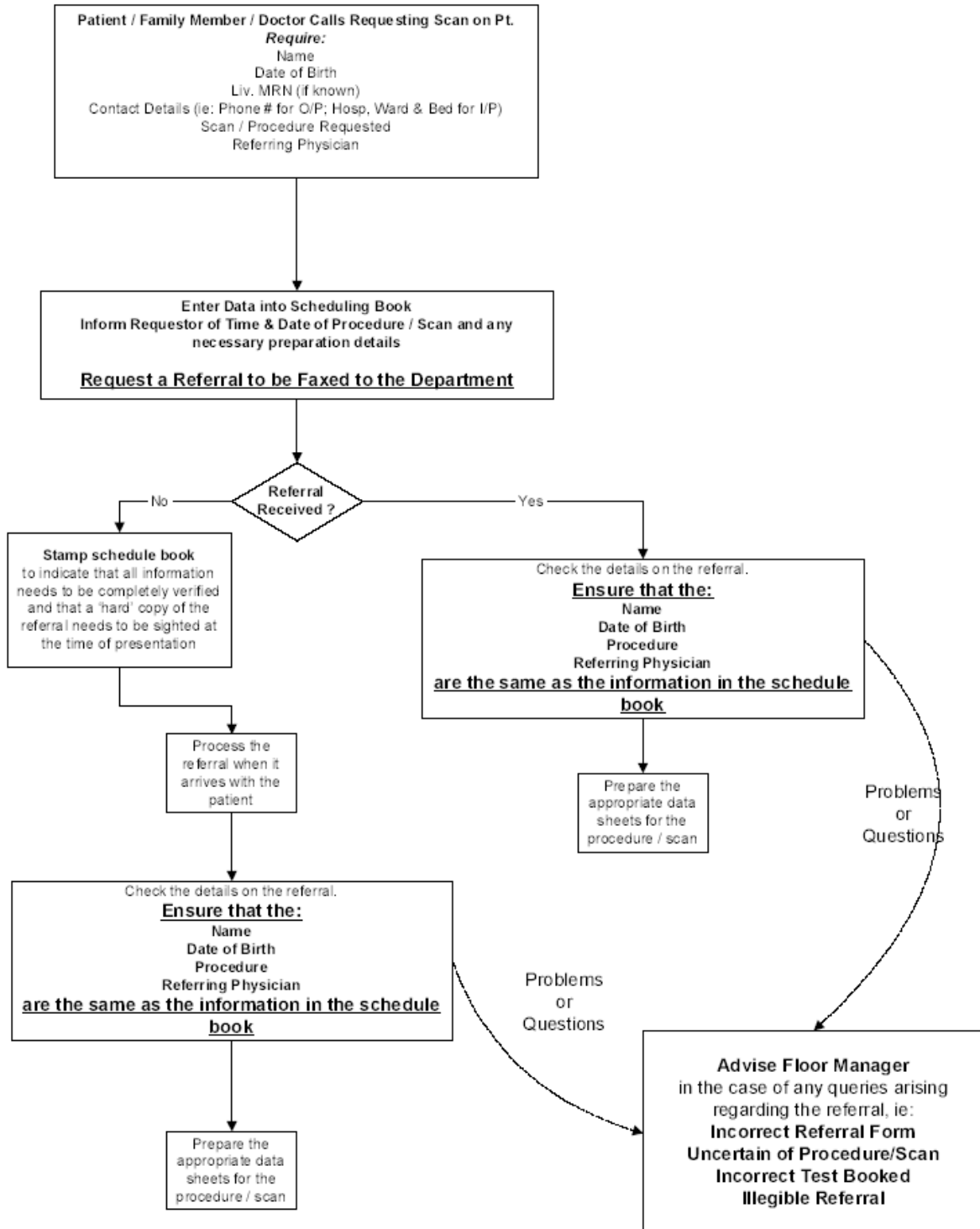


Correct Patient/Procedure/Site Nuclear Medicine workflow for Breast Sentinel Node Lymphoscintigraphy.

