filled in by doctor performing examination. Verify client has signed the consent form.

2. Nurse to call “Time Out” – see Time out P&P.

3. From looking at the mammograms and discussing with the clinician determine the shortest approach after reviewing the films i.e. the shortest route to the lesion e.g. Lateral

4. Position the patient on the table prone with the affected breast in the hole. The arm on the affected side should be placed alongside the body. The other arm may be placed under the head. The head should be turned to the side and the patient as low to the table as possible.

5. Compress the patient’s breast so that the lesion is at the centre of the compression paddle window.

6. Home the stage by pressing MOTOR ENABLE and HOME.

7. Perform scout x-ray by selecting ACQUIRE 512 IMAGE.
   I. Enter the patient’s details.
   II. In the view box select Scout and highlight LT or RT.
   III. In the comments write ‘scout’, ‘LT’ or ‘RT’, position and approach, calcs or mass, the location of the lesion and number of cm from the nipple e.g. (Scout LT CC Sup Calcs 2oclo 3cmFN).
   1. Click OK and set exposure. The x-ray tube should be at 0 degrees before exposing. Be sure to set an appropriate exposure.
   1.1. Once the image has been acquired click ‘Done’ then ‘Window’ and sharpen the image.

8. Once the lesion has been identified and is in the centre of the field of view.
   I. Lock the keypad of the lo-rad table and inform the patient of the necessity to keep extremely still.
   II. Set up for the stereo set by moving the x-ray tube to +15 degrees.
   III. Expose, once the image has been acquired move the x-ray tube to minus 15 degrees and expose again.
   IV. Once both images have been acquired click, ‘Done’.
   V. Window and sharpen the images.
9. To target the lesion using the mouse select ‘STEREO TARGET’.
   I. A box will appear on the screen, move this over the lesion
   II. Left click once.
   III. Left click again to move box over to the next stereo image.
   IV. Left click with the mouse again to select target.
10. Transmit the target and verify.
11. Be sure that $z + 10 < \text{compression and compression} > 28.

**SETTING UP THE Senoryx Encor Unit**

1. Switch on the unit. Switch located at the back, at the base on the unit.
   I. Assemble the green lid with the vacuum canister. Place the assembled canister inside the unit by opening up the flap lids of the senoryx unit. Close
   II. Connect the central tubing to the central spout of the green lid of the canister. Close the ‘tandem’ opening with the respective lid.
   III. Slot the vacuum cassette, ensuring the ‘spout is facing you.
   IV. 
   V. Connect the tube from the vacuum cassette to the ‘patient opening’ of the green canister lid.

2. Open the probe (needle) packet
   1. Attach the tubing to the end of the probe to the vacuum cassette opening.
   2. Insert the probe into the probe holder making sure the cogs are correctly aligned. Rear first so that it sits flat against the probe holder.
   3. Ensure that the needle is cocked, by pulling the silver lever forward till it’s lose and easy to move. Calibrate the needle by tapping the ‘sample’ foot switch.
The Vacb Procedure:

1. The clinician cleans the patient’s skin.

2. Press MOTOR ENABLE and Z POSITION on the lo-rad table and hold down until the probe stops moving.
   i) Wind the ‘Z’ forward (rear knob) so that the tip of the needle is in line with the middle of the metal piece on the compression paddle. The clinician should estimate this for you.
   ii) Once in the correct position, press Z=0 (number in upper right corner should be zero).

3. Wind the ‘Z’ back approximately 1cm so that when the probe moves to the target position it does not catch on the breast tissue.

4. Press MOTOR ENABLE and TARGET and hold down until the probe stops moving.

5. Wind the ‘Z’ forward so that the needle tip is touching the skin surface. Visually check that the needle position looks similar to the target on the planning images.

6. The clinician injects local anaesthetic at the target site. When the clinician is ready to make the incision, wind the ‘Z’ back so that they can get to the correct location.

7. Once the incision is made wind the ‘Z’ forward so that the differential (number in bottom right hand corner) is minus(-) 2.0. Be sure that the needle moves smoothly into the breast tissue.

8. Clinician will lock the stage and warn the patient that there is going to be a loud click (as the needle enters the breast)

9. the clinician fires the needle.

10. Sampling will now occur by pressing the foot pedal of the senoryx encore unit – (clinician does this)

11. Sample according to Senorx and Hologic manuals - starting points can be varied by selecting different buttons on Senorx machine (refer to manual)
Radiographer:

i. Place a sheet of damp filter paper on the trolley for the specimens.
ii. After sampling, X-ray the specimens using manual exposure factors.
iii. Leave the needle/probe in the breast until the specimen image has been checked. If the calcs are visualised within the specimen no more sampling is required.

One person must remain in the room with the patient at all times.

Inserting Metal Clip Marker

If a metal marker is required:
1. Open a sterile marker for the clinician.
2. The clinician will insert the marker into the open chamber.
3. Clip marker is deployed by selecting the ‘marker’ tab on the senoryx touch screen. Once the clip has been inserted into the probe, press on ‘rotate maker’ on touch screen of senoryx encore unit.
4. Take a stereo pair annotated as ‘marker’ to check marker position.
5. Remove the probe and holder from prone table and discard the tubing, canister and probe.
6. Unlock the keypad of the prone table and release the compression.
7. Move the table down and get the patient to turn onto their side facing you.
8. Pressure is applied to the wound until bleeding stops and then is dressed with steri strips and a dressing.

10. Warn the patient that if they feel they need to take a painkiller, do not take aspirin as this may increase bleeding and result in a large haemotoma (bruise).

11. Once this has been done the specimens can be placed in a jar of formalin and sent off to pathology. *Remember to place a pathology form and the x-ray of specimens in the pathology bag.
12. At the Hologic workstation print out an image of the examination for the reporting radiologist. Select the SCOUT image on the left side of the screen and the last image taken on the right.

13. Core specimen’s Image can be magnified and centered at the workstation.

14. For diagnostic referrals, the procedure has to be reported by the radiologist. The patient is then allowed to leave (check follow up appointment).

15. For Diagnostic sessions:
   The following details should be recorded on the back of the request form:
   1. The Doctor who performed the procedure
   2. The breast side the biopsy was performed
   3. The type of the lesion - calcifications, mass or distortion
   4. The position of the lesion and distance from the nipple
   5. The approach used – superior, inferior, lateral or medial
   6. If a clip was deployed
   7. How many samples taken and whether calcs seen in specimen
   8. 

16. The table needs to be cleaned. And paddle should be send to DSSU for sterilization.

17. On the monitor workstations use the mouse to click on the open door icon at the bottom on the menu bar.

18. A dialog box will appear stating do you want to quit, select YES. This is followed by another dialog box No. of cases to be archived. Click on ‘Yes’. The system will switch off after archiving.

**Summary of Completing the biopsy**

1. Remove the needle and driver from the breast.
2. Release compression.
3. Turn the patient to the supine position and steri-strip the incision.
4. Apply a compression dressing to the wound.
Troubleshooting the procedure

1. Breast compression should be a minimum of 40cm

2. Breast plate can either be on 4.5cm or 6cm depending on the thickness of breast. The correct breast platform will be indicated when the compression tab is clicked on the acquisition screen (the patient information screen)

3. Sometimes the position of the furthest approach works better to get the probe well inserted and to maintain good vacuum suction.

4. One can inject anaesthesia through the probe to give local anaesthesia after the biopsy has been performed.

5. A post-procedure mammogram will show the clip position before the patient leaves on the day of the biopsy.

6. This gives good baseline along with information about how to do a needle localisation should it be needed.
### ASSESSMENT CLINIC Procedure

<table>
<thead>
<tr>
<th>Reviewed by</th>
<th>Last Reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selin Prasad</td>
<td>09/04/2016</td>
</tr>
<tr>
<td>Approved by</td>
<td></td>
</tr>
<tr>
<td>Harj Bariana</td>
<td></td>
</tr>
</tbody>
</table>

#### SCOPE

BCI Clinic Admin Manager, Director Clinical Services, Senior Radiographers, All Radiography/Mammography Technologist, BCI NUM

#### POLICY

Senior Radiographers will be responsible for the co-ordination of the assessment clinic. The Breast Care Nurse will assist to ensure the smooth operation of the assessment clinic.

#### PROCEDURE

1. The front line receptionist “arrives” the clients that have been given appointments to attend the assessment clinic on the BIS. Breast Care nurse / Health Care Professional informed of the arrival of the client.

2. The Breast Care nurse / Health Care Professional explains and obtains a signed consent form for attendance to the assessment clinic.

