ACUTE SERVICES REDEVELOPMENT PROJECT

SERVICE/DEPARTMENT

Out-put Based Specification

Pharmacy

Planning Group Lead:  A Cameron

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author</th>
<th>Comments</th>
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<td>1</td>
<td>7.3.13</td>
<td>M Pratt</td>
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</table>
1 INTRODUCTION AND OUTLINE OF SERVICES

1.1 Departmental Function

The Pharmaceutical service is an Area service based at D&GRI which provides a full range of pharmacy services to all hospitals and clinics in the area, it also provides a range of services to GP practices and community pharmacies. Specific functions are detailed below:

- Ensure safe, effective use of medicines in Dumfries and Galloway Royal Infirmary and community hospitals
- Prepare and provide chemotherapy in a form ready for administration
- Prepare and provide TPN
- Aseptic production of other parenteral products as appropriate
- Receive goods, storage (cold, cool and freezing), checking, processing, ordering, distribution throughout Dumfries and Galloway.
- Top up of stock to clinical areas DGRI, Midpark and Allanbank
- Supply and provide advice on vaccine prescribing, storage and administration to GPs
- Provide pharmaceutical care to inpatients and outpatients. Includes use of POD lockers and dispensing at ward level
- Dispense discharge prescriptions for Dumfries and Galloway Royal Infirmary, Mid Park and community hospitals.
- Provide outpatient prescriptions for specialist outpatient services
- Counselling of in-patients and outpatients in departments and clinical areas
- Provide written and verbal advice and education relating to medicines to public, patients and staff
- Procurement of medicines including unlicensed medicines, medical gases and controlled drugs
- Managing unlicensed medicines and the control processes around them
- Setting up and controlling processes for managing clinical trials medicines
- Manage safe and effective storage and supply of Medical gases and Liquid Nitrogen
- Organize safe and effective monitoring processes for issue of Clozapine
- Assemble and manage the required range of Emergency trays
- Extemporaneous dispensing
- Transport of medicines to and from department
- Processing of medicines returned from wards and departments
- Provide an emergency Out of hours pharmacy service

1.2 Specialist/Tertiary Services

- Aseptic production
  Specialist Regional QA services input is delivered from GG&C therefore no space is dedicated to the provision of this service.
  Medical Gas testing is provided by Medical Physics DGRI but is the responsibility of the chief Pharmacist. No specific space is committed to this service in Pharmacy.

1.3 Current Service Configuration

The pharmacy service is an Area service delivered from pharmacy department D&GRI.
The clinical service is ward based with pharmacists spending most of their time at ward level working directly with patients and clinical staff.

The dispensary services the needs of all hospitals in the region and dispenses all received discharge prescriptions.

Supply of medicines to all hospitals is from the D&GRI Pharmacy store as is the supply of a range of supplies, such as GP vaccines, to clinics and all GP Practices in the region.

All medicines procurement takes place within the DGRI Pharmacy.

The above service takes place from accommodation currently based on the LG floor of DGRI from accommodation which includes:
- Waiting areas
- Open plan dispensary
- Extemporaneous dispensing area
- Storage
- Back store
- Controlled drugs room
- Aseptic suite
- 2 walk in fridges
- Infusion room
- Collection area for up-lift to wards
- Medicines information
- Clinical waste area
- Goods received area
- Office dispensary
- Office distribution
- Office pharmacists
- Procurement office
- Antimicrobial office
- Secretaries office
- Medical gas storage including VIE
- Liquid nitrogen supply area

1.4 Capacity For Investigation/Treatment Of Current Referrals

The capacity in the department is under significant strain currently, and plans are in place to redevelop the existing dispensary to create additional working space and improve flow. The aseptic unit is a new unit completed in 2011 which is of a size and quality required for the existing service. Opportunity exists to change certain aspects of the service to increase care given in the community.

Specifically consideration could be given to:
- Moving Clozapine monitoring and dispensing to community
- Increase in homecare provision

1.5 Patient Activity (by function)

Figures provided are for period 1 Nov 2011 – 31 Oct 2012 unless specified
Aseptic Dispensing: 7000 items dispensed
Discharge dispensing: 120,000 items dispensed
Medicine items supplied: c500, 000
Stockholding: c£600k
1.6 Effect Of System Redesign/Balance of Care/National Strategy

Current Links with Primary Care & Community Services
The hospital pharmacy service will be managed and delivered as part of a fully integrated system run in conjunction with primary care.

