

The Newcastle upon Tyne Hospitals   
NHS Foundation Trust

Directorate of Pharmacy & Medicines Management

# Rotational Pharmacist Programme 2009

Information Pack





# Welcome to the Directorate of Pharmacy

The Newcastle upon Tyne Hospitals NHSFT is a 2000 bed teaching trust with annual drug expenditure in excess of £60 million. The Trust has traditionally enjoyed a well-deserved reputation for the quality and excellence of its hospital service overall and has been at the forefront of several important medical developments over the last half-century.

## The Directorate of Pharmacy & Medicines Management

The Directorate incorporates a number of dispensaries, in-patient dispensing facilities, clinical, operational and Medicines Information support services, providing pharmaceutical care direct to patients and staff.

We also have dispensing and production units that provide highly specialised treatments such as cytotoxic chemotherapy for patients undergoing cancer treatment; aseptic products such as parenteral nutrition infusion bags for patients with special nutritional needs; and manufactured unlicensed medicines ('specials') which may be necessary where suitable licensed products are not available.

Some of the services we provide are made available to other healthcare organisations, as a means of generating income for our Trust and allowing other Trusts to take

advantage of our high quality facilities and expertise for the benefit of their patients.

Our department has a commitment to providing training for prospective pharmacists and pharmacy technicians, and has close links with the local universities and colleges providing undergraduate and vocational training. We are also involved in providing training for junior medical staff in collaboration with Newcastle University's Medical School.

Our pharmacy teams are made up of highly skilled healthcare professionals and support staff, experienced in their field of pharmacy practice. We work closely together, and with other Clinical services throughout the Trust.

As a department we aim to provide expert guidance and advice on any aspect of medication.



Newcastle upon Tyne through the Gateshead Millennium Bridge



## Transforming Newcastle Hospitals

In June 2006 the Trust achieved Foundation Trust status. The Trust is in a period of change with the 'Transforming Newcastle Hospitals' project, which will see the Newcastle General Hospital (NGH) site close and services relocated to the Royal Victoria Infirmary (RVI) and Freeman Hospital (FRH) sites. These developments will have a significant positive impact on pharmacy services.

In the spring of 2009 a brand new dispensary will open in the newly built Victoria Wing at

the RVI. This will replace the four current dispensaries across the RVI and NGH sites, and will complement the RVI's state-of-the-art Production Unit and associated Pharmacy Distribution Centre. In the same year the Great North Children's Hospital is due to open, also at the RVI site. At the FRH, construction of the new Northern Centre for Cancer Care and Renal Services Centre is complete with a new cytotoxic preparation suite and small dispensary for oncology and renal out-patients.



RVI Exterior including Great North Children's Hospital  
(Artist's Impression)



FRH Cancer and Renal Services Centre - Interior Level 3



FRH Cancer and Renal Services Centre – Main Entrance



RVI Exterior (Artist's Impression)



## Pharmacy Services in the Newcastle Hospitals

The following sections detail the activities that are currently undertaken in the Directorate of Pharmacy & Medicines Management.

### Clinical Services

In 2008 the Trust approved a three year investment strategy to improve clinical pharmacy services across the Trust. This commitment has allowed us to develop existing services and expand into new clinical areas.

With an increasing emphasis on cost effective prescribing, and following the publication of several NPSA alerts relating to drug safety, a strong clinical pharmacy presence on the ward ensures the safe and appropriate use of medication, as well as helping patients to receive the best possible care.

Our band 6 pharmacists are allocated designated wards on a rotational basis, and are trained and supported to provide a clinical service, including medication history taking, drug chart review, pharmaceutical care plan production, discharge medication preparation and information services. The concurrent completion of a diploma will complement your ward work, helping you to develop as a clinical pharmacist.

Specialist pharmacists also provide a clinical service to the wards, as well as producing guidelines, budget reports, reviewing drug safety procedures and training other members of the multidisciplinary team. Wards with a One Stop Dispensing service (the utilisation of patients' own medication and labelling all medication ready for discharge) are additionally supported by a clinical technician who may help with drug history taking, medicines reconciliation and ordering.