3. Radiographers acquire information on work up views from BIS by clicking on the ‘reader’ information and Sectra IDS7. With consultation with the radiologist further views are performed, plus or minus targeted ultrasound.

4. The breast care nurse liaises with radiographers, radiologist, surgeon, pathologist, sonographers and counsellors to ensure clients are attended to in turn and in a timely manner.

5. Every effort should be taken by all radiographers and nurses to tick the Recall Assessment clinic sheet at each stage appropriately. See P&P “Recall Assessment Clinic List”.

---

Supporting Women with Breast Cancer – Today and Every Day
eVersion 3 – 2016  Page 102
6. All images are available to the radiologist on the workstation.
   • If there are no further investigations to perform the radiologist discusses with the client in private the outcome of the investigations. The client is informed of recommendation to return to screening when they are due next for their screening round. A radiological report is sent to the GP and a “normal” letter to the client.
   • If Biopsy is required, the surgeon or breast physician performs a clinical examination, documents a medical history and consents the client after explaining what the procedure will involve.

7. When the client is returned to the biopsy room, the radiologist checks that the consent form is signed and then proceeds to obtain verbal consent from the client.

8. Before proceeding with the biopsy “Time Out” procedure is carried out. See P & P “Patient Identification – correct patient, correct site, correct procedure”

9. Once all checked, the biopsy is performed.

10. At the end of the clinic
   • Any used ‘compression paddles’ from the prone table and forceps to be sent to for sterilisation at DSSU. Ensure one sterile paddle will be available for the next day.
   • Bard Guns for sterilization sent to DSSU department
   • Check supply cupboard and make list of consumables necessary to restock for next clinic.

11. Radiographer to ensure all units are turned off, rooms are clean before leaving.
CHAPTER 3
Section: Radiography, Assessment
Original Date Issued: 23/04/15
Created by: Sue Doran

MT DRUITT BREAST ASSESSMENT CLINIC

Reviewed by: Selin Prasad
Last Reviewed: 09/04/2016
Approved by: Harj Bariana

SCOPE
Director Clinical Services, All Radiography/Mammography Technologists staff and Breast Care Nurses,

POLICY
Senior Radiographer will be responsible for the co-ordination of the assessment clinic. The Breast Care Nurse will assist to ensure the smooth operation of the assessment clinic.

PROCEDURE
1. The front line receptionist “arrives” the clients that have been given appointments to attend the assessment clinic on the BIS. Breast Care nurse / Health Care Professional informed of the arrival of the client.

2. The Breast Care nurse / Health Care Professional explains and obtains a signed consent form for attendance to the assessment clinic.

3. Radiographers view the images on Sectra IDS7 and “Reader’s informationon BIS to To acquire information for work-up views. With consultation with the radiologist further views are performed, plus or minus targeted ultrasound.

4. The breast care nurse liaises with radiographers and radiologist to ensure clients are attended to in turn and in a timely manner.

5. Every effort should be taken by all radiographers and nurses to tick the Recall Assessment clinic sheet at each stage appropriately. See P&P "Recall Assessment Clinic List”.

6. All images are available to the radiologist on the workstation. If there are no further investigations to perform the radiologist discusses with the client in private the outcome of the investigations.
The client is informed of recommendation to return to screening when they are due for their next screening round. A radiological report is sent to the GP and a “normal” letter to the client.

If Biopsy is required, the Breast Care Nurse will give the client an appointment to return in the afternoon after 1.00pm to return for further investigations. When the client returns for the afternoon appointment, the surgeon or breast physician performs a clinical examination, documents a medical history and consents the client after explaining what the procedure will involve.

7. When the client is returned to the biopsy room, the radiologist checks that the consent form is signed and then proceeds to obtain verbal consent from the client.

8. Before proceeding with the biopsy “Time Out” procedure is carried out. See P & P “Patient Identification – correct patient, correct site, correct procedure”

9. Once all checked, the biopsy is performed and the samples processed according to P&Ps

10. At the end of the clinic
   - Any used biopsy guns are sent to DSSU department for sterilization
   - Any samples to be taken to pathology department
   - Check supply cupboard, update stock list on I:Drive: Clinic:/mtdruiit assessment
     clinic/stocklist
   - Email Clinical Support officer a list of consumables necessary to restock for next clinic
   - Record stats for the clinic on i/imaging/mtdruiit assessment clinic/stats

11. Radiographer to ensure all units are turned off, rooms are clean before leaving.
**CHAPTER 3**

**Section: Radiography, Assessment**

| Original Date Issued: 23/04/15 |
| Created by: Sue Doran |

**MT DRUITT SPECIMEN IMAGING USING TRIDENT UNIT**

| Reviewed by: Selin Prasad | Last Reviewed: 09/04/2016 |
| Approved by: Harj Bariana |

**SCOPE**

Director Clinical Services, All Radiography/Mammography Technologists staff and Breast Care Nurses,

**POLICY**

This procedure enables the imaging and identification of calcification in the specimen

**PROCEDURE**

1. Turn on the unit by pressing the on/off button on the front of the CP unit
2. Log in user name – specimen and password user
3. Select patient name from worklist
4. Select open and choose left or right specimen
5. Open door to the unit
6. Place specimen (specimen should be on a dampened sheet of filter paper) on magnification plate which should be at the highest position
7. When screen displays ready press Xray button on the front of the cabinet, keep depressed for several seconds – there are 2 exposures
8. If the image is adequate select accept
9. Select archive button on right hand side of screen and send to Sectra Pacs
10. Open procedure by clicking +
11. Select pres image and send
12. Select Close patient button on screen
13. Staff member to complete and fax this form to 9845 8834 and give to Pathologist
14. Radiographer to phone Westmead work station/area (9845 5653 ) and request that the clients specimen film be printed and given with the faxed form to Pathologist attending the Westmead afternoon assessment clinic
CHAPTER 3

Section: Radiography

Original Date Issued: 1 July 1996
Created by: Judy Bursle

ULTRASOUND EQUIPMENT – QA TESTS

Reviewed by: Selin Prasad
Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Director Clinical Services, Breast Sonographers

POLICY

To ensure ultrasound equipment is performing to manufacturers specifications. The following is the procedure used if using an RMI Phantom.

Ultrasound Service Engineers perform and document tests at scheduled maintenance service.

PROCEDURE

1. Dead Zone
   The dead zone or “ring-down” distance is measured with the top group of rods. The distance from the transducer face to the first rod whose echo is resolved from the reverberation is the length of the dead zone.

   With the mechanical annular array transducer, the dead zone does not interfere with imaging due to acoustic fluid providing a ‘stand-off’. This means the surface of the test object can be easily resolved.

2. Vertical Depth Calibration
   This is performed with the vertical group of rods just off centre line of the phantom. All targets should be displayed simultaneously. Accuracy is checked by comparing the caliper distance with the known separation between rods in the phantom (1cm separation). Measurements should be performed in the:-

   • near field  distance between the top 2 rods
   • far field  distance between the last 2 rods resolved

   and the distance between the top and bottom rods to identify any error in vertical depth miscalibration.

   Note: Accuracy should be within 2% of actual known separation distance.
3. **Lateral Resolution or Beam Width**
   This can be measured with the vertical group of rods used for depth calibration. The rods will appear as short horizontal lines which approximates the lateral resolution at that depth. Measure the lateral resolution at a point in the near field, focal zone and far field. (Specify depth for each position measured)

   **Note:** The lateral resolution should be within the manufacturer’s specifications; typically values range from 0.5mm to 10mm and should not vary week to week by more than 1mm.

4. **Axial Resolution**
   Axial resolution is measured using the nylon resolution pattern, set at a depth of 3cm. Axial resolution is the spacing of the two closest rods in the group which can be resolved.
   
   (3mm)
   (2mm)
   (1mm)
   (0.5mm)

   **Note:** The consistency should not vary by more than 1mm.

5. **Sensitivity**
   Adjust the instrument settings to barely resolve the bottom rod. The fading of the parenchymal scatterers indicates the depth of penetration.

   **Note:** There should not be a change of more than 6dB or 1cm depth of penetration

6. **Uniformity**
   Simply check that the tissue texture pattern is uniform in intensity across the image at a particular depth of penetration, near field, focal zone and far field.

7. **Geometric Distortion**
   Using the 6mm solid ‘tumour’ object in the phantom, visually check that the image on the screen is a well-defined circle and not an ellipse.

8. **Physical and Mechanical Inspections**
   An inspection of the transducer, power cords, controls and system cleanliness to ensure satisfactory operation and condition.