Hospital pharmacy service will be largely ward based with clinical services totally delivered at ward level.

Hospital Electronic Prescribing and Medicines Administration system will allow increased clinical controls over prescribing.

1.7 Impact Of Current Location/Configuration On The Running Of The Service

1.7.1 Positive

Aseptic suite works well. Pharmacy store location is good in respect of deliveries. Where it is operational there is a good clinical service which is ward based and accessible. This leads to good clinical relationships. There are strong links with primary care to develop consistent prescribing policies and practices. A rapid and effective medicines distribution service exists despite the problems with storage.

1.7.2 Negative

Dispensary location not close to wards.
Not enough work area in dispensary, this does not optimise work flow.
Not enough storage space requiring infusion fluids to be stored in public corridor.
Shelving inadequate.
Lighting inadequate.
Corridors are busy.
Co-location of staff.
No toilets.
No meeting room or staff area.
Aseptic remote from chemo clinic and dispensary causing increased journey times for pharmacy and nursing staff.
Lay out of aseptic suite does not provide optimal work flow.
No staff changing facility to minimise infection control risks.
No sink to wash hands.
No Wi-Fi.
Staff pressured to deliver high quality service in a low quality environment.

1.8 Current Service Risks

Current environment does not minimise risk of dispensing and supply errors due to interruptions.

Departmental space is too small to run an efficient service. Currently products are stored in multiple places leading to difficult stock management. Corridors are congested and bulky infusion fluids are being stored in a public corridor.
Staff recruitment and retention is difficult, whilst pharmacist recruitment has been a long term problem, this has eased slightly recently. Recruitment of qualified technicians is extremely difficult giving ongoing problems in sustaining services.

Staff are operating at maximum capacity, with a background of growing workload. Our staffing figures benchmark at the low end of the scale when compared with other Boards which gives a low baseline. Our workload is continuing to increase with aseptic chemotherapy activity increasing 30% in the last year alone.

2 SERVICE TRENDS

2.1 Demand on Specialty/Service

- Increasing patient numbers and complexity
- Increasingly complex treatment regimens
- Increased patient turnover
- New high tech biologic products will increase need for aseptic and clinical support
- Patients not staying as long but requiring more intensive treatment
- Recruitment of staff

2.1.1 Anticipated Future Activity

Day case activity increasing resulting in increased activity on pharmacy dispensary. Increased patient turnover and demand on beds will require more rapid turnaround of dispensed discharge medicines further adding to dispensary pressures.

Response times for supply of medicines for in-patients, and patients being discharged must improve.

Intensive clinical pharmacy input will be required to Acute Admissions Unit to ensure rapid patient assessment and improved patient flow thereafter.

Increased use of cytotoxic chemotherapy from increased early identification (Detect Cancer Early initiative) and treatment of cancers, plus cancer repatriation from tertiary centres.

2.1.2 Anticipated Shifts in the Locus of Care

Day cases increase
Increase in intensive input at admission stage to streamline care thereafter
More care provided out with DGRI such as development of Stranraer cancer services, renal services in cottage hospitals
Cottage hospitals increasingly serviced from primary care based services
Increased role of Community pharmacy in chronic pharmaceutical care
Increased role of Home Care organisations in provision of care to patients

2.2 Technology / Developmental Technology

- Gene therapy – assumed not delivered in DGRI
- Increased use of robotics systems including out-patient use will improve dispensing accuracy and response times
- Electronic Prescribing/Patient Records will allow greater clinical controls and a more focussed clinical pharmacy service. Improving patient safety.
- Use of e-health technology to communicate will be the routine therefore need excellent and robust wi-fi access
2.3 Assessment & Admission Criteria

Clinical pharmacy assessment of patients and their medicines on admission, during stay and on discharge in clinical areas. A specific and acute need in Acute Admissions Unit to ensure patients fully evaluated at an early stage.

2.4 Links with Primary Care and Community Services

Communication of medicine related care plans from and to nursing homes and community pharmacies
Provision of vaccines to GP practices
Joint formulary work

2.5 Nurse Practitioner/AHP Role Enhancement

Consideration needs to be given to potential role of independent pharmacist prescriber and also to the training of non-qualified staff to take on a dispensing role.

