1. Objective

To ensure that the magnitude of any unintended dose to a patient and the associated risk are as low as reasonably practicable.

2. Responsibilities

In accordance with employer's procedure 'EP20', Service Leads are responsible for maintaining an inventory of equipment and this shall identify the local manager responsible for each of the items of equipment listed. This latter responsibility includes ensuring that appropriate equipment maintenance, calibration and equipment handover arrangements are in place for all radiation equipment under their management.

Service Leads shall identify equipment replacement priorities and shall communicate these priorities to the General Manager.

The General Managers are responsible for ensuring that an effective radiation equipment purchasing programme is in place across the NHSGGC, taking account of budgetary constraints for equipment replacement.

3. Equipment Management

Critical examination and acceptance testing of new radiation equipment shall be initiated by the local manager responsible for each of the items of equipment, and shall be carried out by the supplier/installer in conjunction with the appropriate Radiation Protection Adviser/Medical Physics Expert (RPA/MPE).

Regular preventative maintenance, repair, calibration, and quality assurance tests must be undertaken on each item of equipment listed in the inventory required by procedure 'EP20', by appropriately trained Operators.

If radiation equipment exhibits a fault likely to cause patient overexposure this will be investigated and the equipment will be withdrawn from clinical use until repaired by a trained service engineer.

If an assessment either by the Service Lead or the RPA/MPE (as part of a routine testing programme or an incident investigation) indicates that the risks of unintended radiation exposure of patients are too great, or that the radiation doses to patients for procedures performed are unnecessarily high, because of the age or reliability of radiation equipment, they may decide or advise that the relevant equipment should be withdrawn from service. Risks from both continued use of the equipment and the implications of withdrawal of the service must both be taken into account and documented accordingly.

Equipment handover forms must be used whenever maintenance, repair, or quality assurance checks of radiation equipment are undertaken by a third party, and satisfactory equipment performance must be confirmed before the equipment is returned to clinical use.

The General Managers must ensure that equipment replacement programmes are reviewed annually and equipment replacement planned taking account of budgetary constraints and clinical strategy.

The Service Lead must ensure that any equipment identified as being a high priority for replacement, either because of the frequency of failures which could potentially result in overexposure of patients, or because of unnecessarily high doses should be replaced as soon as practicable, taking account of budgetary constraints.