9. **Hard copy fidelity**
   A comparison of on-screen image and hard copy image should be made to ensure that the weakest echoes visible on the display are visible in the hard copy image.
CHAPTER 3

Section: Radiography

Original Date Issued: 1 July 1996
Created by: Judy Bursle

ULTRASOUND INSTRUMENTATION AND QUALITY CONTROL

Reviewed by: Selin Prasad

Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Director Clinical Services, Breast Sonographers

POLICY

1. List of Ultrasound Instruments

Westmead Breast Centre

Philips IU22 (2 units)
Phillips Epiq

2. Ultrasound Quality Control

The quality control checks are to be performed at the six monthly services by the manufacturer’s Service Engineer. (NAS 2.9.3 standard is six-monthly).
PERFORMING BREAST ULTRASOUND

Reviewed by: Selin Prasad  
Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Director Clinical Services, Breast Sonographers

POLICY

This procedure is performed primarily for highly targeted investigations of a specific mammographic or clinical abnormality and to differentiate cystic from solid masses. Upon identification of an area of interest, a FNAB or core biopsy may be conducted under ultrasound guidance.

PROCEDURE

1. Review patient’s mammography films and radiologist report, patient history form and any previous mammogram/ultrasound films prior to commencing the examination. Determine where the suspicious lesion is to be located within the breast

2. Select patient information from the worklist on the ultrasound machine complete by entering the sonographers initials and attending radiologist initials in the appropriate area

3. Ensure that new paper towel is placed on the bed and that the ultrasound room and equipment is clean and tidy before bringing the client into the room

4. Greet the patient by introducing yourself and explaining the procedure

5. Position the patient supine on the bed with the side to be examined raised on a 45 deg. sponge and the arm extended above the head to flatten and extend the breast.

6. Apply liberal amount of gel to the area to be examined. Ask the patient if she is aware of any symptoms such as pain, palpable lumps. Palpate any areas of concern and correlate this with the ultrasound image.
7. Using a radial or quadrant technique image the entire area of concern. Use slow, smooth sweeps of the transducer to assess anatomy, continuity of tissue plains, distribution of glandular tissue, fatty tissue and location of any lesions.

8. Maximize your image by adjusting focus, gain, dynamic range and depth.

9. Record any lesions in the area of interest including information on location, size and vascularity
   When a lesion is found, it must be scanned in all directions to carefully evaluate its
   - Shape
   - Margins
   - Internal echo texture
   - Relationship to and effect on surrounding tissue
   - Affect on the ultrasound beam e.g. posterior enhancement
   - Compressibility

10. The lesion should be imaged in the transverse, sagittal or both oblique projections. It should also be measured in three planes- longitudinal, AP and transverse, at the widest dimensions.

11. Document the location of the lesion by its position on the clock face and by its distance from the centre of the nipple.

12. Ensure that the correct lesion is identified and that it corresponds to the mammographic lesions.

13. If no specific abnormality is detected take four images to represent the breast tissue in that Quadrant

14. Always have the marker on the edge of the transducer positioned to the left, when imaging, to ensure reproducibility of images.

15. Once the examination is complete send the images to the pacs and call in the radiologist to review the examination.

16. Transducer must be cleaned with approved cleaning agent and the paper sheet covering the exam bed replaced following each examination.
Supporting
CHAPTER 3

Section: Radiography

Original Date Issued: 30/03/95
Created by: Helen Dumford

ULTRASOUND GUIDED BIOPSIES

Reviewed by: Selin Prasad
Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Director Clinical Services, Breast Sonographers

POLICY

This procedure aids in the accurate biopsy of lesions that has been identified by ultrasound

PROCEDURE

1. The patient's mammography and ultrasound images should be available for review using the PACS system.

2. The patient is positioned as for the diagnostic ultrasound examination with the affected side raised

3. The ultrasound probe needs to be prepared so to avoid contamination:
   - Place a generous amount of gel on the transducer face and place plastic wrap over this, ensuring there are no air bubbles smooth the wrap down to the electrical cord at the base of the transducer and secure by wrapping around the cord

4. The biopsy trolley must be placed in the room and prepared as per P&P Assessment Clinic – Trolley Setup (subject to Radiologists preferences)

5. The radiologist is notified that the procedure is ready to commence.

6. Ultrasound gel can be substituted by the Iodine or chlorohexadine solution for a contact medium. Care must be taken to ensure that solution does not come in contact with the transducer face.

7. After completion of timeout and review of signed consent form the biopsy can begin

8. The lesion needs to be located and remain visible on the screen throughout the procedure
9. Upon insertion of the biopsy needle the probe needs to be held in the SAME plane as the needle so as to allow good visualisation of the needle location.

10. Upon visualisation of the needle into the lesion take an image demonstrating the needle tip within the lesion.

11. All images should be annotated with the lesion position, the type of procedure and the pass number e.g.; FNA/pass 2

12. This procedure may need to be repeated for several passes through the lesion.

13. At the end of the examination- pressure should be applied to the area and post biopsy care and information given appropriate to that biopsy – e.g. Core or FNA

14. Sharps should be removed by the radiologists and placed into a sharps bin

15. Biopsy trolley should be cleared by placing items if only lightly soiled (no heavy blood stains) into the blue waste bags, tied and placed into general rubbish bin

16. Biopsy trolley should then be wiped using neutral wipes supplied and wipe disposed of into rubbish bin

17. Plastic wrap should be removed from transducer and transducer cleaned as per P&P- cleaning the ultrasound transducer
SCOPE

All staff

POLICY

To ensure that BCI staff and clients immediately report any needle stick injuries and receive appropriate and timely care of any injuries.

PROCEDURE

If a staff member is a recipient of a needle stick injury she/he will report immediately to their Senior Manager. If a client is the recipient of the needle stick injury the client will be referred to the Assessment Clinic Coordinator and the Breast Care Nurse (BCN).

The recipient of a needle stick injury will be given immediate local care of the wound by a BCN or other qualified staff member following the flowchart information. This includes encouraging bleeding; washing the area with soap and water and then applying clean dressing.

If the needle stick injury involves a client, the staff member is required to inform the person of what had occurs and if possible request that their consent to have appropriate blood tests. If consent is obtained, request forms are completed and the clients has blood taken.

Refer to the red “Information Sheet – For Staff Members who have Occupational Exposure to Blood or Body Fluids” posted on the WH&S board, located in appropriate visible location in all clinic and staff areas for more detailed information.

An IIMS form is to be completed online.
CHAPTER 3

Section: Radiography, OH&S

Original Date Issued: 10/10/02
Created by: Harj Bariana

YELLOW Sharps BIN/Yellow Clinical Waste Bag

Reviewed by: Selin Prasad

Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Director Clinical Services, All Radiography/Mammography Technologists staff

POLICY

The purpose of the yellow sharps bin is to dispose any sharps that has been used during a procedure. The yellow clinical waste bag is to be used to dispose of heavily soiled items.

PROCEDURE

All heavily contaminated waste to be placed in the yellow clinical waste bag provided

NB: No Sharps to be placed in this bag.

1. The bag should be sealed and disposed of in the yellow contaminated bin provided for.

2. Yellow clinical waste bag/bin is located in every room.

3. When bin is full, replace with a new one from dirty utility room.

Yellow Sharps Bin:

- Is located either on the wall of each room or a mobile bin is available
- All sharps to be disposed of in this bin
- once full, close the lid and dispose the bin in the clinical waste yellow bin in the Utility Room
### ASSESSMENT – POST CORE BIOPSY CARE

<table>
<thead>
<tr>
<th>Reviewed by: Selin Prasad</th>
<th>Last Reviewed: 09/04/2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved by: Harj Bariana</td>
<td></td>
</tr>
</tbody>
</table>

**SCOPE**

Director Clinical Services, Radiologists, Breast Physicians, Clinical Coordinator, Breast Care Nurses (BCN), All Radiography/Mammography Technologists staff

**POLICY**

After a biopsy procedure has been performed, care has to be taken to avoid infection and bleeding from site of biopsy.

**PROCEDURE**

**POST BIOPSY DRESSING**

1. Radiographer/enrolled nurse/Breast Care Nurse assisting Radiologist should be wearing disposable gloves so as to apply pressure to site of biopsy in between procedure. After procedure, apply pressure to the biopsy site for 5 to 10 minutes.
2. Place steri-strips over incision site by pulling edges together. Cover steri-strips with a small opsite (waterproof dressing). Apply ice pack wrapped in rediwipe.
3. The client is then instructed regarding post biopsy care and care instruction sheet is given.