A copy of the current clinical pharmacy structure is included later, for your information.

### Rotational Pharmacist Programme

The three year rotational programme currently consists of fifteen rotations across the Trust. This will provide you with the opportunity to gain invaluable experience of a wide range of clinical specialities which include:

- ◆ Admissions
- ◆ Cancer Services
- ◆ Cardiology
- ◆ Cardiothoracic Surgery
- ◆ Critical Care
- ◆ Dermatology
- ◆ Diabetes & Endocrinology
- ◆ Elderly Care
- ◆ Gastroenterology
- ◆ General Surgery
- ◆ Haematology
- ◆ Infectious Disease
- ◆ Neurosciences
- ◆ Orthopaedics
- ◆ Ophthalmology
- ◆ Paediatrics
- ◆ Paediatric Oncology
- ◆ Renal Medicine
- ◆ Respiratory Medicine
- ◆ Rheumatology
- ◆ Transplant
- ◆ Vascular Surgery
- ◆ Women's Services

During each rotation you spend approximately half your time directly involved in clinical activities, with the rest allocated to other areas of the department, including dispensaries, production services, medicines information, clinical trials, discharge team and the anticoagulant clinics. A copy of the current rotation is included later.



## Out of Hours Service

Rotational pharmacists will be expected to take part in the Emergency Duty rota, providing out-of-hours pharmacy services. As part of the clinical pharmacy strategy we are working towards the implementation of a seven day per week extended hours service. This will include direct clinical input on the admissions ward until late evening.

## Clinical Education and Training

There are a number of clinical training opportunities available to participate in. Rotational pharmacists will be expected to

enrol on a Post Graduate Clinical Diploma course, with current pharmacists having taken places at either the University of Sunderland or Queen's University in Belfast. In addition weekly clinical meetings are held for pharmacists and technicians, with participants being encouraged to share knowledge through appropriate case studies, journal reviews, training packages and other clinical presentations.

The Trust currently supports seven preregistration pharmacists per year and all pharmacists are expected to contribute to their education and training needs.

## Operational Services & Medicines Management

### Dispensary Services

- ◆ All drug purchasing for the Trust
- ◆ Pharmacy support for clinical drug trials
- ◆ Management of the procurement of a wide range of unlicensed or "named patient" drugs
- ◆ Robotic dispensing of inpatient, outpatient and discharge medications
- ◆ Pharmacy-run anticoagulant clinics, three days per week (RVI) and five days per week (FRH)
- ◆ Pharmacy shop

Current opening hours are 08:30 to 17:00 from Monday to Friday and 09:00 to 12:30 on Saturday.

### Stores and Distribution

Both the Freeman Hospital and the RVI have large drug stores, which serve as the base for the stock topping up service for all wards and departments. The Pharmacy Distribution Centre (PDC) at the RVI site supplies and delivers medicines to external locations including community clinics and other healthcare organisations. Technical staff visit the wards and departments on a scheduled basis to manage drug storage, stock control and drug ordering. The stores are managed by technical staff and pharmacists do not routinely work here.

There is a central ordering, invoicing and administration point for the procurement of pharmaceutical goods for the Trust.

### Pharmacy Practice Centre

The Pharmacy Practice Centre is located at the FRH site and includes the Medicines Management Unit, Antimicrobial and Formulary Pharmacists.

### Clinical Trials

There are Clinical Trials units within the main Pharmacy Departments on each site, coordinating the dispensing of medication for the numerous commercial and non-commercial clinical trials being conducted throughout the Trust.

Procurement and supply of medicines for clinical trials is a highly complex process, quite different from the non-trial setting, and Pharmacy staff in each of the units work closely with trials investigators, commercial sponsors and other involved parties to set up the medicine supply procedure for each individual clinical trial. This ensures that the procurement and dispensing process runs smoothly and the complex accountability requirements are met.



Dispensing of clinical trial medication is generally carried out in the main dispensaries by staff that have completed the required in-house training. Individual trial dispensing is usually located at the dispensary most convenient for the trial investigation unit in question, though this may be dictated by requirements for specific storage or preparation facilities for the trial medication which may not be available at the nearest site. Clinical Trial prescriptions may only be dispensed at the site chosen for the individual trial, and cannot be processed in any of the other dispensaries.

