

JOB DESCRIPTION

1. JOB IDENTIFICATION

Job Title: Specialist Technician - Radiopharmacy
Responsible to: Production Manager - Radiopharmacy
Department(s): Pharmacy
Directorate: Pharmacy
Operating Division: University Hospitals Division
No of Job Holders: 1
Last Update (insert date): 14-Jun-18

2. JOB PURPOSE

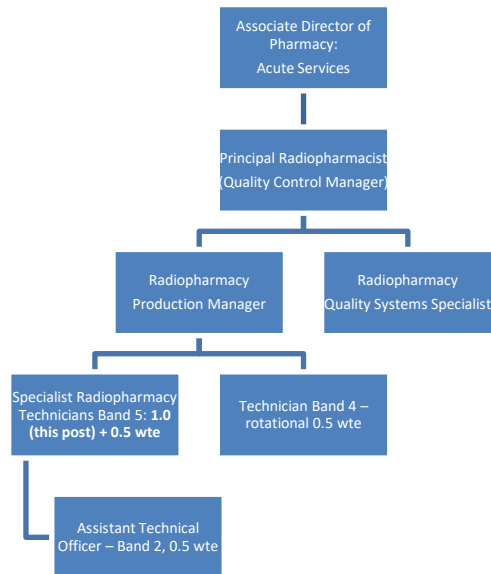
To provide technical skills that ensure radiopharmaceuticals are ordered accurately, are prepared safely at the required quality and are issued for administration to patients at the times required.

3. DIMENSIONS

As a member of the radiopharmacy team, the job holder will assist in the provision of a twice daily radiopharmacy service to 12,000 patients annually across nine hospitals in Lothian, Fife and the Borders.

Responsible for ordering radiopharmaceuticals and supplies to the value of £5,000.

4. ORGANISATIONAL POSITION



5. ROLE OF DEPARTMENT

The aim of the Pharmacy Service is to assure quality of patient care in the provision of treatment with medicines. To this end, the objectives are:

- (i) To provide pharmaceutical care to individual patients by meeting their particular needs whilst maximising efficiency in the use of resources.
- (ii) To provide medicines through systems of quality control which ensure safe, effective and economic use.

The Radiopharmacy achieves the objectives by operating under a Manufacturer's "Specials" Licence granted by the Medicine and Healthcare Products Regulatory Agency (MHRA) to produce radiopharmaceuticals that comply with European standards.

6. KEY RESULT AREAS

(i) Main duties and responsibilities (80% of activities)

Receive orders from nuclear medicine departments for radiopharmaceuticals that are required for patients. Prepare the radiopharmacy worksheets, labels, dispatch notes and transport documents for the radiopharmaceuticals that are required. Set up the aseptic suite with the materials and equipment required to ensure that radiopharmaceuticals are prepared efficiently.

Participate in the routine manufacture of radiopharmaceuticals including the radio-labelling of autologous blood cells. This requires maintenance of competency in aseptic manipulation.

Measure and record the radioactivity of each radiopharmaceutical that is prepared and confirm that it is within acceptable limits to ensure that patients receive the correct dose of radiation. Apply labels to containers and ensure that they are issued in the correct radiation shield to minimize radiation exposure.

Clean and disinfect the radiopharmacy aseptic suite to ensure that radiopharmaceuticals are prepared in a sterile environment.

Ensure that radiopharmaceuticals for transport to other hospitals are issued in packaging that complies with the road transport regulations, that the packages are labelled correctly and that they are accompanied by the required documentation. Ensure that drivers who transport the containers have received training in basic radiation safety.

Deal with enquiries concerning the availability and supply of radiopharmaceuticals.

Handle radioactive materials safely to minimize personal radiation exposure and exposure of colleagues. Monitor working areas for radioactive contamination to ensure a safe working environment.

Ensure that radiation monitoring equipment is working properly by performing calibration and functional checks.

Perform quality control tests on radiopharmaceuticals that have been prepared in the radiopharmacy to ensure that they meet the required standards.

Undertake stock control procedures and order supplies from internal and external sources to ensure that radiopharmaceuticals are available when required.

Manage the storage and disposal of radioactive waste to ensure that it is treated in accordance with statutory requirements.

Write, review and update standard operating procedures, worksheets and other documentation.

Participate in research to improve the Radiopharmacy service and provide new radiopharmaceuticals to clients.

(ii) Other departmental duties (20% of activity)

Maintain personal competency in aseptic manipulation.

Assume a joint responsibility with other staff members for the security of pharmaceuticals and radioactive sources.

Notify the Production Manager of any deficiencies in physical resources.

Deputise for the Production Manager.

Participate in the pharmacy technicians' weekend and evening rotas; depending on qualifications.

Appraise the performance of assistant technical officers in accordance with the principles of personal development and the performance planning system.

Comply with policies, procedures and standards identified and/or defined by management.

Understand and comply with the safety and security requirements of the Department of Pharmacy.

Ensure the safe and secure handling of all documentation and medicines.