2.6 Multi-Disciplinary & Multi-Agency Working

Working with all grades of medical and nursing staff in clinical areas contributing to patient care.
Prescribing TPNs with MDT
Social work links due to level C and blister packs
ADTC work

2.7 Other Factors Affecting Activity And Treatment By 2015 / 2020

None Identified

2.8 Treatment Trends

Therapy
1. Chemotherapy
2. Biologics
3. Parenteral antibiotic treatments

Trend
1. Increased use of complex regimens and prolonged treatment periods.
2. Increased use of biologic treatments such as monoclonal antibodies in specialties such as rheumatology, neurology ophthalmology, dermatitis and cancer
3. Increased treatments out of hospital or in outpatient setting

Departmental Impact
1. Increase in clinical and aseptic dispensing
2. Increased information and clinical support required for the full clinical teams and increased dispensing times required
3. Increased workload on aseptic dispensing and clinical support pharmacists

2.9 Likely Technical Advances

- Access to pharmacy IT systems
• More advanced robotics freeing up pharmacy staff time to refocus the service on key clinical and efficiency concerns
• Electronic prescribing and medicines administration
• Increased use of high cost and complex biologic agents

2.10 Service Delivery Transitional Risks

• Disruptions to supply of medicines as distribution, aseptic and dispensary move
• Stock drift
• Maintaining communication if on different sites
• Moving Controlled drugs and fridges
• Robot function
• Commissioning of aseptic
• Unprepared
• Unexpected service change

3 CLINICAL/SERVICE MODEL & PHILOSOPHY OF CARE

3.1 Philosophy of Care

Pharmacy area and individual departments
Pharmaceutical Care will be delivered in a patient centred way designed to improve safety, reduce harm and improve outcomes for the patient and increase hospital throughput and reduce risk of readmission.

Pharmaceutical services will be professionally delivered responding to patient needs and respecting confidentiality as well as maximising safety and reducing harm

3.2 Model of Care Delivery

Pharmaceutical Care will be delivered near to the patient as part of a MDT. The clinical service will focus on “front of house” services ensuring effective medicines reconciliation and pharmaceutical assessment is delivered and an effective pharmaceutical care plan is prepared for the patient, which will be delivered by the MDT for the duration of the patients stay. This will mean an intensive input in the Combined Assessment Unit. Pharmaceutical Care will also have a discharge focus ensuring continuity of care is effective post discharge. The main focus of the hospital pharmacy team will be on acute therapeutic changes as chronic medication will be managed by the multi disciplinary team in primary care, including community pharmacists.

Medicines, procurement, storage and distribution will be from a centralised facility. Discharge prescriptions will be dispensed from a centralised facility, which could be located separate from the main pharmacy store. The dispensary should have convenient access for nursing staff but will not be accessed by patients. Discharge dispensing for cottage hospitals could be delivered via community pharmacies.

Patients Own Medicines (PODs) will be used to a maximal extent stored in secured POD lockers in each patient room

The Aseptic dispensing service will be delivered from a single centralised service located in the new hospital ideally based in pharmacy but could be separate. It will be conveniently located for oncology service.
The service delivered will be completely dependent on high technology developments being in place for example it will require robotic storage, distribution and dispensing systems. HEPMA is being planned for delivery in existing D&GRI to allow embedding before move to new hospital requirement and pharmacy staff will have access to and fully depend on efficient utilisation of Wi-Fi enabled and operational computer tablets for the full range of pharmaceutical care management.

Delivery of pharmaceuticals to and from wards and departments will be by non-pharmacy staff mainly porters and transport, or via automated systems that are risk assessed as being robust and secure enough to deliver medicines. It is assumed domestic services for the full department, including aseptic services will be provided by specialist service outwith pharmacy i.e. domestic services.

3.3 Future Service Scope

It is assumed that Pharmacy will only deal with Medicines. Non-medicinal products will be delivered via an alternative non-pharmacy route.

It is assumed no Gene therapy will be delivered from the new hospital and as a result no gene therapy preparation facility is planned as part of the aseptic suite.

It is assumed that general activity in pharmacy will increase as patient turnover increases with increased admissions and shorter stays. This will require more rapid assessment, more complex regimens and more rapid discharge response times required.

The range of services provided will be as follows:

- Ensure safe, effective use of medicines in Dumfries and Galloway Royal Infirmary and community hospitals
- Prepare and provide chemotherapy in a form ready for administration
- Prepare and provide TPN and other parenteral products as appropriate
- Receive goods, storage (cold, cool and freezing), checking, processing, ordering, distribution throughout Dumfries and Galloway.
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3.4 Patient/Process Flow & Service Delivery

The service will be delivered from both department and ward level.
1 – Medicines Supply – will be delivered from an automated pharmacy with robotic order assembly and dispensing functions.
2 – Technical and clinical support will be provided as direct patient and clinical involvement at wards and departments

Renal fluids to be delivered direct to renal unit bypassing pharmacy.