**POST BIOPSY CARE**

4. Client may return to work or other activities the day of the procedure providing her work/activities do not involve heavy lifting or strenuous athletic activities. The following day all activities should be well tolerated.
5. Leave waterproof dressing on for 48 hours, and then remove. Leave steri-strips in place until they fall off or for 7 days. Provide patient with After Core Needle Biopsy information sheet for further details and contact numbers if any concerns.
6. Client may shower as normal. If any concerns contact Breast Care Nurse at Westmead Breast Cancer Institute or their GP.
After Core Needle Biopsy

Here are some suggestions on how to care for your breast following today’s needle test.

You have been given a small ice pack to put over the biopsy area in order to reduce the swelling and minimise the discomfort. Please keep this in place, inside your bra, for about 1 hour or until the ice has melted. Then you can dispose of the plastic pack or store in the freezer in case you want to use it again later in the day.

The biopsy area has been dressed with steri-strips (paper tapes) and a waterproof dressing. You will find that this small wound heals quickly. You may wash or shower with the dressing in place and remove the dressing 48 hours after the biopsy. The steri-strips will fall off over the next 7 days.

You may experience some discomfort in the area of the biopsy as well as some bruising. If you need painkillers for the discomfort paracetamol-containing products are recommended (for example Panadol® or Panamax®). Avoid taking aspirin or anti-inflammatory medications for 24-28 hours as this could make the bruising worse.

Should you experience pain, fever, redness or swelling of the surrounding skin, then you may have an infection needing antibiotics. You can ring the clinic for advice during business hours or contact your general practitioner (GP) or hospital emergency department after hours.

At the time of the biopsy, you should have been told when to expect results, either at a ‘follow up’ appointment with a surgeon or other clinic doctor, your GP or at BreastScreen Sydney West. Your GP will normally receive a full written report when the results are available if you have provided your doctor’s details.

Should you have any further concerns, please contact the Breast Care Nurse at:

The Westmead Breast Cancer Institute
9845 8472 or 9845 8888
SCOPE

All Staff

POLICY

Sharps are to be disposed in accordance with the EPA Standards.

PROCEDURE

1. Recognised sharps containers to be used on all occasions.

2. All sharps to be disposed of safely according to the Infection Control guidelines.

3. Once the container is full it is to be sealed by the user and put in the yellow clinical bin in a dirty Utility Room

4. Replace with a new sharps bin.
RADIOGRAPHY – OH&S BLOOD SPILLAGE

Reviewed by: Selin Prasad

Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Director Clinical Services, All Radiography/Mammography Technologist, Radiologists

POLICY

To ensure the health and safety of all staff when dealing with any blood spillage

PROCEDURE

If there are any body fluids or blood spillage, after any procedure,

1. Put on a pair of gloves before cleaning the machine thoroughly with warm soapy water

2. Then clean the machine with wet wipes provided

3. All materials heavily stained with body fluid and blood must be disposed of in contaminated yellow clinical waste bags.
CHAPTER 3

RADIOGRAPHY – OH&S – USE OF GLOVES FOR MAMMOGRAMS

SCOPE

Director Clinical Services, All Radiography/Mammography Technologists staff

POLICY

To avoid cross infection from either the radiographer or the client, gloves are worn when a risk is evident.

PROCEDURE

Disposable gloves are available for radiographers use. The use of gloves is optional but should be worn if

- Radiographers have open cuts on their hands
- Client has excessive rash on the breast, particularly under the breast where bleeding may occur.

Non sterile disposable gloves are at all units and must be reordered when supplies are running low.

Clients with open or weeping sores on the breast should be re-booked.
CHAPTER 3
Section: Radiography
Original Date Issued: 18.11.08
Created by: Vanessa Sands

DATA REQUIREMENTS FOR RADIOGRAPHERS USING THE DIGITAL GE MACHINE FOR DIAGNOSTIC PROCEDURES for all modalities

Reviewed by: Selin Prasad     Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE
Director Clinical Services, All Radiography/Mammography Technologists staff

POLICY
To ensure all digital images for one client are match in the archive it is vital correct data entry of client details occur

PROCEDURE
Data requirements for Radiographers using the Digital GE Machine

To start your session either work from a work list or from the client’s notes. Only enter data into the fields below, leave other fields blank.

If you make an error in typing data in, you may be able to correct it before you start the exam/rays. Once you have started the exam and completed the patient you will not be able to edit the information. If, at this stage you notice that a name is misspelled or an ID number, or a DOB is wrong please make a notation of it on the file, so that data staff can correct at Parramatta.
Take note of Identification label sample that is used on the client’s notes below

Medical Record number is the PID = Patient identification number.

<table>
<thead>
<tr>
<th>PID= Patient ID</th>
<th>MRN: 123456</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARY JANE SMITH</td>
<td>Age: 52</td>
</tr>
<tr>
<td>21 MAIN STREET</td>
<td></td>
</tr>
<tr>
<td>LITHGOW 2222</td>
<td></td>
</tr>
<tr>
<td>DOB: 14/03/56</td>
<td></td>
</tr>
<tr>
<td>Accession number: 04-MA-08-5155321</td>
<td></td>
</tr>
<tr>
<td>Phone: 6525 2245(w)   6525 4478 (h)</td>
<td>Date of Mammo: 15/07/08</td>
</tr>
</tbody>
</table>

Date of Birth
Film ID = Accession Number
Study
/Exam date (Automatically inserted)

On the Acquisition Monitor, enter information in the following fields below:

All information is to be entered in CAPITALS

1. LAST NAME
   Enter the client’s surname, press Enter or TAB key

2. FIRSTNAME
   Enter the client’s first name. Press Enter or TAB key
   Do NOT enter middle name or initial.

3. PATIENT ID
   The full MRN (medical record number) for clients having a digital mammogram is found on the label on the top left hand corner of the referral form. Enter the full number as displayed eg: 023156

Fields from Label
- Last Name
- First Name middle name (no commas)
- PID start with 500-599
- Date of Birth, month first, then day and year
- Accession number as per label eg: 04-MA-08-5155231
Enter as 023156 then press enter or TAB Key

4. DATE OF BIRTH
Enter the Date of Birth. E.g. 14/3/1956 as:-

Enter date of birth in the American manner i.e.
Enter month first then press space bar
Enter day (number) then press space bar
Enter year e.g. 1956 then press space bar.
Then press enter.
The date of birth will then display
14 MAR 1956.

5. SEX
Select with the mouse “F” – this can be set as a default.

6. IMPLANTS
If it is a new client, you will be able to tell this from the consent form, or you may ask the client. Note this information needs to be transcribed onto the radiographer bag.
If it is a rescreen client, please check on the consent form.
Select “Yes” on the monitor using the mouse.

7. ACCESSION NUMBER
Enter the client’s accession number, from the client’s identification label. This ID is found below bar code on the label.
Enter as for example: 04-MA-08-5155321

8. OPERATOR
Enter the Radiographer’s initials

E.g. for Jane Smith, enter as JS
CHAPTER 3
Section: Radiography
Original Date Issued: 18.11.08
Created by: Vanessa Sands

PROTOCOL FOR UPRIGHT STEREOTACTIC BIOPSY (GE Machine)

Reviewed by: Alison Hudson
Last Reviewed: 30/1/13

Approved by: Harj Bariana

SCOPE
Chief Radiographer, All Radiography/Mammography Technologists staff

POLICY
To ensure the proper use of the stereo unit, the following protocol will be used to biopsy breast lesions under mammographic control.

PROCEDURE
Using the GE senographe digital imaging unit with the gantry at 0 degrees
1. Remove the face shield, remove the compression paddle and move the compression as high as possible

2. Remove the bucky and attach the stereo unit by sliding on and securing by using the latches (same as the normal bucky)

3. Move the unit into position e.g. cc or lat

4. Position the unit to the correct height for the patient then select angulation mode by pressing the top button on the stereo unit marked number 1 (this disengages the tube from the bucky and allows the stereo images to be acquired)

5. Before starting the exam, check that the type of exam displayed on the monitor shows as stereo

6. Select the correct patient’s details from the worklist and press start exam

7. Move the stereo compression paddle (with large aperture) to maximum height using large knob on side of unit
8. Position the needle holder in the park position by pressing button marked “P” (1st of row of three) the next button should flash green (to move the needle holder the needle path should be closed. To do this push small plastic tag between needle guides into the needle path by pushing small slide lever on needle post)

9. The client should be placed in the correct position on the biopsy chair – to facilitate the correct mammographic approach

10. Proceed with positioning the patient so that the area of concern is within the aperture on the compression paddle

11. Compress the breast until skin is taut and advise the client not to move.

12. With the gantry at 0 degrees, take a scout image of the breast using auto mode.

13. When the scout view is displayed, click over the small reference markers (with the top button either side of the mouse) and using the roller ball drag them into position directly over and corresponding to the large inverted T

14. Take two images at +15 degrees and -15 degrees (either first) using the large button the gantry will not move until previous image has been acquired and will stop at 0 degrees before travelling on, the unit remembers the exposure used for the scout and will use that for the stereos.