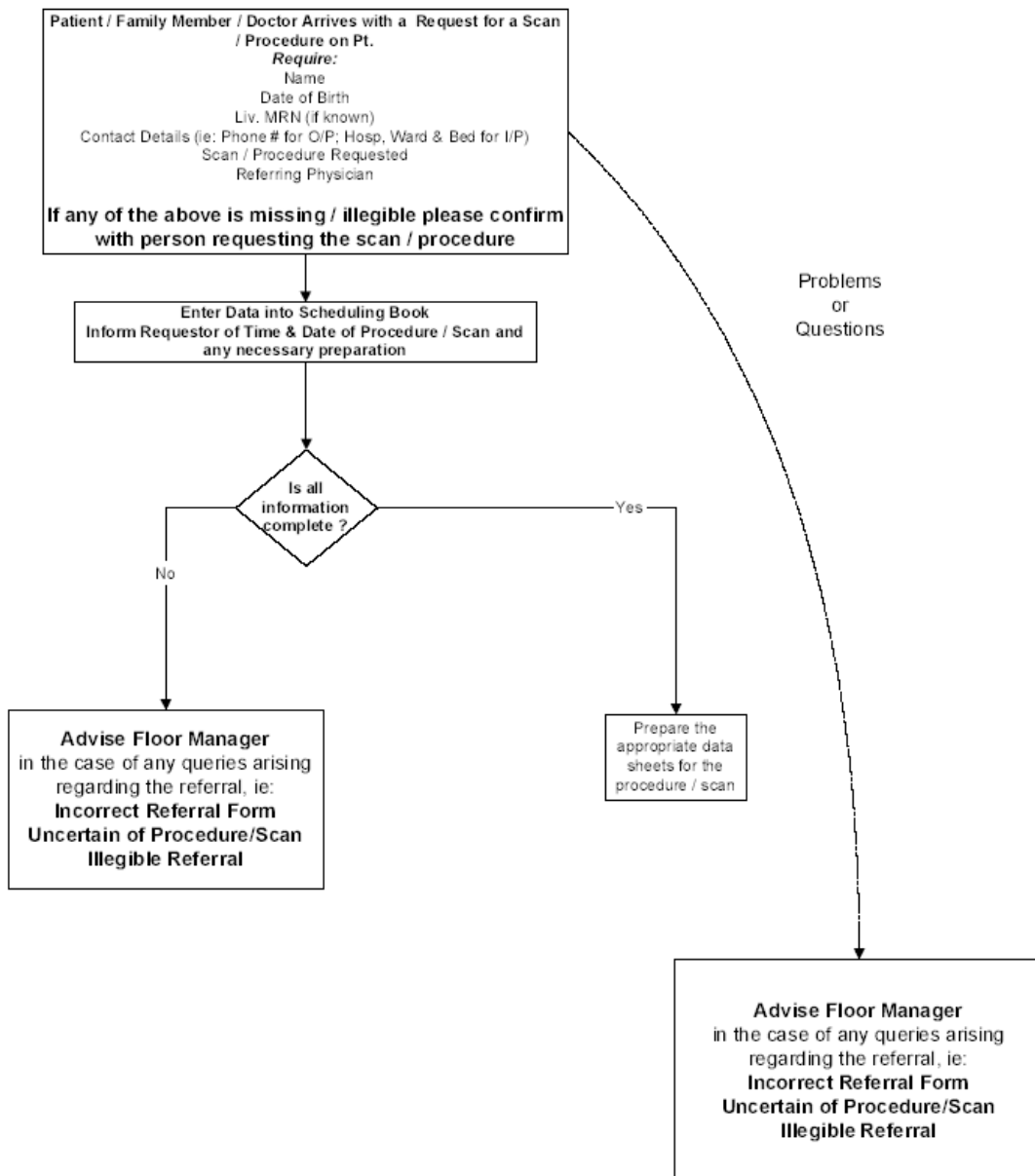
Patient Scheduling

Bookings can be taken 1) over the phone, 2) over the counter in the department and 3) via the Electronic Medical Register (Powerchart).