### **Medicines Information (MI)**

The Medicines Information service provides information and advice on all aspects of drug therapy. The aim is to support the safe, effective and efficient use of medicines within the Trust by the provision of evidence-based information and advice on the therapeutic use of medicines. Help and support is provided to other Trust staff in utilising the information resources available at ward level.

The MI centre is currently staffed by one full-time Medicines Information pharmacist and two part-time pharmacists, who answer approximately 150-200 enquires per month on a variety of topics including dosing and administration, adverse effects, availability, use of medicines in pregnancy and breast-feeding, and many others. There are a wide range of specialist pharmaceutical information resources available for support including reference texts, medical and

### **Production Services**

#### **Newcastle Specials Pharmacy Production Unit (PPU)**

The Pharmacy Production Unit (PPU) based at the Royal Victoria Infirmary is a large modern facility that has both a manufacturer's specials license and an Investigational Medicinal Products (IMP) license issued by the Medicines and Healthcare Regulatory Authority (MHRA). It is an NHS designated lead unit for the North East for Pharmacy manufacturing and looks to develop both a

pharmaceutical periodicals, in-house files and electronic databases, and we have access to more specialised information services provided outside the Trust.

The service is available to Trust staff and patients requiring information relating to treatment received from our Trust.

### **Operational Education and Training**

Our department is committed to providing training for prospective pharmacists and pharmacy technicians, and has close links with the local universities and colleges providing undergraduate and vocational training. The regional Pharmacy Education and Training Office (PETO) which oversees the provision of pharmacy training across the region, is also based at the Freeman Hospital.

Each year a comprehensive pre-registration training programme is provided for pharmacy graduates, covering all aspects of hospital pharmacy practice and including the RPSGB required cross-sector placement.

A comprehensive two year vocation training programme is provided for student pharmacy technicians, affiliated with Newcastle College.

In-house training for other grades of pharmacy staff is provided, allowing them to develop and progress in their roles and provide invaluable support to the professional and technical staff within the department.

local and national catalogue of cost effective medicines for the NHS.

The unit currently manufactures a wide range of sterile and non-sterile specials, (a special being an unlicensed medicine manufactured in response to a prescription for an individual patient for whom a suitable licensed product is not available).

An IMP license enables us to prepare Investigational Medicinal Products to facilitate



clinical trials. Production staff within the unit can work with trial investigators to develop new formulations and dosage forms.

The following non-sterile products are currently prepared:

- ◆ Oral liquid medicines
- ◆ Topical liquid medicines
- ◆ Suppositories and pessaries
- ◆ Capsules and moulded tablets
- ◆ Ointments, pastes and creams (includes coal tar, dithranol products)
- ◆ Medicated hard candy lollipops

The following sterile products are prepared:

- ◆ Parenteral nutrition bags
- ◆ Hydration bags (to facilitate some chemotherapy regimens)
- ◆ Cytotoxics in bags and syringes
- ◆ Antibiotics in bags and syringes
- ◆ Infusions in glass bottles and ampoules
- ◆ Patient Controlled Analgesia solutions in syringes

The product range covers large- and small-scale terminally sterilised and aseptically manufactured items. A Homecare service for the provision of medicines in single use infusion devices is also available.

## Pharmacy Quality Control (QC)

The Pharmacy Quality Control Laboratory is staffed by scientists with experience of the NHS and the Pharmaceutical Industry. Their role is to ensure that any medicinal product used by the Trust is fit for its intended use.

The laboratory's main function is to analyse the raw material and packaging components that are used by the Trust's Pharmacy Production Unit to manufacture medicinal products that are not readily available from the usual suppliers, and to analyse these manufactured products to ensure that they meet the agreed specifications and are satisfactory for their intended use. Environmental and microbiological testing is performed to ensure that the facility meets the standards demanded by the licensing authority.