15. When both stereos have been acquired press the stereo option button on the monitor next to tools, then on the top images click over the area of interest using the lowest mouse button, this will centre the area on the lower enlarged images

16. Click on the new primary button to target, click and drag (using the top mouse button and roller ball) the marker over the area of interest on both stereo images separately

17. Click on show epipolars to show the Z coordinates are the same (0 is the base plate, count the scale from the base plate to the markers, this should be the same) then click on hide epipolars

18. Click on check on scout to make sure targets correspond to area of interest,
19. Then click on Needles and Punctures and choose the needle being used, read the information in the bottom panel under the needle description and act on that (e.g.: corrective action needed - click OK) and when target ready to send hit the send button then wait for 30 secs

20. At the stereo unit press the go to target button (the second button on the lower level of the unit, with an arrow next to it) the green light should flash, when the target position is reached the coordinates on the small display panel at the unit should read X=0 Y=0 Z=0

21. Open the needle path by moving the small plastic slide lever

22. Fit bushing (metal, large in bottom - for senoryx unit) then fit plastic needle guide in to bushing to correspond with needle size

23. The doctor then cleans patients skin, administers local to the area, makes small incision in the skin and then positions needle in the target position and proceeds with the biopsy

24. Stereos can then be taken as pre sample films – (to make sure patient still in position,) and/or a single post sample picture can be taken by returning the tube to 0 degrees using the large) button, closing the needle path and returning the needle to the park position and can be compared by pressing the check on scout button, this will appear on the top of the monitor.

25. Any pictures can be brought to the screen by clicking on them in the series view at the top left of the monitor.

26. Select the films not being printed using the quality check “Not OK” button at the bottom of the monitor

27. Before releasing the compression the exam folder must be closed, (then return tube to 0 degrees, close needle path and return to park if not done before) then release the compression to the top of the column using the large knob at the side of the unit then engage the angulation by pressing the top button on the unit marked number 1

28. Remove patient and then remove and clean stereo unit and senographe unit before replacing bucky, face shield and compression paddle.
29. Remember to remove the white plastic needle guide a from the steel bushing. White guide is disposable the steel one is washed and kept.

Several things to note are –
If compression is changed a new series will begin and the scout or any other films taken will not be saved
Only the last target chosen will be able to be targeted, you cannot recall previous targets as the unit only remembers the last set of co-ordinates.

The XY&Z coordinates on the monitor and on the small panel are not the same, when the needle reaches the target, the coordinates on small panel on unit will be 0

If the patient has moved you can manually move to the new area by changing X which moves ↔ and Y which moves ↑ + nearer chest wall and Z which moves the depth + towards the receptor plate.

NOTE: Refer to P&P:
PROTOCOL FOR USE OF SENORYX Encor UNIT WITH GE UPRIGHT STEREOTACTIC BIOPSY ATTACHMENT –Mount Druitt Clinic, for more information.
TO switch ON/OFF PHILLIPS ULTRASOUND MACHINE

Reviewed by: Selin Prasad
Last Reviewed: Harj Bariana
Approved by: Harj Bariana

SCOPE

Director Clinical Services, All Radiography/Mammography Technologists staff

POLICY

To switch on the Phillips Ultrasound machine –IU22 and Epiq

PROCEDURE

1. Switch is located on the left hand side of the console, above the keyboard on IU22. Switch is located on the console on left hand side.

2. Press the ON switch

3. A green light next to switch will be activated.

4. The initializing software will begin. The software requires approximately (4)four minutes to start

5. To turn off press the ON/OFF switch, next to the green light once.

6. Ultrasound machine will initialize shut down procedures.
USE OF SENORYX Encor UNIT

Reviewed by: Selin Prasad  Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Director Clinical Services, All Radiography/Mammography Technologists staff

POLICY

The Senoryx Biopsy system is used in conjunction with the GE upright Vacb, Hologic Prone and Upright Vacb unit, for the biopsy of non-palpable lesions especially calcifications.

PROCEDURE

Set up of unit:

1. To start the unit, press the “On" button
2. Depress the black paddles at the back of the unit to pivot the tray out of the way to access the vacuum canister area. Place the lid on the vacuum canister and close the large and tandem holes with their respective lids. Insert canister into the unit and use the tube provided to attach to the central hole.
3. Replace the tray above the canister unit and cover the tray with a disposable bluey sheet.
4. When instructed by radiologist to open needle and tubing (after area of interest located on the monitor). Open vacuum tubing and attach to the unit pushing it firmly into place. The back tube attaches to the “Patient” hole on the canister.
5. Open biopsy needle and attach the tubing to the vacuum set.

As per operators manual
I:\Imaging\EQUIPMENT\equipment brochures manuals/EnCor Enspire Quick Ref Guide

Calibrate following instructions on screen and using operators manual.

After use: Dispose of needle using correct OHS instructions. Wipe down unit to prevent cross infection.
CHAPTER 3
Section: Radiography
Original Date Issued: Created by: Susan Doran

PROTOCOL FOR USE OF SENORYX Encor UNIT WITH GE UPRIGHT STEREOTACTIC BIOPSY ATTACHMENT – Mount Druitt Clinic

Reviewed by: Sue Doran Last Reviewed: 02/04/15

Approved by: Draft

SCOPE
Director Clinical Services, All Radiography/Mammography Technologists staff

POLICY
To ensure the proper use of the senoryx encor unit, the following protocol will be used to biopsy breast lesions under mammographic control.

PROCEDURE
Using the GE senographe digital imaging unit with the gantry at 0 degrees

1. Remove the face shield, remove the compression paddle and move the compression as high as possible
2. Remove the bucky and attach the stereo unit by sliding on and securing by using the latches (same as the normal bucky)
3. Remove compression paddle from the stereo unit and place the white attachment to the top of the unit
4. Hold the u shaped clip below the needle guides and secure white top to u shaped bottom using long screws – re attach compression paddle to unit
5. Procedure explained and consent form completed by doctor performing examination. Verify client has signed the consent form.
   “Time Out” performed – see Time out P&P.
6. Position the patient with the area of interest within the aperture and compress the breast
7. Acquire the scout images and follow protocol for upright stereo upto point 21
8. Fit metal bushings into the bottom needle guides then fit appropriate plastic needle guide in the bottom guide
9. When Senoryx unit is ready -mount the needle carrier onto the stereo attachment as per Senoryx encor manual. The needle tip is at the same end as the tab on the stereo attachment.

10. The stereo attachment then slides onto the front of the stereo unit using the grooves in the white plastic as guides. See photo below.
11. Follow procedure for acquiring sample – please refer to Senoryx encor manual
12. Image the sample using the unit provided to verify calcs within the specimen
13. If clip is to be deployed please refer to Senoryx encore manual for instructions
14. At the end of the procedure – remove needle and dispose into the sharps container
   Please refer to the encor manual for instructions on disposal.
CHAPTER 3
Section: Radiography
Original Date Issued: 23/03/00
Created by: Judy Bursle

MAMMOGRAPHY EQUIPMENT – GE Senographe DS

Reviewed by: Selin Prasad
Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE
Director Clinical Services All Radiography/Mammography Technologists staff

POLICY
Information and description of GE Senographe DS Mammography unit

GE Senographe DS

A. Height adjustable tube head with Moly/Rhodium Target and Moly/Rhodium filter

Filters and anode tracks
Maximum current for each track/focal spot configuration:

<table>
<thead>
<tr>
<th>Track</th>
<th>Focal spot</th>
<th>Mo</th>
<th>Rh</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Large</td>
<td>100mA max.</td>
<td>62mA max.</td>
</tr>
<tr>
<td></td>
<td>Small</td>
<td>40mA max.</td>
<td>35mA max.</td>
</tr>
</tbody>
</table>

The minimum filtration permanently installed in the useful beam of the X-ray tube is 0.008 mm aluminum equivalent (8µm aluminum equivalent) at 30 kV corresponding to the thickness of beryllium of the X-ray tube output window.

The switched filters are installed on a disk driven by a stepping motor which moves from one filter to the other. Two different filters are supplied:

- Molybdenum: 0.03mm,
- Rhodium: 0.025mm,
Note: The system electronics control the filters according to operator requirements in manual mode, or to software requirements in AOP mode.