Medical gases cylinders – direct delivery to Cottage and Community Hospitals and new hospital.

Increased role of community pharmacist.

3.5 Future Service Delivery Risks

Increased activity beyond staffing capacity
Insufficient redundancy built in to technological solutions
Inability to effect required skill mix changes
Patients Own Medicines for use in hospital stay do not arrive as a matter of routine on a high scale
HEPMA is not successfully implemented
Robotic dispensing and storage is not implemented
Recruitment and retention of pharmacists and technicians
Continuity of supply due to failure in the manufacturing / supply chain

4 FUNCTIONAL CONTENT

The Proposed Facilities/Accommodation Overview (What is included)
Pharmacy

| Pharmacy |  |
|----------|--
| No       |

<table>
<thead>
<tr>
<th>Dispensary and Storage Areas</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Loading bay</td>
<td>1</td>
</tr>
<tr>
<td>Office: 5 Persons (Purchasing)</td>
<td>1</td>
</tr>
<tr>
<td>Goods received area</td>
<td>1</td>
</tr>
</tbody>
</table>

<p>| | |
|  |  |
|  | Work station for each member of staff with PC storage shelves for any paper required |
|  | Access to computer, space to turn and move pallets |</p>
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<thead>
<tr>
<th>Area</th>
<th>Quantity</th>
<th>Description</th>
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<tr>
<td>Infusion store</td>
<td>1</td>
<td>Storage device to accommodate pallet storage and organised storage of individual boxes and bags of infusion fluids.</td>
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<tr>
<td>Sundries store</td>
<td>1</td>
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</tr>
<tr>
<td>Dispensary Waiting area</td>
<td>1</td>
<td>Seating and notice board plus access to health information point</td>
</tr>
<tr>
<td>Office: 1 person</td>
<td>1</td>
<td>Desk and 2 seats to allow one to one patient counselling</td>
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<tr>
<td>Medicines storage area</td>
<td>1</td>
<td>Suitable housing for pharmacy robot plus highly accessible and robust shelving system for storage of medicines that cannot be stored in the robot. Require access in this area to ‘N’ computers and also have space for organising and checking orders coming in and going out.</td>
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<tr>
<td>Dispensing area</td>
<td>1</td>
<td>Area highly accessible to hospital staff with ready access to the medicines storage area via robotic driven conveyor system.</td>
</tr>
<tr>
<td>Controlled drug storage</td>
<td>1</td>
<td>Highly secure room with sufficient storage for controlled drugs within cupboards which comply with British Standard. Access to computer and alarmed 24/7 on separate part of alarm system.</td>
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<tr>
<td>Clinical trials area</td>
<td>1</td>
<td>Equipped with cupboards and shelves, plus dispensing bench</td>
</tr>
<tr>
<td>Inflammable store</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Vaccine fridge</td>
<td>1</td>
<td>Shelving for storage of vaccines, 2-8C alarmed system linked to switchboard 24/7 operation</td>
</tr>
<tr>
<td>Medicines fridge</td>
<td>1</td>
<td>Shelving for storage of medicines, 2-8C alarmed system linked to switchboard 24/7 operation</td>
</tr>
<tr>
<td>Cool store</td>
<td>1</td>
<td>Shelving for storage of medicines, 8 - 15C alarmed system linked to switchboard 24/7 operation</td>
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<tr>
<td>Returns processing area</td>
<td>1</td>
<td>Shelving plus workbench</td>
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<tr>
<td>Despatch area</td>
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<td>Series of shelf to allow 5 separates runs and despatch areas</td>
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<tr>
<td>Bottle Medical Gas storage</td>
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<tr>
<td>(external)</td>
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<td>---------------------------------------------------------------------------</td>
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<td></td>
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<tr>
<td>Liquid nitrogen vessel storage 1</td>
<td></td>
<td></td>
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<tr>
<td>VIE liquid oxygen tank and reserve tank 1+1</td>
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<td></td>
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<tr>
<td><strong>Sub-Total</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Aseptic Suite</strong></td>
<td></td>
<td></td>
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<tr>
<td>Entrance 1</td>
<td></td>
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</tr>
<tr>
<td>Containing 1xhandwash sink, 1xdouble sink with double drainer, area to store clean room shoes, area to store outdoor shoes, area for goods received to be placed, fridge (alarmed and linked to switch board, continuous temp monitoring) hatch from dispensary area to entrance</td>
<td></td>
<td></td>
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<tr>
<td>Store 1</td>
<td></td>
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<tr>
<td>Deep shelving for storage of TPN boxes, sundries, large inflamm cupboard</td>
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<td></td>
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<tr>
<td>Office (4 workstations) 1</td>
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<tr>
<td>4 workstations, Fridge (alarmed and linked to switch board, continuous temp monitoring), Raised bench area for dose banding (containing CCTV monitor, computer/printer), filing cabinets, Pressure gauge panel, storage</td>
<td></td>
<td></td>
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<tr>
<td>Stage 1 changing room 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelving, step-over bench</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General support room 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage of drugs and equipment, benching at standing height, 2xstainless steel trolleys, CCTV monitor and computer, fridge (alarmed and linked to switch board, continuous temp monitoring), small inflamm cupboard</td>
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<tr>
<td>General stage 2 changing room 1</td>
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<td></td>
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<tr>
<td>Shelving, step-over bench</td>
<td></td>
<td></td>
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<tr>
<td>General air lock 1</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
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<tr>
<td>Biologics room 1</td>
<td></td>
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<tr>
<td>Negative pressure isolator (ducted to the outside), clean room chair, stainless steel benching and stainless steel trolley N.b require extra ceiling height</td>
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<tr>
<td>TPN room 1</td>
<td></td>
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<tr>
<td>HLFC cabinets, clean room chair, stainless steel benching and stainless steel trolley N.b require extra ceiling height</td>
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<tr>
<td>CIVAS room 1</td>
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<tr>
<td>Negative pressure isolator (ducted to the outside), clean room chair, stainless steel benching and stainless steel trolley N.b require extra ceiling height</td>
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<td></td>
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<tr>
<td>Cytotoxic air lock 1</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Cytotoxic support room 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage of drugs and equipment, benching at standing height, 2xstainless steel trolleys, CCTV monitor and computer, fridge (alarmed and linked to switch board, continuous temp monitoring) , small inflamm cupboard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cytotoxic stage 2 changing room 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelving, step-over bench</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cytotoxic room 1</td>
<td></td>
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<tr>
<td>Negative pressure isolator (ducted to the outside), clean room chair, stainless steel benching and stainless steel trolley N.b require extra ceiling height</td>
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<tr>
<td>Plant room (external)</td>
<td>1</td>
<td>2x air handling units (cyto and general) – to be secure Control panel (situated inside but not inside aseptic unit)</td>
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**Sub-Total**

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<thead>
<tr>
<th><strong>Support Accommodation</strong></th>
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<tbody>
<tr>
<td>Office: 8 staff (&quot;hot desks&quot;)</td>
<td>1</td>
<td>Requires work stations and computers</td>
</tr>
<tr>
<td>Office: 1 person</td>
<td>1</td>
<td>Desk and 2 chairs notice board/white board</td>
</tr>
<tr>
<td>Office: 3 persons in administration area</td>
<td>1</td>
<td>Desk and chairs notice board/white board</td>
</tr>
<tr>
<td>Staff WC/wash</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Disabled WC</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cleaners room</td>
<td>1</td>
<td></td>
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<tr>
<td>Disposal hold</td>
<td>1</td>
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<tr>
<td>Staff locker bay</td>
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<td>40 small lockers</td>
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<td><strong>Sub-Total</strong></td>
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<table>
<thead>
<tr>
<th><strong>Total Net</strong></th>
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<tbody>
<tr>
<td>Planning</td>
<td>5%</td>
<td></td>
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<tr>
<td>Engineering</td>
<td>3%</td>
<td></td>
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<tr>
<td>Circulation</td>
<td>25%</td>
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<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>

### 4.1 Clinical Facility Requirements (How will it work)

#### 4.1.1 Configuration

#### 4.1.2 Reference to internal relationships/adjacencies

- Procurement to be located in close proximity to main pharmacy distribution area.
- Goods received area to be adjacent to main pharmacy distribution area.
- Goods received area to be highly accessible from the loading bay.
- Pharmacy distribution area to be in close proximity, or have good mechanical linkage to dispensary to allow regular and convenient stock movement.
- Aseptic suite to be close to dispensary to allow simultaneous dispensing of oral and parenteral chemotherapy.
- Aseptic suite to be close to chemotherapy clinic to allow convenient flow of product and staff between the 2 areas without patient/visitor cross over.
- Pharmacy areas to be close to staff amenities
4.1.3 Access Requirements

Dispensary to be highly accessible for wards as despite pneumatic tube system there will still be a significant flow of people to and from dispensary.

The pharmacy is required to be secure at all times. Access to the pharmacy must be restricted to authorised personnel only including out of hours

Rapid and easy link between dispensary and main pharmacy store

Aseptic dispensing service to be located ideally in pharmacy but highly accessible to chemotherapy treatment areas

Store to be close to loading bay to allow ease of access for deliveries

4.2 Opening Times (When will it work)

Assumed existing hours will still apply:
Mon – Fri 8:30 – 17:00
Sat – Sun 9:00 – 12:00

Based on current experience these hours very often over-run necessitating services and facilities to be available significantly beyond stated opening hours.

Weekend services are non-ward based

Out with hours provided from a pharmacist on call service who will regularly be required to attend the department to arrange supply and information and therefore will require access and services to all parts of pharmacy potentially 24hours a day every day of the year.

As services develop it may be a requirement to increase these hours so flexibility of heating, lighting, security must be built in as a requirement. This may be expected to cover potentially any area in Pharmacy.

4.3 Specific Design Considerations

Aseptic suite to be developed in accordance with Guidance for Planning, Design and Construction of new and upgraded Aseptic Facilities as outlined in Appendix 2 of this document.

Robotic requirements of height and floor strength to be developed with estates colleagues

Pneumatic tube delivery system to have width and length sufficient to take most medicines including bulky dispensed discharge prescription. Security of system to be validated and risk assessed to allow medicine supply.

Heat/temperature controls to be as follows:
Office temperatures 20C to 25C
Room temperature for medicines storage 20C to 22C
Aseptic suite 18C to 22C
Fridge storage temperatures 2C to 8C
Cool store 8C to 15C
Freezer -22C to -20C
Temperature monitoring system to be linked to central monitoring system within a 24/7 link to alert pharmacy staff to variances.

Temperature monitoring linked to a central monitoring system for all medicines storage areas, especially fridges, throughout hospital.

Department to be designed to a high security standard with access restricted to only approved pharmacy staff. Access levels to be variable in different zones in pharmacy e.g. not all staff will be permitted access to controlled drug storage area, or aseptic suite.

Out of hours alarm system to be installed with 24/7 monitoring process allowing alerting to a central monitoring point and rapid pharmacy alerting process

Storage cupboards to be provided to required specification for storing medicines. With Controlled drug cabinets to be to required British standard. This also to apply to all medicines storage throughout hospital.

The environment to have natural light all places where staff has prolonged periods of work.

Staff to have ready access to staff amenities

4.4 Design Guidance

Storage of medicines:
To comply with current legislative requirements and professional guidance to aid planning and design, the following may be used as reference:

Controls Assurance - Medicines Management Standard (Safe and Secure Handling of medicines). April 2009

Royal Pharmaceutical Society of Great Britain 2005 - The Safe and Secure Handling of Medicines – a team approach


Pharmacy security systems must however in addition to the above must be agreed and approved with the Chief Pharmacist and the local crime prevention branch of the local constabulary

Robotics
Robotic storage and order assembly systems to be designed to ensure built in redundancy, to ensure fail safe mechanisms will apply. This may mean the installation of a minimum of two robots, each with a double picking head. Current stock range extends to c7000 product lines and around 500,000 stock transactions per annum

Medical Gas Systems
Piped medical gas systems to be designed to requirements of the existing Health Technical Memorandum at the time. Currently HTM 02-01 applies.

Bottled medical gas cylinders to be stored in a remote, well ventilated and clearly sign posted store, with sufficient room for storage. This store must be easily accessible by portering staff. The storage facilities for gas cylinders must be agreed and approved with the Chief Pharmacist and the Boards Health and Safety Officer.
4.5 Environmental and Services Requirements

CCTV, to cover all stock holding areas of pharmacy.
Natural light to be available in main working areas of department
Easy access to pneumatic tube system
Wi-Fi access throughout pharmacy
VIE tank and back up VIE ensuring access for the hospital to piped medical oxygen to all wards and relevant clinical areas. The VIE and reserve to be sited in a risk assessed way to ensure safe and secure supply and built in redundancy.