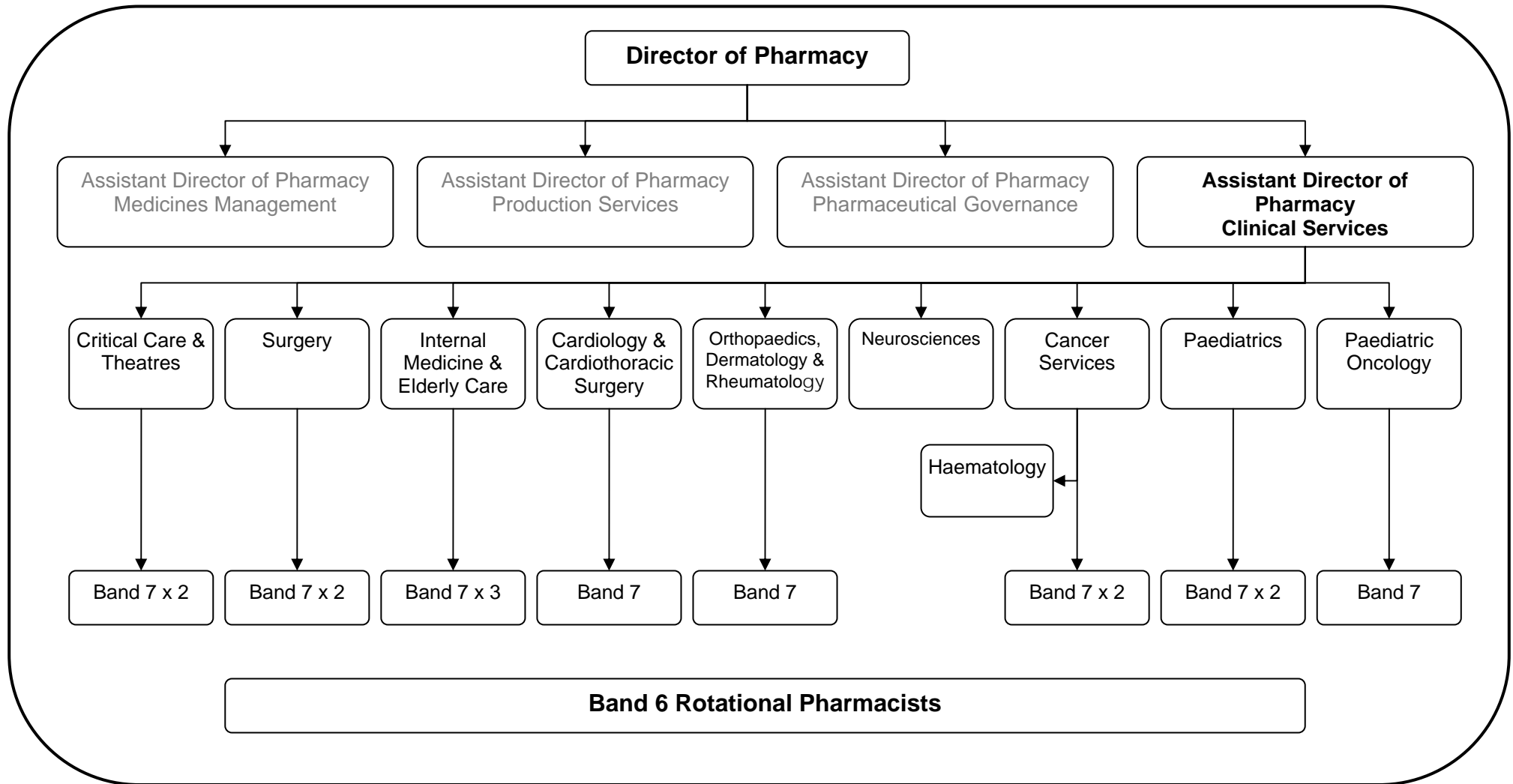
Assessment of the suitability for use of unlicensed medicines is also performed by QC.

QC also has contracts with outside companies to provide them with analytical services similar to those provided to the Trust's own Pharmacy Manufacturing Department.

Pharmacy Quality Control, though not directly involved with patient care, has a wide role throughout the Trust and is involved in some part with much of the treatment received.