<table>
<thead>
<tr>
<th>TARGET</th>
<th>VOLTAGE (kV)</th>
<th>FILTER</th>
<th>EQUIVALENCE (HALF-VALUE LAYER)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molybdenum</td>
<td>30</td>
<td>0.03Mo</td>
<td>0.3 mm Al minimum</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>30</td>
<td>0.25 Rh</td>
<td>0.35 mm Al minimum</td>
</tr>
<tr>
<td>Rhodium</td>
<td>30</td>
<td>0.25 Rh</td>
<td>0.4 mm Al minimum</td>
</tr>
</tbody>
</table>

B. Focal spot size .1mm-3mm
C. fixed focal distance (65cms)
D. 270° rotating arm
E. Integral compression device

**Compression force and breast thickness:**
- Compression Force:±10 newton
- Breast Thickness: ±10mm

F. Dual foot pedals for comp and height adjustments.
G. Digital Detection Plate 19 x 23cm
H. Magnification 1.5 x 1.8

<table>
<thead>
<tr>
<th>Component</th>
<th>Al equivalence (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnification stand (1.5 and 1.8)</td>
<td>Less than 0.35</td>
</tr>
<tr>
<td>Image receptor support</td>
<td>Less than 0.2</td>
</tr>
<tr>
<td>Bucky cover</td>
<td>Less than 0.2</td>
</tr>
<tr>
<td>Stereotix positioner</td>
<td>Less than 0.3</td>
</tr>
</tbody>
</table>

I. Generator GE model ZF HOODMR 200-240V 50-60 Hz. Single –phase 200/208/220/240 V (±10%)
J. Gantry with display panel
K. Console with focal size target/filter selection lateral, position, KV and MAs setting display.
L. Acquisition monitor - 1 mega pixel

Ambient light level
Senographe DS monitors are adjusted for use in light levels up to 50 lux.

**Workstation storage**
Total internal disk capacity: two disks, each of 40 Gbytes.
Allocated for image storage: 70 Gbytes (corresponding to approximately 3500 acquisitions).
M. Exposure modes:
AOP: Standard
  Dose
  Contrast
Automatic exposure optimization of parameters
Determines kVp and mAs, and selects filter
Pre-exposure, time delay
Equivalent breast thickness, radiological density

Manual select kVp and mAs (lowest 22kVp)

N. RADIATION AND FILTER INFORMATION
Conforming to standard mammography practice, the radiation reference axis is directed
at the chest wall edge of the digital detector; radiation is shielded so that there is no
radiation directed behind the chest wall.

1. Accessories—
facesheild
  Large comp paddle
  Tilt large comp paddle with chest wall
  Small and mid size comp paddle
  Small and mid magnification comp paddle
  2 magnification tables large and mid
  Large and small localization paddle
  Localization face shield

2. Testing equipment
  Flat filed device
  3x 2cms Lucite blocks
  1QST Device
  ACR square phantom
  Breast phantom
  Densitometer

3. Printer
  Agfa Drystar 4500 laser printer

4. FILM
  Agfa Drystar single emulsion mammo film –18/24cm & 24/30cm

AMBIENT CONDITIONS
Operational ambient conditions
- Humidity: 10%min., 80% max.
- Temperature: 15°C (59°F) min 35°C(95°F) max.
- Atmospheric pressure: 700hPa min., 1060hPa max.
### SCOPE

Director Clinical Services, All Radiography/Mammography Technologists staff

### POLICY

Description and information on ultrasound units at BCI and Mount Druitt Clinic

**Philips IU22 Vision 2008 ultrasound unit**

- Display monitor fully articulating flicker-free 20-inch wide format resolution flat panel
- L12-5, L17-5, transducers
- Breast and soft tissue imaging software
- Netlink Dicom 3.0 as per technical spec.
- Fully articulating control panel, including height, swivel, and slide
- Easy access transducer connectors and integrated cable storage
- Digitally enhanced 8 speaker high-fidelity stereo audio
- Integrated footrest
- Integrated storage shelves
- 4 wheel swivel and swivel/brake lock control
- 2D, 3D, 4D, MPR Live Volume Imaging and Live xPlane imaging
- Next generation digital broadband acoustic beam foaming,
- High-bit, low noise, digital circuitry
- Dynamic range up to 181dB for improved 2D performance
- Increased Doppler sensitivity
- New Adaptive Broadband flow imaging automatically adjusts bandwidth for optimal flow sensitivity and resolution
- Next Generation SonoCT real-Time Compounding, with Widescreen capability
- Up to 9 beam-steered lines of sight
- XRES Adaptive Image Processing for noise and artefact reduction to improve tissue conspicuity
- Pull out alphanumeric keyboard for manual data entry
- iSCAN intelligent one-button optimization in 2D Doppler modes
- iFOCUS intelligent focusing capability for one-button optimization of focal range size and position
iOPTIMIZE intelligent optimization technologies for one-button approach to instantly adapt
High-Q Automatic Doppler Analysis
Intelligent Tissue Specific Imaging

Application-specific and user definable Quicktext Automatic Annotation
QuickSAVE User Defined Programs (up to 45 transducer)

On-board workstation-class data management with thumbnail previews and storage of
images, loops, and reports
Retrospective and prospective clip capture to internal drive or removable media
Integrated DVD/CD burning capability
DICOM 3.0 Print and Store capability to internal drive or DVD/CD

Other Core Features
Color Power Angio
Tissue Harmonics and Pulse Inversion Harmonic Imaging
Basic 3D Imaging capability with MPR visualisation feature
2D, M-Mode, Pulsed, high PRF, Color Flow Doppler
Duplex CW Doppler
ECG capability
Cineloop Image, M-mode and Doppler Review
High Definition Write Zoom and Read Zoom with pan features
Chroma Imaging
Measurement tools including: distance, depth, area, and circumference
Volume Flow Measurements

BREAST AND SMALL PARTS CLIN PKG

Includes the following
- Small Parts Clinical Option
- Musculoskeletal Clinical Option
- Contrast Clinical Option
- TCD Clinical Option

NETLINK DICOM 3.0
DICOM 3.0 compliant with support for the following functions:
Performed Procedure Step
Storage Commit
Modality Worklist
Vascular structured reporting
OB structured reporting
GYN structured reporting
Cardiac structured reporting
**TRANSDUCER, L17-5**
Fine pitch, 256 element, high resolution linear array transducer 17 to 5 MHz extended operating frequency range for high resolution superficial application, including small parts, breast, vascular and musculoskeletal imaging.

**TRANSDUCER, L12-5**
Fine pitch, 256 element, high resolution linear array transducer with 12 to 5 MHz extended operating frequency range for high resolution superficial application, including small parts, breast, vascular and musculoskeletal imaging.

**PANORAMIC**
Real-time extended field-of-view composite imaging, acquired in fundamental or SonoCT mode.

Phillips Epiq:
SCOPE

Director Clinical Services, All Radiography/Mammography Technologists staff

POLICY

Description and information of Hologic Prone Vacb unit.
CHAPTER 3

Section: Radiography

Supporting Women with Breast Cancer – Today and Every Day

PRONE TABLE COMPRESSION PADDLE CLEANING

Reviewed by: Selin Prasad

Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE

Director Clinical Services, All Radiography/Mammography Technologist, Breast Care Nurses.

POLICY

To avoid infection, paddle has to be sterilized or thoroughly cleaned, for each procedure.

PROCEDURE

- At completion of a vacb biopsy the compression paddle is removed. The compression paddle is to be washed in soap and water then dried with a paper towel.

- On the occasion whereby the paddle has to be cleaned by staff: The compression paddle is then to be wiped over with 70% Isopropyl alcohol prowipe.

- At the completion of each procedure, the compression paddle is to be washed and placed in the container in the utility room for transfer to the Dental Sterilising Services Unit.
PROCEDURE FOR REPEATING OR REJECTING IMAGES AND PERFORMING REPEAT/REJECT ANALYSIS- GE UNIT

SCOPE

Director Clinical Services, All Radiography/Mammography Technologists staff.

POLICY

To ensure that the radiation dose to clients is kept to as low as possible (ALARA), the number and cause of repeated mammograms will be analysed and feedback given to radiographers. Analysis of the data will help identify ways to improve efficiency and reduce costs, as well as reduce patient exposures.