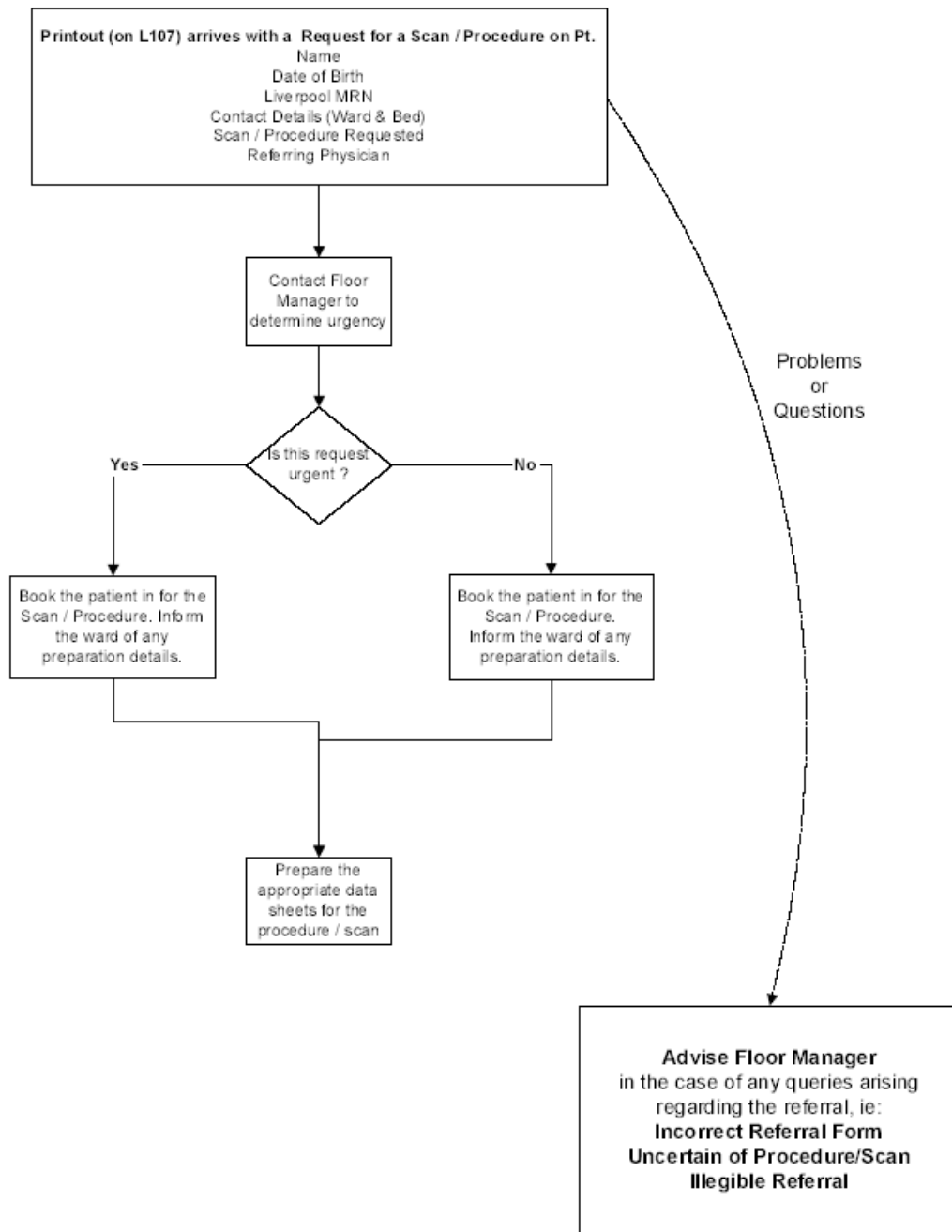
Phone Booking



Over the Counter Booking



Powerchart Booking



Patient Presentation

- Identify patient as outlined in “Correctly identifying a patient” (see Appendix 1)
- Match patient to appointment in scheduling book.
- Check Medicare card details against the information in the Patient Administration System (PAS) including:
 - Patient name spelling
 - Address
 - Date of Birth.

- Enter patient details into Hosrep including
 - Patient name
 - Medical Record Number (MRN)
 - Date of Birth
 - Address
 - Contacts
 - Study details

An unique accession number is assigned for the study to be used as a check against the patient when the study is accessed for further input such as report typing or review of results, the correct patient/study is guaranteed.

- Match paperwork to the patient.
- Give pregnancy status form to patient.
- Announce over the intercom the patient is ready to commence the study.

Procedure commencement:

- The patient's name is called and is accompanied by the technologist, or nurse to the examination room.
- The patient identification is completed as per the policy (see attached)
- The correct study is checked against the referral.
- The patient's pregnancy status is confirmed.
- The technologist or nurse explains the test and answers any questions.
- The patient changes into a gown with the opening to the front.

Clinical Interview

- The technologist notifies the physician the patient is ready for the lymphoscintigraphy. Cultural consideration is given to the sex of the doctor performing the study.
- The physician takes a clinical history including the site and notes the symptoms. They determine if the patient history matches the clinical notes on the referral and answers any questions the patient may have.
- The physician determines if the study requested is appropriate for the patient's history.
- The physician verifies the date and time of surgery to determine the activity to be injected and the route of administration (peri-tumoural or sub areolar) and notifies the technologist the study can proceed.

Dispensing the Radiopharmaceutical (R/P)

- The volume to be dispensed is calculated. See Appendix 2)
- The R/P Antimony Colloid is selected and the compound name, expiry date and time is checked by two technologists and the labels initialled by both technologists.
- The patient name is entered into the calibrator from the scheduling sheet.
- Dose calibration labels are printed for the administration log and the also attached to the lead shield of the patient dose.

Administering the R/P

- The same physician who determined the site carries out the administration.
- The syringe pot is checked for correct R/P, patient name and activity for the study.

- Identify the patient and administer the dose as per the procedure (see Appendix 2).
- Note the mode of administration and place dose label on patient worksheet.

Performing the study

- The type of study is selected on the acquisition computer.
- The patient name, MRN and Date of Birth are entered.
- The patient is identified by name and positioned for imaging.
- When the sentinel lymph nodes are identified, the position is marked in two planes.
- On completion of the imaging, the images are checked by the physician to determine all views required to determine the clinical reason for the test have been acquired.

Image display

- The patient is selected from the directory and images printed to include patient name, MRN, date of study, type of study, view and patient side.
- All the patient information including previous films are forwarded to the physician for reporting.

Report

- The physician's access code is entered into the dictation system.
- The patient's MRN is entered via the keyboard.
- The report includes the
 - patient's name
 - MRN
 - type of study
 - study date
 - referring doctor's name,
 - patient's clinical symptoms.
- The report is stored in a secured area on the computer.
- The typist enters their password to access the directory list of reports.
- The patient MRN is selected and checked against the patient file.
- Hosrep is accessed and the patient details for that accession number are obtained by entering their name.
- The MRN and date of birth is entered.
- The report is typed, checked and then electronically verified by the reporting physician.
- A hard copy is printed and signed by the physician.

-/-/-/-/-/-/-

Correct Patient/Procedure/Site Nuclear Medicine workflow for Bone Study

As per lymphoscintigraphy procedure up to Procedure commencement.

Procedure commencement:

- The patient's name is called and is accompanied by the technologist, or nurse to the examination room.
- The patient identification is completed as per the policy (see attached).
- The correct study is checked against the schedule and the referral.
- The patient's pregnancy status is confirmed if appropriate.
- Paediatric patients are weighed.

Clinical Interview

- The technologist notifies the physician the patient is ready for the bone study.
- The physician takes a clinical history and notes the symptoms. They check to determine if they match the clinical notes on the referral and answers any questions the patient may have.
- The physician determines if the study requested is appropriate for the patient's history.
- The physician notes the views required on the study worksheet or consults with the technologist on the requirements for the study and it proceeds.

Dispensing the Radiopharmaceutical (R/P)

- The volume to be dispensed is calculated.
- The R/P MDP is selected and the compound name, expiry date and time is checked by two technologists.
- The patient name is entered into the calibrator from the scheduling sheet.
- Dose calibration labels are printed for the administered log and the also attached to the lead shield of the patient dose.

Administering the R/P and performing the study

- The type of study is selected on the acquisition computer.
- The patient name, MRN and Date of Birth are entered.
- The patient is identified by name, metal objects are removed and the patient positioned for imaging.
- The syringe pot is checked for correct R/P and activity for the study.
- The patient is identified and the dose administered.
- The mode of administration is documented and dose label placed on patient worksheet.
- On completion of the initial imaging, the images are checked by the physician to determine any further views are required to report the clinical questions for the test.

Image display

- The patient is selected from the directory, the study is processed and images printed to include patient name, MRN, date of study, type of study, view orientation for tomography and patient side.
- All the patient information including previous films are forwarded to the physician for reporting.

Report

- The physician's access code is entered into the dictation system.
- The patient's MRN is entered via the keyboard.
- The report includes the
 - patient's name
 - MRN
 - type of study
 - study date
 - referring doctor's name
 - patient's clinical symptoms

- The report is stored in a secured area on the computer.
- The typist enters their password to access the directory list of reports.
- The patient MRN is selected and checked against the patient file.
- Hosrep is accessed and the patient is accessed by entering their name.
- The MRN and date of birth is entered.
- The report is typed, checked and then electronically verified by the reporting physician.
- A hard copy is printed and signed by the physician.

(see Appendices next page)

APPENDIX 1

Policy Name

CORRECT PATIENT IDENTIFICATION AND CORRECT PROCEDURE POLICY

Expected Outcomes

To ensure the correct study is performed on the correctly identified patient prior to the commencement of all studies

Policy Statements

The referral documents must contain:

- Patient name.
- Date of Birth.
- Name of procedure.