## Clinical Pharmacy Structure 2009





## Rotational Programme Timetable 2008

Clinical Duties	Operational Duties	Base Site
<b>Part 1</b>		
Cardiology	Medicines Information	RVI
Respiratory Medicine	Dispensary	RVI
Surgery	Dispensary	RVI
Elderly Care	Dispensary	RVI / FRH
Gastroenterology	Discharge Team	RVI
<b>Part 2</b>		
Orthopaedics & Rheumatology	Dispensary	FRH
Respiratory & Cardio	Dispensary	FRH
Medicine & Medicines Management	Anticoagulant Clinic	FRH
Admissions	Dispensary	RVI
Cancer services	Production Services	NGH
<b>Part 3</b>		
Neurosciences & HDU	Dispensary	NGH
Paediatrics	Production Services	RVI
Renal	Dispensary	FRH
Cardiothoracic Surgery	Dispensary	FRH
Haematology	Production Services	RVI



## NewcastleGateshead

***"The most exciting, beautiful and friendly region in the whole of England"***

(Lonely Planet Blue List 2008)

NewcastleGateshead is a vibrant and dynamic place, brimming with regeneration and energy, and you will be spoilt for choice whatever you enjoy - shopping, dining out or enjoying an evening of entertainment at one of the myriad of theatres, cinemas and music venues dotted across the region. The city itself is just minutes away from unspoilt countryside and miles of stunning Northumbrian coast, and the Lake District is a mere two hour drive across the north pennines. Affordable housing, great schools and easy traveling all promise an enviable lifestyle here in the North East.



Northeast England map showing major roads, rail lines and airports



## Newcastle upon Tyne

Newcastle upon Tyne has a population of around 285,000 and is the administrative, cultural and educational centre of the North East.

The city today is compact and dynamic with a rapid transport underground system and a comprehensive indoor shopping precinct that is one of the biggest and best in Europe.

Once a medieval walled town - the base for continuous warfare with the Scots - it is steeped in history, evidenced by the old Norman Castle Keep, sturdy towers and parts of the embattled surrounding wall, now lovingly preserved. Fifteenth Century St Nicholas' Cathedral commands the approaches to a bustling riverside and the seven bridges that span the Tyne to the south.



Grey's Monument, Newcastle upon Tyne

There are museums and libraries in plenty and art galleries, including the Laing with its fine permanent collection of British Art. The Theatre Royal is at the hub of a thriving theatre world and is regularly visited by the Royal Shakespeare Company. Across the iconic Gateshead Millennium Bridge, the BALTIC offers modern art whilst the Sage is a world class music venue.



Bamburgh Castle, Northumberland

Sport is well represented in and around the city, home of Newcastle United. General sports and leisure activities - indoor and out - include athletics, golf, tennis, football, cricket, squash, riding, rambling, sailing, rugby, and angling. Gosforth Park is well established as Newcastle's racecourse and the Town Moor is the venue for the country's biggest annual fair.

There are plenty of friendly pubs and superb restaurants in the area. Newcastle has an international reputation for its nightlife, offering a wide variety of bars and clubs to suit all tastes. The Rough Guide to Britain recently voted a night out in NewcastleGateshead as the number one British attraction.

Getting out and about in Northumberland, the wildest and least populated of any English county, is a refreshing experience. Rolling hills and the forest of the Northumberland National Park reach north to the Scottish Border, just two hours drive away. England's finest sand-duned beaches and interesting fishing villages line the coast. Offshore lie the Farne Islands, a famous bird sanctuary and home to thousands of seals. To the west, historic Hadrian's Wall stretches to Carlisle and the Lake District.

Twenty minutes south lies the city of Durham and its great Cathedral. An hour's further drive brings the beautiful Yorkshire Dales and Moors within range.

For more information see

- ◆ [northeastengland.co.uk](http://northeastengland.co.uk)
- ◆ [visitnortheastengland.com](http://visitnortheastengland.com)
- ◆ [visitnewcastlegateshead.com](http://visitnewcastlegateshead.com)

**NuTH**

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**JJF, NR & CH**