PROCEDURE

1. Select image before closing exam that requires a repeat or rejection.
2. Click on ‘Quality Check OK’ on the left lower screen display.
3. A grey screen with the titled “repeat or Rejection Selection” appears.
4. If the image is to be repeated, select the repeat option.
5. Then select the reason for the repeat image, e.g. patient positioning
6. Select the ‘Save’ option.
7. Then repeat image.
8. If the image is to be rejected, select the rejected option.
9. Then select the reason for the rejection e.g. poor compression
10. Select the Save option.
11. When exiting the exam, another grey box appears.
12. Select the “OK” option and continue to close exam.
13. To obtain the repeat and rejection data, download the information from Rm 1 and Rm 2 Radiographers Console CP4
15. Select RRA icon opens to Repeat and Rejection analysis window
16. Select to preferred time interval for analysis.
17. Select “Export database”
18. Insert blank CDRom in CD Drive.
19. Select OK.
20. When data has been exported CD drive will open.
21  The wunig display icon will appear.
22  Remove CD
23  Select OK.
24  “Select Repeat and Reject Analysis OK” icon.
25  Load the CD on the computer
26  Open folder to review files.
27  Select RPA_PC_Tool” icon.
28  This opens the Repeat and Reject Analysis.
29  Select date – year, month, date. Select time (HH,MM,SS)

Show results for Radiographer (Technologist). Select the Radiographers initials. Then select Preview Analysis. This displays the Repeat and Reject Analysis for the chosen Radiographer. When performing QA, do not put initials on exam as this is included in your repeat analysis.

**Frequency**

The test will be carried out continuously as part of the data collected on the Radiographer’s Report Sheet. Manual repeat/rejection analysis checks will be carried out each six months.

**Pit falls**

There is a danger that radiographers may alter their routine procedure criteria for accepting films if they know that rejected films will be analysed. To avoid this, radiographers must enter their initials when performing the exam.

**Performance Criteria**

The overall repeat rate should be less than 3%. Percentage rates in each category should be analysed and if any one category is significantly higher than the others this would indicate improvement could be made.
CHAPTER 3  
Section: Radiography  
Original Date Issued: 5 December 2008  
Created by: Harj Bariana

SPECIMEN X-RAY FOR HOOKWIRE LOCALISATION AND VACB/CORE BIOPSY,  
ULTRASOUND OF HOOKWIRE LOCALISATION SPECIMEN

Reviewed by: Selin Prasad  
Last Reviewed: 09/04/2016

Approved by: Harj Bariana

SCOPE  
Director Clinical Services, All Radiography/Mammography Technologists staff.

POLICY  
All hookwire localization specimen have to be x-rayed. If the localization was performed under ultrasound, then ultrasound of the specimen has to be done as well. All vacb specimen samples have to be x-rayed.

PROCEDURE  
If the procedure was performed under ultrasound:-

1. Place the specimen in a clean kidney dish with saline solution.  
2. Apply gel on the transducer probe and cover with cling wrap.  
3. Scan specimen capturing images demonstrating the hookwire through the lesion in two planes.  
4. Identify the wire – pointing arrow to wire and label wire. Identify lesion – measure lesion size in two planes.  
5. X-ray specimen using magnification.  
7. Print out two films with screen magnification on workstation – one for pathology, one for radiology reporting.

If procedure performed Mammographically

Only x-ray specimen using above exposures

Core Biopsy Images

Specimens should be placed on filter paper dampened with saline. X-ray the specimens on the filter paper using magnification with exposure factor of 25kVp 8mAs on Senographe DS machine
SCOPE

Chief Radiographer, All Radiography/Mammography Technologists staff, Nurse Counsellors, Breast Physicians, Assessment Radiologists.

POLICY

The service must comply with the NSW Ministry of Health Policy Directive, PD for Clinical Procedure Safety that an intended procedure is performed on the correct patient at the correct site. Prior to commencing an interventional procedure, all persons involved in the procedure must take a "Time-Out", ie. to confirm that the patient is correctly identified, understands the procedure and consent has been obtained. A checklist is provided and must be signed by all team members present in the room. If there is any discrepancy, the procedure must be stopped until there is full compliance.

PROCEDURE

1. Once it has been established that a patient in the assessment clinic requires a biopsy, the nurse counsellor will explain the procedure, obtain verbal consent and prepare the biopsy consent form.

2. The nurse counsellor will place the clipboard with the Biopsy consent form ready for the either the surgeon/breast physician or radiologist to fill in and obtain signed consent.

3. The biopsy procedure is explained to the client and medical history is obtained from the client and recorded on the assessment form. Signed biopsy consent is obtained from the client.

4. The enrolled nurse who will be assisting with the procedure will prepare a trolley.

1. Once “Time-Out” is complete the biopsy may commence.
Prior to commencing the biopsy

Ultrasound:
1. The client will be brought into the room and her name and DOB will be confirmed against the BCI ID labels by either the nurse or the radiographer. Client details are selected from the BIS under “Ultrasound Biopsy”.
2. The BCI ID label will be placed on the “Time-Out” form, specimen jar and pathology request form.
3. When the radiologist arrives he/she will check the consent form has been signed and obtain verbal consent from the client.
4. The nurse will initiate the “Time-Out” and complete the checklist.
5. Once “Time-Out” is complete the biopsy may commence.

Digital Prone Table
1. The client will be brought into the room and her name and DOB will be confirmed against the BCI ID labels by either the nurse or the radiographer. Client details are entered onto the machine.
2. The BCI ID label will be placed on the “Time-Out” form, specimen jar and pathology request form.
3. When the radiologist arrives he/she will check the consent form has been signed and obtain verbal consent from the client.
4. The nurse will initiate the “Time-Out” and complete the checklist.
5. Once “Time-Out” is complete the biopsy may commence.
6. The radiologist may then leave the biopsy room while the client is being positioned and target images obtained (the prone biopsy commences with patient positioning).
CHAPTER 3  Section: Radiography  Original Date Issued: 20.01.2016
Created by:  S.Ning; H. Nguyen

END OF THE DAY PACKUP PROCEDURES

Reviewed by: Summer Ning, Hanh Nguyen  Last Reviewed:  

Approved by:  Harj Bariana

SCOPE

Director Clinical Services, All Radiographers and Mammography Technologists

PVERICY

Ensure that all staﬀ are able to operate the mobile van for the end of the day.

PROCEDURE

CLOSING AND SECURING THE ENTRANCE DOORS

1. On the door mounted control panel, push the "OFF" button to de-energize the door.
2. Switch the breaker (#22 lower RHS box) in the staﬀ room.
3. Complete a walk around of the unit to ensure all of the compartment doors are closed and locked.
   Note: At this point you will need to raise the U-shaped coupler to disengage the door mounted handrail from the stair handrail and return it to the stowed position on the exterior door.
4. Set the security system by pressing the “COMMAND” button when the system states it is ready.
5. This will prompt another screen which will display PERIMETER and ALL. Select “All” to arm the system.
   Note: The security system will only ARM when ALL the doors are closed (sliding door is not part of the security system) and there is no excessive movement before arming. Once ready the control panel will display “SYSTEM READY” at which point you may press the COMMAND followed by the ALL key. You have 40 seconds to exit the unit once the system has been armed.
6. Close and lock the sliding door.
7. Close and lock the exterior door.
CLOSING THE ENTRY STAIRS

1. Fold the flip down step up.
2. For overnight close, the stairs can be returned to the closed position with the hand rail locked into place.
3. Close the stairs by pressing and holding the stair control switch in the lower compartment.

SHUT OFF THE WATER PUMP

1. Turn the water pump “OFF” by pressing the red switch located on the bottom right corner of the tank monitoring system panel.
2. Turn the tank monitoring system “OFF” by turning the black switch in the upper right corner of the panel.
3. At the 12V circuit breaker panel (located in the first entry-side compartment), de-energise the tank monitoring system, water pump and sump pump circuits.
HOW TO TURN ON AND OFF THE LIGHTS

Reviewed by: Summer Ning, Hanh Nguyen  
Last Reviewed:

Approved by: Harj Bariana

SCOPE

Director Clinical Services, All Radiographers and Mammography Technologists

POLICY

Ensure that all staffs are able to operate the mobile van.

PROCEDURE

1. There are switches for the lights located in each of the rooms of the mobile (staff, reception, mammography room, etc.). Each switch has a rocker switch to activate/deactivate and if dimmable, a rotary switch to control the brightness.
### How to Operate the Entry Stairs – Mobile Van 2

**Scope**
Director Clinical Services, All Radiographers and Mammography Technologists

**Policy**
Ensure that all staff are able to operate the mobile van for the start of the day.

**Procedure**

1. Open the first entry-side compartment.
2. The control for the stairs is in the top RHS corner of the compartment.
3. Check that there is nothing impeding the stairs from reaching the extended position.
4. To extend the stairs, press and hold the stair control switch. There will be some noise as the gears activate – this is normal.
5. Lower the flip down step extension.
6. Retrieve the stair hand rails from the third entry-side compartment (underneath the wheelchair lift) and secure to the side wall of the stairs.
7. Unlock the main entry door to the mobile. **Note:** Take care on the stairs, particularly when the hand rails are not in place.
8. Unlock and slide open the automatic door.
9. Enter and deactivate the security system (if enabled) (see separate section for alarm activation/deactivation). **Note:** You will have 2 minutes to deactivate the security system (if activated) once the main door has been opened.
10. Open the front door and extend the U-shaped coupler up, and pull the right side out, and pivot it around to meet the installed hand rail.
11. Drop the U-shaped coupler down on top of the installed hand rail to secure them together.
HOW TO TURN OFF THE ALARM SYSTEM – MOBILE VAN 2

Reviewed by: Summer Ning, Hanh Nguyen

Approved by: Harj Bariana

SCOPE
Director Clinical Services, All Radiographers and Mammography Technologists

POLICY
Ensure that all staffs are able to operate the mobile van for the start of the day.

PROCEDURE

Note: the alarm system must be turned off during transport.

1. After unlocking the main and sliding doors, enter the unit and locate the security system panel to the right of the door.
   Note: You have 2 minutes once the doors have been opened to deactivate the alarm system.
2. To deactivate the alarm, press 99 + CMD. The display should read “System Not Ready”.
3. System is deactivated.
HOW TO EXTEND THE STEPS FOR THE MOBILE VAN 2

Reviewed by: Summer Ning, Hanh Nguyen
Last Reviewed:

Approved by: Harj Bariana

SCOPE
Director Clinical Services, All Radiographers and Mammography Technologists

POLICY
Ensure that all staff are able to operate the mobile van for the start of the day.

PROCEDURE

LOWERING THE AUTOMATIC STABILISING LEGS

1. Obtain keys from the small compartment located at the rear end of the van. Enter code, (2827) and then pull the latch.

2. Use the key to open the entry-side second compartment. The control panel is in the top RHS corner.

3. Check there is nothing underneath the legs before activating the system.

4. Turn the system on by pressing "SYSTEM POWER".

5. Press the ‘AUTO’ button to activate the automatic deployment of the hydraulic legs.

6. The system will automatically level the mobile unit. The process should take no longer than 1-3 minutes. The system will automatically stop once the unit is level.

7. You do not have to turn the system “OFF”. The control panel will enter “Sleep” mode automatically after about ten minutes of inactivity.
CHAPTER 3  
Section: Radiography  
Original Date Issued: 20.01.2016  
Created by: S.Ning; H. Nguyen

<table>
<thead>
<tr>
<th>OPERATING THE EMERGENCY CALL SYSTEM – MOBILE VAN 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewed by: Summer Ning, Hanh Nguyen</td>
</tr>
<tr>
<td>Approved by: Harj Bariana</td>
</tr>
</tbody>
</table>

**SCOPE**  
Director Clinical Services, All Radiographers and Mammography Technologists

**POLICY**  
Ensure that all staff are able to operate the emergency call system.

**PROCEDURE**

**OPERATING THE EMERGENCY CALL SYSTEM**

**Note:** There are three duress buttons; one in the staff room above the sink, one in the reception room underneath the countertop and one in the mammography room just to the left of the operator’s station above the countertop. There is one strobe per room.

**Note:** When a duress button in one room is activated, the strobes in the other two rooms will illuminate.

1. To activate the duress alarm, locate and press the button at the bottom of the alarm station (see above note for locations).
2. To silence the alarm, enter 99 into the security alarm panel.
3. Reset the alarm station by using the supplied resetting tool gently (button does not have much movement). Pull the activation button downward.
CHAPTER 3  

Section: Radiography  

Original Date Issued: 20.01.2016  
Created by: S.Ning; H. Nguyen  

OPERATING THE SINK(S) – MOBILE VAN 2  

Reviewed by: Summer Ning, Hanh Nguyen  

Last Reviewed:  

Approved by: Harj Bariana  

SCOPE  
Director Clinical Services, All Radiographers and Mammography Technologists  

POLICY  
Ensure that all staff are able to operate the mobile van sink(s).  

PROCEDURE  

OPERATING THE SINK(S)  

1. To use the sink/faucets (assuming the fresh water tank has been filled), ensure the tank monitoring system, water pump and sump pump circuits are energized on the 12v circuit breaker panel located in the second curb-side compartment (next to the reception desk).  

2. Energize the tank monitoring system by turning the black switch in the upper right hand corner to the “ON” position.  

3. Turn the water pump “ON”. Do this by energizing the red switch located on the bottom right corner of the tank monitoring system panel.  

4. Turn on the desired faucet on the sink in the staff or procedure room.  

   Important: DO NOT LEAVE THE PUMP IN THE “ON” POSITION IF THERE IS NO WATER IN THE TANK. THE PUMP NEEDS WATER PRESSURE TO OPERATE. FAILURE TO TURN THE WATER PUMP OFF WILL RESULT IN DAMAGE TO THE PUMP.  

5. Each sink is supported with a sump pump which drains the water from the tank automatically so it is important to ensure the sump pump circuit is in the “ON” position to ensure the drains will not back up with water.
CHAPTER 3
Section: Radiography
Original Date Issued: 20.01.2016
Created by: S.Ning; H. Nguyen

HOW TO PACK UP SCREENING MACHINE FOR TRANSPORTATION – MOBILE VAN 2
Reviewed by: Summer Ning, Hanh Nguyen
Last Reviewed: 20/01/2016
Approved by: Harj Bariana

SCOPE
Director Clinical Services, All Radiographers and Mammography Technologists

POLICY
Ensure that all staff are able to pack up the mobile van for transportation.

PROCEDURE

SHUT DOWN THE SCREENING EQUIPMENT AND UPS

1. Check all images have been sent from the Acquisition Workstation and Shutdown the system.

2. At the back of the Acquisition Workstation, press “UPS” to turn off.

3. Press the white Power Switch to the “OFF” position.
4. At the rear of the gantry, switch the black switch to the “OFF” position.

5. Check all images have been sent to PACS from the SecurExchange

6. Shutdown SecurExchange by tapping once on the Green Button

7. To shutdown the UPS in the staff room, remove the cover, and press and hold “STOP” on the keypad for 2 seconds.
8. After the touchscreen is inactive for one minute, switch the orange breaker switches (UPS) down to the off position.

   **Note:** The UPS will take approximately 3 minutes to shutdown.

**INSULATION JACKET**

1. Following shutdown of the mammography equipment, install the detector insulation jacket on the mammography modality. This will help to maintain an optimum temperature.

**SECURE LOOSE ITEMS**

1. Secure all loose items before transporting the mobile unit.

2. Take the two fire extinguishers off their hooks (located in the waiting room and mammography room) and stow securely.
SCOPE:

Diagnostic Radiologists, Director Clinical Services, All Breast Imaging Staff,

POLICY:

This policy is established to ensure that all referrals for diagnostic breast imaging are appropriate in clinical terms in order to improve the effectiveness and efficiency of patient care and reporting of imaging results.

PROCEDURE:

All referrals should encompass the following clinical dimension and appropriateness. Lack of compliance to the below will thereby deem a referral inappropriate:

- Should contain all the necessary information/medical history so that the radiologist, radiographer and sonographer are well informed of the clinical indication for imaging
- A schematic representation of any palpable lump(s) felt, surgical scars to be indicated on the breast diagram to assist clinical staff in localizing region of interest
- State clearly the imaging required - for example: Mammogram/Ultrasound
- State clearly the side requiring imaging
- In case of interventional procedure(s), state clearly the side, size and location of the lesion(s) to be biopsied. State results of relevant previous investigations
- State any significant findings on prior breast imaging
- Contain detailed information on any prior biopsies/interventional procedures performed to assist clinical staff in imaging and reporting results
- Referring clinician should inform of any symptoms, the location and nature of palpable abnormalities so that imaging studies and reporting can be tailored to answer the clinical question
- Should be correctly dated and signed by the referring clinician, with provider number
- Should contain the correct patient personal details - Full name, date of birth, medical record number and address
- Should be legible and easy to read so the requirements of the referring clinician is met
Procedure for Inappropriate Referral:

Senior radiographer to be consulted to establish appropriate course of action

i) Inappropriate clinical information to be discussed with radiologist on duty for appropriate course of action. This may involve contacting the referring doctor to make the relevant changes. The radiologist may request another referral with the correct information documented.

ii) Incorrect patient details and out-of-date referrals, notify reception staff for appropriate course of action.