The Medical Record Number should be issued prior to commencement of the study.

Prior to administration of radiopharmaceutical, the technologist must:

For Hospital inpatients:

Check the patient name and MRN on the wristband matches the patient referral.

Directly ask the patient their name and date of birth to match it to the referral/wristband.

For other patients:

Directly ask the patient their:

- Name
- When were you born.

If the patient is from a Non English Speaking Background (NESB) and does not understand English, you must use an interpreter.

For all patients

Ensure the correct procedure is requested.

The physician must perform a review of the requested study prior to commencement, to match the clinical symptoms of the patient to the test and to ensure the study is appropriate. Bone Mineral Densitometry is excepted.

A timeout then occurs where the technologist must confirm the study with the physician orally or as written on the patient worksheet. Do not commence any procedure unless the correct patient and procedure have been identified.

For all patient handovers including transfers the patient's nurse is to confirm the correct patient's identity and the procedure to be performed as per the patient's notes.

The Ward Orderly is to check the patient name and MRN on the wristband identifier and proceed if they match the required patient details. All patients must have a wristband before leaving the ward.

Practice Guidelines

It is important for staff introduce themselves and their role in the patient's test.

Questions which encourage the respondent to provide their own answers must be used in preference to questions encouraging a "yes/no" answer such as "Are you John Doe and is your birthdate 1/1/1990?"

The use of interpreters is critical in ensuring the patient is able to make an informed decision to proceed with the test and to ensure the patient is able to carry out the test correctly. Interpreters are to be routinely booked from interpreter services, but Department staff or a member of the family may also be used if interpreter services are unable to be obtained.

References

1. *Patient identification – Correct Patient, correct procedure, correct site model policy PD2005_380.*
2. *Guidelines for verbal confirmation of a patient's identification. SSWAHS Improving correct Patient Identification*
3. *How do you Correctly Identify a Patient? SSWAHS Clinical Governance Unit Poster*

The assistance of Lara Realph NUM Liverpool Hospital Medical imaging Stream, and Carol Walker of the Patient Quality Unit is gratefully acknowledged

Policy Author: A.Scott

Policy Reviewers: Dr J.Chu.

APPENDIX 2

Radiopharmaceutical Dispensing, Calibration & Administration

To administer the isotope prescribed for a patient study accurately including:

- Documentation of the calculation of the volume required to be dispensed for the activity to be administered
- Actioned within the guidelines of the ANZAPNM Accreditation Standard

1.1.1. Procedure

All techniques in this section must be carried out under aseptic technique.

Personal Protective Equipment must be worn eg. gloves

Radiation, Time, distance and shielding principles must be adhered to.

Dispensing

- Ensure that every point in each step is completed before moving to the next step.
- Call a licensed second person to verify the required radiopharmaceutical vial, the expiry date / time prior to the completion of calibration procedure.

STEP 1.

- Determine the activity to be administered from the study procedure and correct paediatric doses as per the Gilday dose chart.
- The volume to be dispensed is calculated and documented using the equation:

$$V = A/RD$$

Where V = Volume to be dispensed (mL)

A = Activity to be dispensed (MBq)

R = Radioactive Concentration of the radiopharmaceutical (MBq/mL)

D = Decay Factor.

STEP 2.

- Ensure the dispensing area is clean and clear.

STEP 3.

- Select the radiopharmaceutical from the storage area by label and verify the vial inside the shielding pot is correct.
- Swab vial with an alcohol wipe and aseptically dispense the volume into the syringe from the vial within the pot.

Calibration

- Ensure that the dose calibrator is set to the correct isotope channel prior to calibration of the dose.
- Calibrate the activity which must be within 10% of the determined dose.
- Print out the patient dose labels, initialising them with the verifying technologist or radiochemist.
- Write the volume onto the label for documentation in the patient notes.
- Place the syringe into a syringe shield and a shielding pot.
- Affix the top label to the shielding pot and the second label to the hot lab sheet.
- Return the radiopharmaceutical to the storage area, ensure no equipment is contaminated and replace any contaminated blue sheets.
- Should another dose be needed, return to the beginning of the dispensing procedure.

Administration

- 1) Check the syringe shielding pot label as the correct radiopharmaceutical and activity for the study.
- 2) Identify the patient and administer the isotope as per the procedure.
- 3) Note the mode of administration for oral or site and type of injection, onto the patient datasheet.

1.1.2. References

Australian and New Zealand Association of Physicians in Nuclear Medicine. Standards for Accreditation of Nuclear Medicine practices. November 2000