Maintain the confidentiality of documents processed.

Attend a fire lecture and life support training annually and non-patient manual handling every two years.

Update current skills and knowledge as required.

Participate in continuing personal development.

Participate in internal and external courses and meetings as appropriate.

Undertake any other designated Band 5 technician duties as appropriate.

7a. EQUIPMENT AND MACHINERY

The post-holder requires specialist knowledge and experience of the principles of operation of the equipment in the Radiopharmacy. This involves practical use, quality control and first-line diagnosis of faults.

Use radionuclide generators that are the sources of radioactive materials used to manufacture radiopharmaceuticals.

Use laminar air-flow safety cabinets in which sterile radiopharmaceuticals are manufactured.

Use an Amercare Compact Blood Labelling Suite in which radiolabelled autologous white blood cells are prepared.

Use a fume cupboard for the handling of hazardous volatile substances.

Use radionuclide calibrators to measure the activity of radiopharmaceuticals manufactured in the Radiopharmacy.

Use analytical equipment such as a thin-layer radiochromatogram scanner and a gamma-ray spectrometer to measure the quality of radiopharmaceuticals manufactured in the Radiopharmacy.

Use radiation monitors to detect radioactive contamination on members of staff, surfaces and equipment.

Understand the operation of the air handling plant that supplies sterile air to the aseptic suite.

7b. SYSTEMS

Comply with the Quality Policy of the NHS Lothian Hospital Pharmacy Service.

Comply with the requirements of the Quality System (BS EN ISO 9001: 2008).

Use the Radiopharmacy computer database to record workload and prepare worksheets, labels, delivery notes, despatch documentation, etc.

Use Microsoft Office for word processing of documents, maintenance of records on spreadsheets, email and internet queries.

Use the ASCRibe pharmacy stock control system for the issue of medicines to wards and individual patients.

8. ASSIGNMENT AND REVIEW OF WORK

Agree objectives with the Production Manager, Radiopharmacy.

Carry out duties assigned by the Production Manager, Radiopharmacy.

Plan own tasks to meet service requirements.

Review of performance is carried out by the Production Manager, Radiopharmacy, in accordance with the principles of personal development.

Duties are subject to periodic review and may change depending on the changing needs of the service.

9. DECISIONS AND JUDGEMENTS

Works to departmental standard operating procedures.

Uses initiative to deal with matters independently when appropriate.

A supervisor is available for reference.

Deputise for the Production Manager.

Agrees objectives with line manager with three monthly review and annual appraisal.

10. MOST CHALLENGING / DIFFICULT PARTS OF THE JOB

Ensuring that radiopharmaceuticals are ordered accurately, are prepared safely at the required quality and are issued for administration to patients at the times required.

To achieve the above by means which maintain radiation safety and radiation protection issues as key considerations in all procedures.

11. COMMUNICATIONS AND RELATIONSHIPS

Communicate with radiographers and medical physics technicians about the use and availability of radiopharmaceuticals.

Communicate with suppliers concerning the supply of radiopharmaceuticals and the resolution of any resulting issues.

Place orders with suppliers and resolves any resulting issues.

Communicate with quality assurance staff concerning the microbiological monitoring of the aseptic suite and aseptic processes.

Participate in the radiopharmacy team meetings.

Work effectively and efficiently with other staff members of the Department of Pharmacy.

Communicate effectively in a manner in keeping with the professional operation of the Department.

Demonstrate duties and techniques to less experienced members of staff.

12. PHYSICAL, MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB

Physical: A high degree of manual dexterity is required. Frequent manipulation of liquid radioactive materials using needles, syringes and small vials requires great care to avoid radioactive contamination and rapid working to avoid radiation exposure. Move heavy radionuclide generators between rooms of the aseptic suite. Lift trays containing products in heavy lead radiation shields into and out of aseptic room transfer hatches. Lift transport boxes containing products in radiation shields.

Mental: Apply high levels of concentration, precision and accuracy during manufacture of radiopharmaceuticals within strict time constraints.

Emotional: Exposure to ionising radiations.
Support members of staff who experience personal problems or work-related performance issues.

Environmental: Work in an aseptic environment using aseptic technique. Radiation protection skills.

13. KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB

The post-holder must have an appropriate degree or equivalent in-depth knowledge and experience in a physical, biological or pharmaceutical science, or be registered on an accredited register such as: the Register of Clinical Technologists; the Academy of Health Care Sciences; The Health and Care Professionals Council or the General Pharmaceutical Council Register for Pharmacy Technicians.

Knowledge, training and experience relating to Radiopharmacy and the Rules and Guidance for Pharmaceutical Manufacturers and Distributors issued by the MHRA. Skills in the manipulation of radioactive or other hazardous materials using aseptic technique is desirable.

14. JOB DESCRIPTION AGREEMENT

A separate job description will need to be signed off by each jobholder to whom the job description applies.

Job Holder's Signature:

Date:

Head of Department Signature:

Date: