SDC - Healthcare Planning
Design brief guidance

2003

STATUS IN WALES

INFORMATION
SDC –
Healthcare Planning:
Design brief guidance
Introduction – The purpose of this document

The NHS is currently embarking on the most extensive re-development of its facilities in its history. The Private Finance Initiative is delivering a record number of newer hospital builds and this procurement route sits alongside other initiatives such as LIFT and Procure 21 which are also delivering new facilities into the NHS.

What is recognised is that a pre-requisite for ensuring that any new building scheme reflects accurately the NHS client requirements is the production of a robust design brief. It is the design brief which acts as the core content of the clinical and non-clinical output specifications and in turn forms a major element of the Invitation to Negotiate (ITN) documentation.

The role of the healthcare planning process is to produce the design brief and this document gives guidance on the process and example outputs which need to be produced.

It is not intended for this guidance to be prescriptive but more to support those embarking on the planning of new schemes. Neither is it intended to be all encompassing; there is significant material available to support the planning process and PFI process, in particular see:

- The Private Finance Unit: www.doh.gov.uk/PFI
- NHS Estates: www.nhsestates.gov.uk
- The Modernisation Agency: www.modernnhs.nhs.uk

Evidence also suggests that the earlier the planning process starts the more detailed the brief and the smoother the procurement process. The design brief needs to be comprehensive to enable private sector bidders to correctly interpret requirements and develop robust and innovative design solutions.
Context – The role of Healthcare planning

Healthcare planning is an essential part of the work leading up to the Outline Business Case / Public Sector Comparator stage of the PFI process.

Healthcare planning, within the overall PFI process, allows Trusts to reflect on current ways of working and provides a framework to refine / alter / improve service delivery. A robust healthcare planning process allows the opportunity for Trusts to embrace new ways of working and provides a vehicle by which space and environmental requirements can be reconfigured to optimise efficiency. In particular the process supports the production of an informed design brief that balances the relationships between the care process, development and use of medical technology and the design of the physical environment.

Healthcare planning allows Trusts to develop new models of care and then to translate them into detailed service specifications, suggesting the way in which the services and departments could be configured for optimal performance and efficiency. In summary the process is about translating opportunities presented in new models of health care delivery and new technology into the requirements for physical space and design.

Detailed overleaf is a diagram that shows how the health care planning fits into the overall development of a capital scheme. Increasingly it is recognised that good quality healthcare planning at the earliest stages of the overall process invariably leads to a better quality scheme.
Context – How does healthcare planning fit into the overall process


Healthcare Planning

OBC Stage  PFI Selection Stage  Build Stage  Commissioning & Operational use
Healthcare Planning – The process

This document sets out principles in helping Trusts to develop a robust design brief and in particular how this can be influenced by the healthcare planning element of the overall process. There are three key concepts / stages in the healthcare planning process that will be covered within this document, they are:

- Developing the Model of Care;
- Developing the Operational Principles/ Functional Content;
- Developing the Operational Policies/ Schedules of Accommodation.

The document also seeks to show how certain tools can be used to enhance and inform the development of the model of care in particular this will cover:

- Utilisation Modelling,
- Patient Flow Mapping.

This document seeks in a simple way to define what each of the healthcare planning concepts are, how they are developed and the people who need to be involved.

A series of worked examples are given in the appendices to help the user to understand further the concepts and outputs of healthcare planning.
Healthcare Planning – The process

The document is structured to follow the healthcare planning process, leading to the production of outputs that cumulatively represent the design brief and in turn inform output specifications and Invitation to Negotiate documentation.

The overall process and structure of the document is set schematically below. The diagram below shows the 3 key, sequential stages of the healthcare planning process.
Developing the model of care – A definition

The model of care is the overarching philosophy identifying how the health economy, and organisations within it, will deliver care in the future. This should reflect the health care philosophy and particular circumstances of the whole health economy / organisation. Models should assess the opportunities for future provision with particular emphasis on modernising:

- The care process;
- Use of technology;
- Use of design.

Examples of a whole system model of care are set out over the following schedules. Diagram 1 represents the provision of services across primary and secondary care. The output of the work underpins the balance of care provision between the acute hospital and care outside of hospital within a primary/community setting.
Developing the model of care – A definition

This diagram represents the role and functions of organisations and facilities across the care spectrum.

Diagram 1
Developing the model of care – A definition

In the context of the whole system individual service models can be developed. The example below shows a proposed model for therapies across all settings.

Diagram 2

- **PCC or D&T Centre**
  - Surgical facility including Surgical Podiatry
  - Orthopaedic Triage
  - Videofluoroscopy
  - Hub or Spoke for Orthotics Services
  - Spoke for local citizens
  - Base for relevant AHP’s

- **Primary Care Centre**
  - **HUB for rehabilitation service**
    - One stop multi-disciplinary assessment and treatment (whole systems) including Gait Lab, Gym and Pool
    - Hub or Spoke for Orthotic Services
    - Centre store for rehabilitation aids and Orthotics
    - Spoke local citizens
  - **Hub for allied professionals**
    - Management and admin base
    - Main staff base
  - **Education centre**
    - For staff, students and patients

- **Non-Health Settings**
  - Multiple locations for local delivery eg. schools, libraries, local sports centre, homes, day centres
  - “Healthy Living Centre”
  - Local repair services eg. Surgical, footwear, hearing aids

- **NHS Health Settings**
  - Multiple locations for local delivery of AHP services eg. Health Centres, GP Practices, PCC
  - Intermediate Services

- **Locations and bases dependent on outputs from relevant SDGs**
  - Outreach Team
  - Neuro Rehab Team
  - Other Multi-Disciplinary Teams
    - Rapid Response Team
    - Paediatric Feeding Team
    - Special Needs Team

- **Acute Hospital**
  - D&T Centre
  - In-Patients
    - Complex/Acute/Critical
    - Hub or Spoke Orthotic Services
    - Base for relevant AHPs
Developing the model of care – A definition

The acute setting model is understood in the context of the whole system thinking illustrated in diagram 1. The diagram below sets out the key building blocks for the configuration of the acute hospital.
Developing the model of care – The process

The first stage in developing the new model of care, is to form an appropriate project framework to include a project team as well as service design / task groups with membership taken from healthcare professionals within the local healthcare community. The project structure and roles and responsibilities need to be clearly articulated prior to project commencement.

The purpose of Service Design / Task Groups is to bring a multidisciplinary group of healthcare professionals together, in order to discuss and consult on how to best deliver services to patients in the context of the overall strategic direction.

The service design / task groups would typically include:

- Medical staff;
- Nursing staff;
- Therapists / PAMs;
- Directors / Management;
- GPs / Primary care representatives;
- Support service representatives e.g. Pharmacy, Laboratories etc.
- Other agencies e.g. social services and ambulance trust.

It is important that appropriate individuals are selected for this work, as a high level strategic approach is required, care should be taken that the groups do not focus on the level of detail that is required at the later stages of the process.

The project structure should reflect the nature of the scheme, covering key processes usually across the whole health economy. For example:

![Stage 1 Stage 2 Stage 3](image-url)
Developing the model of care – The process

Primary, community, ambulatory & pre-admission

Elective admission

Emergency/ non-elective

Chronic disease management

Elderly & intermediate care

Diagnostic & therapies

Critical care

Discharge
Developing the model of care – The process

In order to ensure clarity of purpose, prior to the initial meeting of each of the groups, briefing material should be developed, which outlines the purpose and remit and expected outputs of the group. This material should provide a detailed summary of the overall scheme and ensure the group discussions take place within the correct context.

Detailed below is a checklist for assembling a briefing pack for service design / task groups, this is based upon a new build acute hospital scheme and therefore may need to be adapted for smaller schemes. An example of a full briefing pack is included as Appendix A.
**Developing the model of care – The process**

<table>
<thead>
<tr>
<th>Introduction:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of the aims of the scheme, both in terms of building stock and the wider benefits to public health / social issues.</td>
</tr>
<tr>
<td>An outline of the scheme in the context of other national schemes.</td>
</tr>
<tr>
<td>The progress of the scheme, in terms of Strategic Outline Case (SOC), working towards Outline Business Case etc. A brief summary of the SOC should be included for further clarity.</td>
</tr>
<tr>
<td>A guide to the timescales involved in the current phase of the scheme and the schemes overall timescale targets.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>A summary of what will be delivered e.g. total number of beds within the development, new diagnostic services and suggested new ways of working such as Diagnostic &amp; Treatment Centres (DTCs) and developments in Primary Care etc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Structure of the Service Design / Task Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>A list of all the groups should be provided, with contact names and details for each of them.</td>
</tr>
<tr>
<td>Each Briefing Pack should include a definition of what the group’s aims / terms of reference are, e.g. “The planning of the provision of critical care including CCU, HDU, ITU, Theatres &amp; Recovery and the development of an understanding of the linkages to emergency / non-elective care in particular”.</td>
</tr>
<tr>
<td>A project structure diagram could also be provided at this point, which would demonstrate where the group work fits into the overall scheme.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group Aims and Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A clear definition of the remit and required outputs should be included.</td>
</tr>
<tr>
<td>The principles upon which the more detailed planning can take place;</td>
</tr>
<tr>
<td>The production of the model of care.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Work plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>The work plan should set out the areas to be covered in each meeting, with a clear indication of the outputs required.</td>
</tr>
</tbody>
</table>
Developing the model of care – The process

The final output of the service design / task groups will be the model of care paper; this should address a number of key issues. Many of the issues to be addressed in this paper are often complex and it is advisable to express what is often conceptual thinking in diagrammatic form.
Model of care – Content

Detailed below is the suggested coverage of the model of care development process (a fully worked up example of a Model of Care paper is included as Appendix B):

1. Whole System Principles
   - The main points from the SOC should be incorporated, including the overall objectives of the scheme.
   - Examples of what the overall health economy should provide in light of the new model of care e.g. people centred services, services that address inequalities etc.

2. Whole System Model of Care
   - It should reflect the work of each of the Service Design / Task Groups and how the services fit into the overall model of care.
   - The whole system model of care should reflect the national context in which the services in question are affected e.g. National Bed Inquiry, Waiting Booking and Choice recommendations and National Service Frameworks.
   - The first stage of this work should be in a simple diagram to identify the key components that are to be discussed.

Each service should then be set out and aggregated into its component parts and then organised according to important clinical and functional linkages, an example is set out overleaf.
An example profile of key components for a major new acute hospital scheme is set out below:

- **Teaching and Research Space**
  - Post Acute Care
  - Dental
  - Outpatients
  - Day Investigations
  - Day Surgery
  - Rehabilitation Services (Physiotherapy, Occupational Therapy, Speech Therapy)
  - Emergency Admissions Ward
  - Operating Theatres
  - Cardiac Catheterisation
  - Coronary Care Unit
  - Special Care and Baby Neonatal Unit Paediatric ICU
  - Intensive Care Unit
  - High Dependency Unit
  - Cardiac Intensive Care Unit
  - Coronary Care Unit
  - Radiology
  - Pathology
  - Investigations/Scoping
  - Medicine
    - *General Medicine
    - *Infectious Diseases
    - *Gastroenterology
    - *Respiratory
    - *Dermatology
    - *Renal
    - *Clinical Haematology
  - Cardiac
    - *Cardiology
    - *Cardiac Surgery
  - Surgery
    - *General Surgery
    - *Urology
    - *ENT
    - *Burns
    - *Plastics
    - *Ophthalmology
  - Orthopaedics
    - *Orthopaedic Surgery
  - Neurosciences
    - *Neurology
    - *Neurosurgery
  - Paediatrics
    - *Paediatric Medicine
    - *Paediatric Surgery
  - Obstetrics & Gynaecology
    - *Obstetrics
    - *Gynaecology
  - Acute Mental Illness
    - *Adult Psychiatry
    - *Child & Adolescent Psychiatry

- **Emergencies**
- **Treatment**
- **Critical Care**
- **Diagnostics**
- **Specific Aggregations**
- **Teaching & Research**
- **Ambulatory Care**
- **Rehabilitation**
Model of care – Content

3. Model of Care (Process/Service Specific)

- There is a need to focus down from the whole system model of care into each of its component processes and examine them in more detail. This is likely to be the detail from each service design / task group. For example, emergency care as set out in the diagram overleaf:

This section should also include any relevant information on new ways of service configuration such as DTCs, Emergency Admissions Units, and Primary Care Centres etc.
4. Impact of Model of Care

• A description of the impact that the model of care will have on the capacity of the health economy in terms of how many beds, consulting rooms etc should be provided.

• It should also outline the suggested configuration of the rooms / beds e.g. number of consulting rooms to be provided in the community, number of beds in the Emergency Admissions Unit etc.

• The impact in terms of the health workforce should also be detailed. This section should include information on proposals for GPs with a Specialist Interest, development of the Nurse Practitioner roles etc. Staff and skill mix should also be considered in this section.

• The IM&T requirements needed to underpin the model of care should be included. This should include systems such as the Electronic Health Record (EHR), Picture Archiving & Communication Systems (PACS), and Telemedicine etc.

5. Way Forward

• The final element of this document should cover the next steps in the process. It should include details of which staff groups are required to sign off the model of care, both as a whole and as service specific models. Ongoing work for the Service Design / Task Groups should also be detailed and could include continued development / refinement of care pathways.
Model of care – Issues to consider

In formulating the new model of care, each group will be required to consider any current influences and developments in the health care field amongst which could be:

- **Future service models and levels of care**, such as changes in clinical practice, facility organisation, national guidance (National Beds Inquiry, NSFs etc), configuration of beds etc.

- **Physical setting**, including accommodation of patients, internal flow, travel distances and environmental considerations.

- **Quality Issues**, including patient convenience and privacy & dignity issues.

- **Emerging technologies**, such as electronic health records (EHR), appointment scheduling (booked admissions) and computer links to primary care.

- **Workforce planning**, including the impact of new methods of working on staff roles & responsibilities, working patterns, skill mixes and training / development issues.

- **University teaching and research**, such as consideration as to how the configuration of some services will have implications for the provision of educational / research activities.
Model of care – Tools and techniques

In developing the model of care there are a number of “tools” that can be used to inform the process. These include:

- Patient flow diagrams;
- Utilisation models.

Patient / service flow diagrams

There are two main advantages of this approach:

- Patient flow diagrams play a vital part in mapping the future flows of patients in light of the new model of care.
- They can then be used to identify potential areas of duplication/conflict/inefficiency/bottlenecks.
Diagrams should be produced at “service” level. Example of an emergency service diagram is set out below.

Service Level
Model of care – Tools and techniques

Utilisation Models as a tool

Like patient flow diagrams, utilisation models can be used to inform the model of care. Once the model of care is agreed the use of utilisation models will help to establish the size of the scheme in terms of capacity requirements such as beds and theatres etc. This in turn informs the functional content and schedules of accommodation.

High-level models may utilise population or demographic data and the demand that the population has for the local healthcare services. The model of care as defined in the service design / task groups is then applied in order to determine the functional requirements by each specialty.

The whole purpose of utilisation models is to test planning assumptions and to establish the impact of changes in assumptions on capacity requirements. For example, Models can allow Trusts to see what the impact would be in terms of beds, theatres and out patient rooms etc, if a 3 session day was adopted, or the bed occupancy assumptions were altered.

Examples of some of the following utilisation models are included in Appendix C.

Theatre models

- The model is based on the number of cases passing through the theatres by specialty.
- This figure is then broken down further by elective inpatient, emergency and elective day cases and a standard time taken per procedure is allocated by specialty (e.g. an elective in patient case for general surgery may take on average 1.3 hours and an elective in patient case for cardiothoracic surgery may take on average 2.33 hours);
- Assumptions are then added to this information. The assumptions used are based on national guidance / practice (3.5 hour sessions twice daily, 5 days per week, 48 weeks per year with an 80% utilisation rate).
- The outcome of the calculations carried out by the model details the requirements for in-patient, day case and emergency theatre sessions based on current activity and the assumptions outlined above.
- By altering the assumptions e.g. lengthening the working day to accommodate modernised practices, the requirement for theatre sessions changes accordingly.
Model of care – Tools and techniques

**Bed models**

- This model is based on the same elements as the Theatre Model, in that it is based on specialty activity (this can be obtained via a PAS download of patient activity data from the Trust).

- The model allows users to plan the number of medical and surgical beds required in an Emergency Admissions Unit by selecting which specialties the unit should serve. By selecting the specialties that the user wants to provide from the unit, the activity data for those specialties is converted into FCE’s, then into Occupied Bed Days and finally into numbers of beds by specialty selected.

- This model is based on assumptions that can be altered. The assumptions include occupancy rates, length of stay details and how to treat day cases. In terms of length of stay (percentage staying half day and percentage whole day).

**Diagnostic models**

The example of a model as included in the appendix details how a Radiology department could be planned using various assumptions.

- The total activity for the Radiology Department is broken down by specific modality (CT, MRI, Ultrasound etc) and is then projected forward. Tests are also split by patient group (inpatient/outpatient /emergency) to give a percentage of work for that group of patients.

- Assumptions are then applied to the figures (9 hours of operation per day, 5 days per week, 80% utilisation, average time per procedure etc) for current activity and then also for the future.

- Activity is then broken down by patient group (in patient, out patient etc) in order to give a more accurate view of the usage of the service by different patient groups.

- In doing this, the Trust is able to identify which tests are used by emergency / elective patients, how this will translate into future requirements and also provides the ability to test the impact in the department of different methods / times of working.
Developing the Operational Principles – The process

Once the model of care has been agreed the next key stage of producing the design brief is to develop operational principles and supporting functional content.

Operational principals are a statement that identifies for each element of the scheme the main ways in which that element will function, it’s purpose is to test the impact of the overall model of care on each element of the scheme. The organisation can test through the operational principles its model of care before they proceed with the detailed healthcare planning of schedules of accommodation and operational policies.

Operational Principles and Functional Content should be developed for each service affected by the proposed development (examples provided in Appendix D) they will provide the basis of information from which the Operational Policies and Schedules of Accommodation will be developed. The operational principles should incorporate the following headings and answer the following questions;
### Developing the Operational Principles – The process

<table>
<thead>
<tr>
<th>Heading</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope of Service</td>
<td>What care will the service provide e.g. emergency, elective, outpatients, investigations, and diagnosis?</td>
</tr>
<tr>
<td>Workload / Activity indicators</td>
<td>What is the normal through-put for the department this may be in terms of FCEs, diagnostic procedure, pathology tests or other indicator? This will be developed from activity modelling work</td>
</tr>
<tr>
<td>Key accommodation requirements</td>
<td>What is the estimated accommodation requirement for the service? (This information should be informing the functional content.)</td>
</tr>
<tr>
<td>Configuration</td>
<td>Where will the service be located?</td>
</tr>
<tr>
<td></td>
<td>Will it be collocated or split between various locations?</td>
</tr>
<tr>
<td></td>
<td>What will the relationships with other departments be? Where will they be located in relation to the department in question?</td>
</tr>
<tr>
<td></td>
<td>Will some services remain where they are?</td>
</tr>
<tr>
<td>Key Relationships</td>
<td>What are the key relationships of the service?</td>
</tr>
<tr>
<td></td>
<td>Should it be located close to A&amp;E, outpatients, acute wards etc?</td>
</tr>
<tr>
<td></td>
<td>Should it have dedicated facilities for some elements of it’s service</td>
</tr>
<tr>
<td>Work Patterns</td>
<td>How many sessions will the service run each day?</td>
</tr>
<tr>
<td></td>
<td>How many days per week will it function?</td>
</tr>
<tr>
<td></td>
<td>Is there any need for direct primary care services out of hours</td>
</tr>
<tr>
<td></td>
<td>This work is linked to workload / activity indicators and could incorporate analysis completed using activity models</td>
</tr>
<tr>
<td>Patient flows</td>
<td>This should provide a detail of a how the patients will move through the system from initial presentation to discharge</td>
</tr>
</tbody>
</table>
Developing the Functional Content – The process

In parallel with the development of operational principals should be the development of the functional content. At its most basic level this is a list of the key departments within the scheme and their room requirements. At this stage this should be based upon NHS Estate Health Building Notes (HBN’s) ensuring that the sizes and rooms reflect the consumerism agenda. A full functional content example is set out at Appendix D.

An example for an A&E is provided below:

The main A&E Department will require the following rooms and cubicles with associated reception and waiting areas:

**Areas 1 & 2**
- 11 x individual rooms (10 for general use and 1 for psychiatric patients)
- 6 x resuscitation beds, in a side by side formation, with curtains dividing each bay

**Area 3**
- 12 x cubicles, with curtains dividing each area
- 4 x fast track individual rooms - The observation ward will require 4 beds

The Paediatric Assessment Unit will require 6 beds and 2 paediatric HDU beds (see Operational Policy for the Children’s Ward)

The sub departments of the A&E department will be co-located with each other and in close proximity to the following:
- Observation beds
- Emergency admissions beds
- Central diagnostics, particularly radiology
Developing the Operational Policy – The process

Following the development of the Model of Care and the production of the Operational Principles / Functional Content, the next level of detail required is the production, refinement and sign off of the Operational Policies.

The Operational Policies should be developed for specific departments where these are to be newly built, re-furbished or left in situ. Operational policies are required to convey how each department functions as part of the overall hospital and how the individual facilities elements of the department (i.e. schedules of accommodation / facility requirements) relate to each other, so that the department is planned in a functional way.

Each department should evaluate the draft Operational Policies for their own areas. The service design/task groups should have the opportunity to review each of the policies, in order to ensure that a wide internal consultation has taken place.

The Operational Policies should include sections incorporating the following headings and information (a full worked example is provided in Appendix E):

As many examples of schedules exist there is no need to develop from first principles but rather to use an example and amend/develop as appropriate.

It is at this point that attention / reference should be made to the ongoing development of the “non-clinical” brief. Output specifications need to be produced for the FM services of the project, which should include details such as how catering will be provided to patients / staff, how often waste will be collected from clinical areas etc.
Developing the Operational Policy – The process

These specifications will not produce the facilities brief, however they do need to be cross referenced with the clinical operational policies to ensure that they match e.g. are regeneration kitchens required, how many disposal holds should there be per floor etc. The following list details areas for consideration under the “non-clinical” brief:

<table>
<thead>
<tr>
<th>Access</th>
<th>Staff Accommodation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security &amp; Safety</td>
<td>Linen &amp; Uniforms</td>
</tr>
<tr>
<td>Fire</td>
<td>Admission &amp; Discharge</td>
</tr>
<tr>
<td>Communications</td>
<td>Health Records &amp; PAS</td>
</tr>
<tr>
<td>Car Parking</td>
<td>Sterile Services</td>
</tr>
<tr>
<td>Estate Management</td>
<td>Portering</td>
</tr>
<tr>
<td>Voluntary Services</td>
<td>Post Room</td>
</tr>
<tr>
<td>Religious Facilities</td>
<td>Social Work</td>
</tr>
<tr>
<td>Materials Handling</td>
<td>General Management</td>
</tr>
<tr>
<td>Catering</td>
<td>Education &amp; Training</td>
</tr>
<tr>
<td>Domestics</td>
<td>Medical Engineering</td>
</tr>
<tr>
<td>Transport</td>
<td>Control of Infection</td>
</tr>
</tbody>
</table>
Developing the Schedules of Accommodation – The process

The schedules of accommodation, included within the operational policies, detail for the design team the required number of rooms and floor areas of each ward, department, operating theatre etc.

The number of beds, theatres etc that will be required in the new build will be dictated by the new model of care. The utilisation models are a useful tool that allow different scenarios to be scoped using alternative assumptions such as higher or lower bed occupancy rates and the impact of 3 session days / 7 day working.

The purpose of the schedule of accommodation is to provide a detailed, robust description of the facilities required to provide services in the new build. This information is then fully costed and is incorporated into the Outline Business Case. The Public Sector Comparator will use this information to detail how the Trust foresees its services being provided in the future and allows the private sector to produce similar plans.

An example of a Schedule of Accommodation for an A&E Department is provided on the following pages.
## Developing the Schedules of Accommodation – The process

<table>
<thead>
<tr>
<th>Activity Space</th>
<th>Area m²</th>
<th>Number required</th>
<th>Total area m²</th>
<th>Activity Space</th>
<th>Area m²</th>
<th>Number required</th>
<th>Total area m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Entrance Lobby</td>
<td>20.00</td>
<td>1</td>
<td>20.00</td>
<td>Paeds Resus Room – 2 bays – Category 1</td>
<td>40.00</td>
<td>1</td>
<td>40.00</td>
</tr>
<tr>
<td>Reception Desk</td>
<td>35.00</td>
<td>1</td>
<td>35.00</td>
<td>Psychiatric Interview Room</td>
<td>12.00</td>
<td>1</td>
<td>12.00</td>
</tr>
<tr>
<td>Main Waiting Area</td>
<td>52.50</td>
<td>1</td>
<td>52.50</td>
<td>MRC Trauma Research Lab</td>
<td>20.00</td>
<td>1</td>
<td>20.00</td>
</tr>
<tr>
<td>Children’s Wait/Play Area/Nappy Change</td>
<td>18.00</td>
<td>1</td>
<td>18.00</td>
<td>Sitting Room</td>
<td>13.00</td>
<td>1</td>
<td>13.00</td>
</tr>
<tr>
<td>Feeding Room</td>
<td>5.50</td>
<td>1</td>
<td>5.50</td>
<td>Visiting Room/viewing room</td>
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## Developing the Schedules of Accommodation – The process

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<td>Pharmacy Store</td>
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<td>Equipment Store</td>
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</table>
Having covered all the key stages and produced the required outputs this material can be assembled into the design brief. This should follow the process outlined in this document and the major components of the design brief are set out schematically below:

The design brief once assembled feeds into the Invitation to Negotiate (ITN) documentation and represents the clinical output specifications.
The following paper incorporates the appendices that are referred to in the main text of the “Healthcare Planning Protocol” and hence should be read in conjunction with that protocol.

The aim of the appendices is to provide the reader with fully worked up versions of the following elements that are described in the protocol. The appendices are laid out as follows:

A. Briefing Packs
B. Model of Care
C. Utilisation Models
   – Theatres
   – Beds
   – Diagnostics / Radiology
D. Operational Principles & Functional Contents
E. Operational Policies & Schedule of Accommodation
Anywhere NHS Trust

Service Design Group for Emergency and Non Elective

BRIEFING PACK
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<td>07</td>
</tr>
<tr>
<td>6. Issues To Consider</td>
<td>08</td>
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</table>
1. Introduction

1.1 The project aims to create modern, high quality, value for money, and cost effective health services for the people of xxx. The investment will help to improve health and well-being, reduce the incidence of ill health, associated suffering and premature death. It will help to close the health gap and tackle key causes of social exclusion.

1.2 The investment is one of a number of schemes approved by the Secretary of State for Health following the publication of the NHS national plan and its ambitious targets for service and hospital infrastructure.

1.3 Work is progressing to take this initial work forward to develop an Outline Business Case (OBC). The OBC is an important document as it will establish a baseline in terms of affordability and scheme content against which the redevelopment will be taken through the PFI process.

1.4 In order to meet the programme requirements, it will be necessary to complete the OBC by XXXX. This will necessitate clinicians, health professionals and senior managers throughout the health economy in developing the detail of how future health services across the area should be organised and what configuration of facilities they should be provided from.

1.5 It is proposed that this detailed planning work will be undertaken within a ‘care route’ framework established by eight Service Design Groups based upon the model of care established in the Strategic Outline Case (SOC) document.

1.6 The SOC proposed that future healthcare delivery should be based upon providing the right care by the right people, at the right time and the right place. It proposes a whole health economy development with key development features including:

- New specialist acute hospital facilities;
- New diagnostic and treatment centre;
- New primary care centres;
- Intermediate care services;
- Delivering care at home.

1.7 The following document has been produced to assist the Service Design Group in determining framework principles and it is structured as follows:

- SOC background and model of care;
- Service Design Group structure;
- Service Design Group aims and outputs;
- Service Design Group workplan;
- Issues to consider.
2. SOC Background

2.1 The Partners have together created a vision which puts the NHS plan into practice through a radical transformation in the local health and social care infrastructure. This will promote responsive and personalised 24 hours, 7 days a week integrated health and social care for local people, delivered to a consistently high standard.

2.2 New models of care will improve the patients' experience. Patients will have greater access to local health services, care processes will be planned around meeting their needs in the most efficient, effective and integrated way whether it is an emergency or planned episode of care.

What the Investment will deliver

2.3 The SOC delivers a significant improvement in health services for the people of xxx and supports the ongoing development of specialist care and clinical teaching facilities.

- **XXX extra beds** - additional beds in the system to deliver growth in activity in line with the National Bed Inquiry.

- **New Specialist Acute Hospital facilities** with new wards and theatres, allowing improved access and supporting new service developments, covering Neurosciences, Renal and Children’s services.

- **New primary care centres** offering local diagnostic and treatment facilities in localities of high deprivation and health inequality.

- **New specialist Diagnostic & Treatment Centre** at xxx Hospital with integrated imaging, pathology, theatres, therapy and outpatient consultation services.

- **New Intermediate care services** offering inpatient and community based services aimed at step down and rehabilitation following acute care. Rapid response services and primary care managed beds aimed at meeting patients needs in the community and at home for longer.

- **A community-wide Electronic Health Record**, a level 6 hospital IM&T environment, with full integration between primary and secondary health sectors in the area.
3. Service Design Group Structure

3.1 It was agreed that future project planning should be structured on a whole economy model of care based on the following services types:

- **Primary, community, ambulatory and pre-admission** – planning of primary and community services and facilities, particularly exploring the potential for primary care centres.

- **Emergency/non elective** – planning of services and facilities around emergency care. The partners will be able to deal effectively with emergency hospital admissions by designing appropriate care routes across primary and secondary care and arranging service and facilities appropriately.

- **Elective admissions** – taking the concept of diagnostic and treatment centres to determine how and where to best provide outpatients, day case surgery and planned investigations, including the provision of integrated “high-tech” diagnostic facilities.

- **Chronic disease management** – planning of services and facilities around those chronic diseases recognising the range and incidence of service provision.

- **Elderly and intermediate care** – planning of services and facilities for a group of patients who require rehabilitative care; or those who cannot be discharged for social reasons; or could be maintained in the community with the appropriate design and provision of community based services.

- **Critical care** – planning the provision of critical care including CCU, ITU, HDU and theatres recovery and understanding linkages to emergency / non-elective care, in particular.

- **Diagnostic and therapies** – planning how clinical support services might be provided recognising the potential of secondary and primary care and ensuring consistency with the other service design group principles.

- **Discharge process** - confirming the ‘care route’, which incorporates the discharge planning process and ensuring the elderly and intermediate care group, is consistent with the discharge principles developed.
3. Service Design Group Structure

3.2 The diagram below demonstrates the relationship between groups:

- Diagnostic & therapies
- Critical care
- Discharge

- Primary, community, ambulatory & pre-admission
- Elective admission
- Emergency/ non-elective
- Chronic disease management
- Elderly & intermediate care
3. Service Design Group Structure

3.3 The relationship of the Task Groups to the overall delivery of the project is shown in the diagram below.
4. Service Design Group Aims and Outputs

4.1 Service Design Groups for each of these service streams have therefore been established to discuss and determine the practical application of the proposed model of care.

4.2 Within the given constraints of affordability set out in the SOC, the Service Design Groups are being asked to determine principles upon which the detailed facility planning can be undertaken.

4.3 The outputs of the clinical planning process comprise of:

- **Departmental output specifications** taking this to a level of detail further, the group will help to refine and sign off more detailed output specifications for specific departments where these are to be newly built, refurbished or left in situ. For example, the emergency and non-elective service design group will agree specifications for A&E, MAU and emergency theatres. These will be cross referenced and consistent with other related policies by other Service Design Groups e.g. ITU developed by the critical care service design group, recognising this key interlinkage.

- **High level care routes** setting out overall principles governing how emergency and non elective care processes as a whole will be developed, provided and configured e.g. the paper may articulate the relationship between medical and surgical admissions. These will then be supplemented by:
5. Service Design Group Workplan

5.1 The Emergency and Non Elective Service Design Group suggested workplan is set out below:

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Draft agenda/areas to be covered</th>
<th>Outputs</th>
</tr>
</thead>
</table>
| 1       | Brief introduction to the service design groups  
  |  
  | Role of the service design groups  
  | Timescales and outputs and agree work for meetings  
  | Brief group on bed modelling requirements (depending on which SDG) and introduce examples from elsewhere  
  | Initial debate around high level care routes | • Clear understanding of the clinical planning process and its outputs  
  |  | • Agreed work plan  
  |  | • Draft high level care route principles |
| 2       | Debate patient flows, highlighting areas of doubt/contention or areas requiring further work outside the session (N.B. Meetings 1 and 2 should be covered in first day) | • Second draft high level care route principles and material to enable high level patient flow charts  
  |  | • Identify issues and leads for further discussion/work outside the groups |
| 3       | Review high level patient flow diagrams and review bed modelling  
  |  
  | Sign off main care route principles contained in initial draft  
  | Identify amendments/further work required for final meetings | • Patient flow charts  
  |  | • Updated log of outstanding issues along with resolution plan |
| 4       | Present second draft of care route policies and discuss, either sign off or agree final amendments | • High level care route policies |
| 5       | Receive draft departmental clinical specifications  
  |  
  | Identify amendments/further work required for final meetings | • Material to revise policies |
| 6       | Receive and sign off completed departmental clinical specifications | • Departmental clinical specifications |
6. Issues to consider

6.1 The Group will be expected to provide a clear strategic framework for their service area based upon service and facilities principles established in the SOC.

6.2 Subjects of consideration for each Service Design Group will include:
- Future service models and levels of care
- Physical setting;
- Quality issues;
- Emerging technologies;
- Workforce Planning
- University Teaching and Research.

6.3 Issues for consideration under each of these subject areas for the emergency and non-elective Service Design Group will include:

Future service models and level of care

6.4 The group should use the understanding of current practices within the health economy as a baseline against which to compare different ways of providing the service to ensure that patients are treated appropriately and dealt with as expeditiously as possible. Factors to consider include:
- Impact of development in primary care services on the demand for A/E services i.e. primary care centres,
- Impact on emergency admissions of GPs staggering urgent transfers of patients following urgent home visits;
- Impact of NHS direct on demand for emergency services;
- What effect will the development of an emergency admission call centre have on demand for emergency services/admission?
- Establishment of an emergency care village as a focal point for all unplanned demand for hospital care;
- Single emergency admissions ward/s vs separate Medical Admissions Unit and Surgical Admissions Unit;
- Policy for children;
- Development of primary care led primary care centre and emergency call centre to separate out minor injuries and enable scheduled access to emergency clinics as an alternative to acute admission;
- The provision of separate and discrete diagnostic and treatment facilities in support of emergency care;
6. Issues to consider

- Pre and post procedure care.
- The provision and role of short term observation beds as distinct from assessment beds.
- The Royal College of Physicians recommends that a Medical Admissions Unit should be close to the medical wards, CCU and Radiology facilities.
- Designated emergency lists can be allocated in theatres to avoid disruption to elective work.
- Potential expansion in the duties and roles of nurses e.g. development of nurse practitioners, especially in A&E.
- The assessment, treatment and observation of patients can be undertaken in a wide variety of different units, including observation, assessment and admission units.
- Patients may stay in admissions units for up to 72 hours, intensively treated and then discharged or transferred to a less acute setting: these can then assess and treat medical, surgical and trauma patients in a single unit, or separate units could be provided.
- Assessment units may serve medicine, surgery, obstetrics and paediatrics and can be managed by A&E or the specialty concerned.
- The current scale of admissions and those which could be avoided. The most significant areas in which there might be opportunities for change are medical specialties (in particular care of the elderly) and orthopaedics.
- Rapid Response Teams: Usually targeted at children or elderly people who are assessed to be potentially at risk. Patients can be assessed by GPs or in the hospital and are then sent home and cared for by Rapid Response Teams. These teams can consist of nurses with expanded skills alongside other professionals, in particular PAMs and community based staff.
- Telephone advice: a system which is protocol driven and designed for use by trained nurses and consists of computerised decision support protocols to aid consistent and safe telephone consultation and triage.
- Emergency out patient clinics: patients can be sent home from A&E having been scheduled for attendance at an urgent out patient clinic or in the day surgery unit the following day.
6. Issues to consider

6.5 The work of the other service design groups will have to take into account and consider the impact of emergency admissions and ensure that information is shared between the relevant groups.

Physical Setting

6.6 The group should consider the physical setting for services, including on site and off site options and issues of quality:

- Physically separate facilities from elective care with discrete treatment and diagnostic facilities;
- Facilities for children;
- Emergency ambulance facilities;
- Waiting areas;
- Innovative use of circulation space
- Requirements for research/education in these areas;

Emerging Technologies

6.7 The group should consider:

- I.T. links with primary care providers/impact of shared electronic health record;
- Telemedicine links;
- Patient record management;
- NHS Direct.

Workforce planning

6.8 As a consequence of considering the issues relating to future service models, what impact would be had on staff in terms of:

- Roles and responsibilities
- Working patterns
- Skill mixes
- Training and development considerations
- Physical deployment
- Impact of employment law / European policies

University Teaching and Research

6.9 Developments in the management of emergency services may have implications for training and research that should be considered by the Group.
# Model of Care

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<td>3. Whole System Model Of Care</td>
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<td>4. Acute Setting Model Of Care</td>
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<tr>
<td>5. Impact Of The Model Of Care</td>
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<tr>
<td>6. Next Steps</td>
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1. Introduction

This document provides an example model of care and represents a whole systems model that provides context for future service and infrastructure developments.

The objective of this paper is to ensure the work of Service Design Groups is co-ordinated into a meaningful and consistent overarching vision for the way services will be delivered in the future.

The remainder of this document is structured as follows:

- **Whole system principles** — setting out the principles developed that underpin the development of the model of care;

- **Whole system model of care** — setting out the clinical vision for the provision of health and social care for the people;

- **Acute setting model of care** — describing how services will be arranged on the acute site in the context of the overall model of care;

- **Impact assessment** — in terms of infrastructure, staffing issues and capacity;

- **Next steps** — suggesting a way forward.
## 2. Whole System Principles

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<th>Vision</th>
<th>Objective</th>
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<tr>
<td><strong>People</strong></td>
<td>1a: Provide people centred services that meet needs and expectations</td>
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<td>2a: Provide services that address inequalities and promote inclusion</td>
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<td>2b: Provide services and facilities that create pride and confidence amongst local people</td>
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<td></td>
<td>2c: Provide services that are clear, logical and easy to access</td>
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<td></td>
<td>2d: Deliver services and buildings that integrate with and complement other initiatives taking place</td>
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<td><strong>Regeneration</strong></td>
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<td></td>
<td>3a: Invest in people</td>
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<td></td>
<td>3b: Improve availability and quality of information</td>
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<td></td>
<td>3c: Improve local buildings</td>
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<td><strong>Investment</strong></td>
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<td>4a: Improve overall quality of service</td>
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<td>4b: Provide an uplifting and inspirational environment which promotes well-being</td>
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<td></td>
<td>4c: Provide a modern &amp; sustainable environment which promotes well-being</td>
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<td><strong>Design</strong></td>
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<td></td>
<td>5a: Provide seamless effective services</td>
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<td></td>
<td>5b: Provide efficient services</td>
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<td></td>
<td>5c: Promote local initiatives</td>
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</tbody>
</table>

The Strategic Outline Case aims to achieve a range of benefits for the people of the city and these include:

- creating a system of health and social care infrastructure which is amongst the best in the UK;
- improving access to health care through local and responsive services;
- promoting independence and support for patients to regain their health quickly;
- co-ordinating and designing care processes to meet the needs of patients;
- building partnership working for the most efficient system of care possible;
- delivering the benefits of improved services for clinicians and patients through investment in IM&T throughout the community.
3. Whole System Model of Care

The ‘whole system’ model of care builds on a range of modernising projects and service developments, which are already, or will shortly, be in place. It also reflects the work of the Service Design Groups.

Any future whole system model needs to reflect the national health and social care agenda, which provides a framework within which local health services need to be developed and delivered. In particular, Service Design Groups have considered the content and conclusions of the:

- National Plan which sets out the Government’s health priorities and modernisation agenda;
- National Bed Inquiry which provides context for how to plan acute and intermediate care services;
- National Service Frameworks, which, for key groups and conditions, provide national strategies for providing and delivering services.

Mission Statement

People will be seen by the most suitable professional at the most appropriate time and place for their needs with the minimum number of transfers between professionals and locations.

The aim is to simplify and streamline the presentation to treatment process in order to reduce the time to diagnosis and treatment. Clear and consistent pathways will be developed and followed to deliver the required care that will be delivered from within a suitable culture.

The following principles will be taken into consideration during the redesign of services.

<table>
<thead>
<tr>
<th>Safety</th>
<th>Effectiveness</th>
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<tbody>
<tr>
<td>Flexibility</td>
<td>Efficiency</td>
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<tr>
<td>Choice</td>
<td>Certainty</td>
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<tr>
<td>Accessibility</td>
<td>Responsiveness</td>
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<tr>
<td>Appropriateness</td>
<td>Relevance</td>
</tr>
</tbody>
</table>
Whole systems Model of Care (Using Diabetes NSF as an example)

- **Empowerment**
- **Education**

**Prevention**
- Diagnosis
  - Screening community
  - Primary care
  - Secondary care

**Initial management**
- Primary care
- Secondary care
- Direct access

**Continuing care**
- Direct access services
- Primary care
- Secondary care
- Self care

**Integrated Multidisciplinary/Multi**
- Public health primary care

**Self care behaviour/shared records/protocol**

Events:
- MI/ Angina
- IP admission
- Renal
- Stroke

Diseases:
- Eye disease
- Foot disease
3. Whole System Model of Care

The suggested model of care is based on the process outlined in the Diabetes National Service Framework, (see diagram). Most common conditions will fall within the pathway outlined, with some exceptions such as non-pathological ill health e.g. chronic pain, alcoholism, requiring more specialised pathways.

The diagram highlights the main pathway that most chronic disease patients could follow, during the course of their disease/condition. The model requires that continuity of care is protocol driven, with multi-disciplinary, multi-agency, integrated care, focused on maximising the opportunity for staff and patients to make informed decisions, in order to manage their care at all stages of the care pathway.

"The Expert Patient", an important document recently published by the Department of Health, proposes, with support from healthcare professionals, greater use of the patient's expertise in managing their own disease and in supporting others with the same condition. This concept will be an important feature of the model.

Key changes to the current system include:

- there is an essential requirement for the development of electronic shared records across the whole health economy, which needs to be available to both primary and secondary care providers.

- development of the role of GPs with special interests has been shown to be very successful.

- further development of the roles and responsibilities of Direct Access Services e.g. health centres or at points of delivery such as pharmacies.

- improved communication with citizens, informing them of what services are available, where and when.

- continuing care could be managed closer to the patient by being based in and co-ordinated from primary care settings.

- provision of the correct skill mix, in all settings, across the whole spectrum of care.
3. Whole System Model of Care

- agreement on shared whole systems protocols across the whole continuum of care that all health professionals are signed up to.
- improved continuity of care - a “Key worker” / “Care Co-ordinator” could be located in the community, who would act as a one call gateway into chronic disease management. The management of people with non-pathological chronic ill health could also be helped using this key worker approach e.g. alcoholism, chronic pain.

The whole system model is now further described in terms of:

- Ambulatory and elective care;
- Emergency assessment and care;
- Intermediate care and older people.

**Ambulatory care**

Key criteria for providing further ambulatory and elective/scheduled services within community settings that are currently provided in the acute sector have been developed. These include:

- equity;
- accessibility;
- social acceptability;
- added value regeneration;
- integration with non NHS developments;
- current and planned developments;
- availability of sites;
- deliverability;
- efficiency.

Primary care centres will be provided in a local environment. They will be designed to be flexible, responding to local community requirements and will enable increasing joint provision of services.

The concept of how the ambulatory services will be provided across all settings is set out in the diagram overleaf:
3. Whole System Model of Care

- **Level One**
  - Surgery requiring GA
  - Patients who have multiple complications/risk factors
  - Diagnostics requiring access to MR/CT scanner

- **Level Two**
  - Children’s facilities
  - Minor surgery (LA/sedation)
  - Library/lecture theatre
  - Some therapy services
  - Rehab/intermediate care facilities

- **Level Three**
  - GP/Nursing
  - Some out patients
  - Pharmacy/GDP
  - Self care/expert patients
  - Health promotion
  - Community cafe

**Services/functions**

- **Hospital Specialist Services**
  - Higher risk cases
  - Higher risk procedures
    - GA
    - Low numbers
  - Specialised/expensive/shared resources (limited to one)

- **Local Specialist Services**
  - Medium risk cases/procedures
    - Specialised/expensive resources when limited to a few
    - Medium numbers

- **Universal Services**
  - Low risk cases/procedures/consultations
    - Frequently used services/equipment
3. Whole System Model of Care

The diagram illustrates the range of universal services that will comprise level three Primary Care Centres (PCCs). Level two PCCs will provide a range of local specialist services including Children’s resource centre, diagnostics and treatment services, therapy services and learning and education services. Level one will be provided from the acute hospital site.

Level 2 PCCs will have a particular specialist focus as shown in the diagram below:
3. Whole System Model of Care

**Emergency assessment and care**

The whole system model developed for the management of emergency care is characterised as follows:

- appropriate care, delivered in appropriate settings;
- fast track assessment and diagnostics;
- direct GP referrals to diagnostic services;
- Ambulance referrals to the rapid response teams;
- holistic approach to the management of patients with emergency and urgent needs;
- recognising the different requirements of patients, the development of streaming processes for emergency and elective patients;
- co-ordination and coherence of service / organisational improvements between healthcare professionals and across the health system;
- development of single assessment of patients to avoid multiple clerking and duplication of tasks;
- empowerment of the appropriate healthcare professional to assess patients.

In addition to their current role, the Rapid Response Teams would also “screen” patients in the community that would otherwise be sent to the A&E Department. Rapid Response Teams would further provide packages of care to prevent admissions to the A&E Department.
3. Whole System Model of Care

The diagram below illustrates the balance of where care will be provided:

- Level 1 & 2
  - A&E
  - ITU/HDU
  - Surgical medical specialty beds
  - NHS Direct
  - Ambulance Service
  - Diagnostic
  - GP direct referral
  - Walk in Centre
  - Specialist GPs
- Intermediate care services e.g. step up beds
- Emergency admissions and assessment
- Rapid Response teams
- GP Out of Hours service
- GP direct referral
- Rehab Service
- Walk in Centre
- Specialist GPs
- Emergency admissions and assessment
- Rapid Response teams
- GP Out of Hours service
- GP direct referral
- Rehab Service
- Walk in Centre
- Specialist GPs
Intermediate care and older people

Various publications have highlighted the potential way forward for elderly and intermediate care services and these include:

- The NHS Plan;
- National Service Framework;
- Intermediate Care Guidance;

Intermediate care model based on the following principles/criteria:

- Patient centred and recognise needs of carers;
- Apply a whole system approach;
- emphasis on service redesign and redistribution of resources with some limited new investment;
- use of evidence wherever possible;
- sound reasoning and experience where no evidence exists;
- be flexible in defining use of resources and not restrict intermediate care to older people only;
- fit in with the National Service Framework (NSF) for Older People;
- fit with the Strategy for Services for Older People;
- map services using the patient care route principle;
- recognition of manpower and training needs to support services
- engage users and carers in the process.

The model emerging around the delivery of older peoples and intermediate care is depicted below:
3. Whole System Model of Care

A New Service Model

**Long-Term Support and Review**

- Health promotion and prevention
- Single contact point
- Anticipatory Care targeted over 75s checks
- Multi-disciplinary review and support and keyworker system
- More home care including 24 hr care
- Other support services (e.g. housing)
- Long-term support for older people with mental health problems through Old age psychiatry community services
- Development of ‘hybrid’ mental health worker in primary care
- Specialist GPs
- Community equipment services
- Continuing health care

**Acute**

Single contact point
- Rapid Response Team
- Specialist elderly assessment centre
- Reduce age threshold for acute elderly care directorate admissions to 75 and needs based 65-75 via A& triage
- RRT/step up bed resource – in Primary Care Centre or Independent Sector
- Old age psychiatry community Rapid response team
- Olde age psychiatry in patient service
- Old age psychiatry hospital liaison service

**Post-Acute Rehabilitation**

- Ring-fenced hospital rehabilitation beds
- Community Rehabilitation unit
- Enhanced Day Services

**Intermediate Services**

- Single contact point with links to all intermediate care services
- Slow-stream beds – step down (including social care)
- Transitional Care beds
- Expanded EPICS
- Direct referral for primary care into community services
- Outreach teams
- Palliative care teams
- Support from specialist secondary care services
- Old age psychiatry services including hybrid workers, EMI resource centres and slow stream beds

**Development of ‘hybrid’ mental health worker in primary care**
3. Whole System Model of Care

The whole system

The co-existence of the whole system is depicted in the diagram set out below.
4. Acute Setting Model of Care

**Current situation**

The SOC describes a range of challenges and issues the acute sector faces currently. These include:

- waiting time challenges that are further exacerbated by national plan targets;
- capacity problems hindering the acute sector’s ability to manage emergencies and achieve waiting time targets;
- infrastructure deficiencies in terms of condition of some buildings.

**Current service profile**

Current acute services are characterised by:

- **ambulatory care** – up to 90% of all elective episodes have a length of stay duration that is less than 72 hours (around 70% of all elective episodes require no overnight stay).
- **emergency care** – most emergencies (66%), both medical and surgical, stay in the acute setting for less than 72 hours.
- **critical care** – evidence shows the benefits of specialist units for complex care.
- **intermediate care** – the points prevalence exercise, and evidence from elsewhere, suggests at least 20% of acute beds could be re-focused to provide intensive rehabilitation or intermediate care services.
- **condition based strategies** – CHD, cancer, older people places an emphasis on prevention and ensuring needs are appropriately met in the right setting.
These profiles of both emergency and elective acute patients have length of stay distributions that can be delineated between the core elements of acute and post acute/intermediate care as shown below:
4. Acute Setting Model of Care

Acute service model

In the context of the overarching principles contained in Section 2, the current service profile, current challenges and issues, an acute model of care has been developed, which is depicted below.

Emergency
- Emergency Care Centre
  - A & E
  - Admissions wards
  - Observation beds
  - Short stay beds

- Emergency Beds eg.
  - Trauma
  - Complex emergency surgery

Elective
- Diagnostic & Treatment Centre
  - Some OP
  - Day/72 hour surgery
  - Medical day care

- Elective beds eg.
  - Cancer surgery
  - Joint replacement

Critical Care Centre
- Emergency Theatre
- Elective Theatres
- HDU
- ITU

Post Acute Care
4. Acute Setting Model of Care

The key characteristic of this acute sector model of care is a clear separation of elective and emergency work streams. The model:

- recognises the very different processes involved in caring for patients with different needs;
- enables a better assessment of capacity required;
- provides an ability to ‘ring-fence’ beds;
- ensures appropriate concentration of specialist skills;
- delineates fast stream (short stay) and slow stream (complex needs) patients.

Elements of the acute model of care are further described below:

**Diagnostic and treatment centre**

A focus around planned, non complex treatments and investigations for patients requiring no overnight stay and potentially those requiring stays of less than 72 hours.

The term ‘Diagnostic and Treatment Centres’ encompasses a wide range of healthcare activities and types of facility. What they have in common is the opportunity to achieve the following benefits for patients:

- **Fast and convenient access** – DTCs will deliver additional capacity, which in itself will reduce waiting times, but the concept delivers much more than this. DTCs separate the bulk of routine elective care from competing emergency pressures and can provide such services at times convenient to patients.

- **Reliable booked appointments** – separating elective and emergency care enables greater predictability. Booked admissions can be honoured to a far greater degree than in circumstances where electives and emergencies are under the same units of management and in the same facilities.
4. Acute Setting Model of Care

- **Modern environments** – these patients are generally not seriously ill. They require facilities that they will probably walk into and walk out of. The typical acute ward – designed to accommodate more seriously ill patients and emergency admissions – is far from an ideal environment from the patient’s perspective and day case units rarely have the full range of facilities needed to achieve radical service redesign. DTCs offer easily accessible modern environments without the institutional feel it is hard to avoid in bigger hospitals.

- **Co-ordinated, one stop care** – DTCs provide an environment conducive to new ways or working, bringing down the barriers between general practice and specialist care, between specialists of different disciplines and between medical and other professions. This is the right environment for staff of all professions to work closely alongside each other to provide what these patients want – fast effective care delivered at convenient times.

Key principles are summarised below:

- a focus around those ambulatory services that need to be provided from an acute setting;

- ring - fenced generic beds to ensure planned work can be managed appropriately and given this ability to plan work at higher bed occupancy rates;

- organisation of beds to reflect the significant ambulatory nature of elective and short stay beds reflecting the proportion of patients who stay in an acute environment less than 72 hours;

- same day admission of patients ensuring beds are used efficiently (currently around 14 beds a year are used to admit patients prior to the day of elective surgery);

- appropriate provision and co-location to high tech diagnostics;

- centralisation of core staff including, for example, therapies input.
4. Acute Setting Model of Care

Emergency care centre

Concentration of facilities, skills, equipment to manage all emergency admissions and ‘house’ those patients who stay in an acute environment for less than 72 hours in generic assessment or observation beds with senior multi-disciplinary and multi-specialty input.

A summary of the key points is set out below:

- constant availability of medical support and close proximity to all diagnostic services;
- emergency admissions are located in a single area for clinical observation/assessment;
- acts as a dedicated buffer for acute specialty based medical & surgical wards and includes observation of vulnerable patient groups;
- minimises number of inappropriate emergency admissions;
- places patients to appropriate wards minimising transfers thereafter and ensuring needs are most appropriately met;
- trauma patients are adjacent or as close to theatres as possible;
- minimises trolley waits in A&E pending transfer to acute admissions ward;
- single focus for first 24 hours of emergency care with the opportunity to discharge within that period and for GP enquiries of overnight emergency admissions. Requirement to plan this facility at 75% occupancy;
- integration of this unit with a GP unit (particularly ‘out of hours’ service) is desirable and would help maximize resources dealing with emergency patient flows into the area;
4. Acute Setting Model of Care

Diagnostics and therapies

The principle is that the separation of acute (urgent) work and booked (non-urgent) work should be achieved. This could be done either by separate facilities or separate working practice. This should improve patient access and give a measure of control to the workflow to the diagnostic services.

This would include a fast track approach to diagnostics on the acute site to allow rapid assessment of emergency admissions, but should be set up so as not to interfere with scheduled activity. Current services are distributed across the health care system and key co-locations have been identified. The concentration of diagnostic facilities and skills would help to achieve the principles underpinning the diagnostic and treatment centre concept.

There are advantages to be gained from centralising diagnostic services, particularly radiology. There are certain critical co-relationships of this service; emergency care; critical care (ICU, CCU, theatres etc) which relies on a rapid turnaround of investigations and results service to enable immediate decisions to be taken on the next stage of a patient’s care.

In physical terms, centralised diagnostics will also need to be close to ambulatory care.

Pathology services shall be integrated into a single laboratory complex with a single centralised reception.

Key principles relating to acute provision of diagnostics are summarised below:

- Assumes the implementation of PACS (Picture Archiving and Communication Systems); this underpins the provision of diagnostic services across the whole of the area.

- Separate steams for the elective (booked) patients and the acute (urgent) patient.
4. Acute Setting Model of Care

- Improving patient access; this includes ‘one stop’ services as changes occur in clinical practice; improvements in patient scheduling to allow patients to choose in booking their appointments; provision of appropriate if limited diagnostic services ‘off’ a central site; Pathology services require strong IM&T links with two way flow of information.

- Improved IM&T to ensure improvements in patient scheduling and further service efficiencies; integration of the Radiology patient system with EPR and PAS is essential for improvement in-patient handling.

- Centralising diagnostics as far as possible given constraints of the capital development. The site is not ideal for a central service but it would improve efficiency of use of equipment and staff if achieved. Some satellite services could be supported with appropriate IM&T

Benefits exist of providing pharmacy dispensing stations on wards capable of supporting a computer terminal and printer, access to a vacuum tube system linked to a robotic Pharmacy dispensing system and ensure that every patient bed has its own lockable medicine cupboard. This ensures rapid dispensing of discharge prescriptions and the ability for patients to self-administer their own medicines.

Ideally, the whole of the Pharmacy Department apart from Outpatients Dispensary would be located together i.e. Aseptics/TPN, Purchasing, Stores (containing robotic dispensing machine), Clinical Trials, Dispensary, Medicines Information Unit, Staff room, Educational facilities and Offices.

Therapies (Allied Health Professions) provision within the acute sector needs to support the management of the patient process. Also, where appropriate, they are increasingly taking a lead role in the patient process. Many opportunities are emerging to increase direct access to these services, thereby streamlining care and avoiding unnecessary referral to the hospital.
4. Acute Setting Model of Care

• Therapy and rehabilitation services are currently fragmented and scattered around hospital and community settings. These could be delivered more effectively by developing a hub and spoke model which would facilitate a more patient centred, whole systems approach to care.

A number of key issues emerged relating to the provision of therapy services include:

• Many Therapy-led outpatient clinics could be more appropriately provided within Community settings, even in the short term, provided that suitable facilities were available e.g.: Orthoptics and Dietetics;

• In some instances a non-health setting might ensure a more effective delivery of care e.g.: “healthy living” services and elements of Speech and Language Therapy
4. Acute Setting Model of Care

The diagram set out below shows the vision for the provision of therapies service across all settings:

**PCC or D&T Centre**
- Surgical facility including Surgical Podiatry
- Orthopaedic Triage
- Videofluoroscopy
- Hub or Spoke for Orthotics Services
- Spoke for local citizens
- Base for relevant AHP’s

**Primary Care Centre**
- **HUB for rehabilitation service**
  - One stop multi-disciplinary assessment and treatment (whole systems) including Gait Lab, Gym and Pool
  - Hub or Spoke for Orthotic Services
  - Centre store for rehabilitation aids and Orthotics
  - Spoke local citizens
- **Hub for allied professionals**
  - Management and admin base
  - Main staff base
- **Education centre**
  - For staff, students and patients

**Non-Health Settings**
- Multiple locations for local delivery eg. schools, libraries, local sports centre, homes, day centres
- “Healthy Living Centre”
- Local repair services eg. Surgical, footwear, hearing aids

**NHS Health Settings**
- Multiple locations for local delivery of AHP services eg. Health Centres, GP Practices, PCC
- Intermediate Services

**Acute Hospital**
- Locations and bases dependent on outputs from relevant SDGs

| Locations and bases dependent on outputs from relevant SDGs |
|-----------------|-----------------|-----------------|
| Outreach Team   | Neuro Rehab Team | Other Multi-Disciplinary Teams |
| EPICS Team      | Rapid Response Team | Paediatric Feeding Team | Special Needs Team |

**D&T Centre**
- Complex/Acute/Critical
- Hub or Spoke Orthotic Services
- Base for relevant AHPs

**In-Patients**
- In-Patients
- Rapid Response Team
- Paediatric Feeding Team
- Special Needs Team
4. Acute Setting Model of Care

**Critical care centre**

Theatres, ICU, HDU for patients with complex needs and requiring ongoing specialist care.

A centralised critical care centre will be developed, incorporating ITU, HDU and CCU (recognising the latter’s requirements for a discreet area). Features of this system include:

- critical care services co-located with A&E and theatres within facility constraints that exist;
- graduated critical care model i.e. step up from HDU to ICU;
- concentration of limited specialist ITU nursing skills;
- flexibility in bed usage between HDU and ITU;
- most efficient use of limited staff resource;
- recognition of the requirement of neurosurgery HDU within the unit.

Implementation of the model around critical care needs to be considered carefully. The acute development is a mixture of new build and refurbishment and therefore limitations exist as to what can be achieved.

**Specialty Bed Base**

Complex inpatient care facilities for emergency patients and remaining elective cases. This allows specialisation and ensures a critical mass of patients to aggregate beds into defined specialty wards where appropriate.

Features of the model relating to the use and management of patients within the specialty beds include:

- the current bed base will need to be re-aligned to reflect the need to size appropriately the emergency and elective short stay facilities.
- allows development of centres of excellence/ concentration of expertise;
- centralisation of specialist services;
- bed occupancy levels at 82% as defined in the National Plan.
4. Acute Setting Model of Care

Specialty wards will transfer both elective and emergency care to a post acute care environment when medically fit for discharge, unless there are over riding reasons not to do so (for example, the need for specialist ward-based therapy or equipment which it is not feasible to move with the patient to post acute care).

**Post acute/rehabilitation centre**

Services and beds focused around patient rehabilitation with key links to other settings and intermediate care services.

Scope exists to increase the post acute / rehabilitation beds on the acute site. This reflects the current service profile that illustrates the levels of patients in a post acute phase who are currently cared for in specialty beds.

The model is founded, in part, on recognising patient’s needs at every point of their hospital stay. Benefits of this approach include:

- concentrating therapy skills and expertise in a dedicated, fit for purpose area;
- a focus for discharging patients and an opportunity to make the process more efficient;
- opportunity for better liaison with other services and agencies.
5. Impact of the Model of Care

The proposed model of care needs to be assessed in terms of its impact on:

- Capacity;
- Workforce;
- IM & T.

**Capacity**

The Strategic Outline Case contained the results of a detailed demand modelling exercise to allow a forecast to be made of future health care requirements.

Key messages include:

- an overall requirement of XXXX beds/bed equivalents.
- the future acute bed base is in the region of XXX.
- intermediate care provision is defined as bed equivalents and is calculated at XXX bed equivalents.
5. Impact of the Model of Care

In terms of acute setting capacity the chart below provides a view of how the acute sector capacity will be delineated:

Specialty base 64%

Based on data from 2000/01
5. Impact of the Model of Care

Workforce

The key workforce issues are summarised below:

- **GP's with a specialist interest** – this role continues to develop and the model assumes a significant rise in specialists in primary care;

- **“Key worker” / “Care Co-ordinator”** could be located in the community, who would act as a one call gateway into chronic disease management;

- the **emergency admissions acute model** will only be achieved by having in place:
  - continuous professional development;
  - training;
  - rotations between the general / specialist wards;
  - leadership (both Nurse and Consultant);
  - development of Clinical Nurse Specialist roles.

- **Staffing levels/skill mix/ways of working** – The model will need to maximise the use of all skills and will require a re-distribution, and in some cases, extension, of roles. It will include changes to the roles of doctors, nurses, pharmacists, allied health professionals and a wide range of other healthcare workers such as laboratory technicians, assistants and clerical staff. (ref. The National Plan, Changing Workforce Programme)

The ability to recruit and transfer any service from a central hospital base to one or more community bases will be dependent upon the ability initially to recruit staff. There will continue to be a need to ensure that clinical quality standards are maintained and that staff are supported on a daily basis. Mechanisms for ensuring their continuing professional development will also need to be developed.
5. Impact of the Model of the Model of Care

**IM & T**

There is a clear requirement for a comprehensive Information Management System with associated technology to ensure that patient records and clinical management decisions can be stored safely and accessed at all relevant points in the patient pathway.

The diagram below outlines the concept of the proposed EHR system:

**Whole System Shared**

**Electronic Health Record**

The overall model of care assumes the following infrastructure is in place:

- Electronic Health record across the whole health economy.
- A Patient Scheduling system is needed to ensure that effective use is made of clinician and equipment time.
- The Patient Archive and Storage System (PACS) is considered vital if diagnostic services are to be located within a Primary Care Centre. This would ensure that patient records are available digitally at any point across the local network, without the need for these to be transported manually, with all of the inherent problems that can lead to loss of records and duplication of tests.
6. Next Steps

The model of care will be submitted to Partner organisations for sign off and inclusion in the Outline Business Case. At this stage the model of care paper will be endorsed subject to ongoing scrutiny being completed.

The ‘scrutiny role’ will be deployed to ensure the model reflects latest best practice, is evidenced based where possible, accords to national policy and frameworks.
The table below demonstrates a theatre utilisation model using average procedure times by specialty multiplied by workload and applying utilisation (occupancy hours of working etc) assumptions to generate theatre requirements.

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Average time in theatre (mins)</th>
<th>Theatre requirements estimated from 2000/01 episode data</th>
<th>Theatre requirements estimated from 2000/01 episode data</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Elective IP</td>
<td>Non-elect IP</td>
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<td>General Surgery</td>
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<tr>
<td>Gynaecology</td>
<td>40</td>
<td>65</td>
<td>30</td>
</tr>
</tbody>
</table>

Excludes endoscopies

|HXE | 4.1 | 3.2 | 2.2 |

**Theatre availability**

<table>
<thead>
<tr>
<th></th>
<th>Elective IP</th>
<th>Non-elect IP</th>
<th>DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours per session</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Sessions per day</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Days per week</td>
<td>5</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Weeks per year</td>
<td>48</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>Utilisation</td>
<td>80%</td>
<td>65%</td>
<td>80%</td>
</tr>
</tbody>
</table>

Theatre availability:

- Hours per session: 3.5, 3.5, 3.5
- Sessions per day: 2, 2, 2
- Days per week: 5, 7, 5
- Weeks per year: 48, 52, 48
- Utilisation: 80%, 65%, 80%
## Bed Requirement Model

### Elective Admissions Unit planning

<table>
<thead>
<tr>
<th>Surgical admissions</th>
<th>Specialties included</th>
<th>OBDs</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Surgery</td>
<td>1</td>
<td>3,720</td>
<td>12</td>
</tr>
<tr>
<td>Urology</td>
<td>1</td>
<td>1,073</td>
<td>4</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>1</td>
<td>2,598</td>
<td>9</td>
</tr>
<tr>
<td>ENT</td>
<td>1</td>
<td>1,521</td>
<td>5</td>
</tr>
<tr>
<td>Oral Surgery</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain relief</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gynaecology</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Surgical            | Number of daycases | 6,200 | |
|                     | Number of stays of 1 day | 1,073 | |
|                     | Number of stays of 2 days | 1,299 | |
|                     | Number of stays of 3 days | 507   | |
| Medical Admissions  | OBDs | Beds |
|                     | 8,912 | 30 |

**Assumption**

- Occupied bed days allocated to daycases: 0.6
- Maximum days stay in surgical elective unit: 3
- Number of days open per year: 365
- Occupancy: 82%

### Medical Admissions Unit planning

<table>
<thead>
<tr>
<th>Medical Admissions Unit</th>
<th>Specialties included</th>
<th>OBDs</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Medicine</td>
<td>1</td>
<td>4,151</td>
<td>14</td>
</tr>
<tr>
<td>Haematology</td>
<td>1</td>
<td>245</td>
<td>1</td>
</tr>
<tr>
<td>Cardiology</td>
<td></td>
<td>248</td>
<td>1</td>
</tr>
<tr>
<td>Dermatology</td>
<td></td>
<td>123</td>
<td>0</td>
</tr>
<tr>
<td>Nephrology</td>
<td>1</td>
<td>95</td>
<td>0</td>
</tr>
<tr>
<td>Neurology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rheumatology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geriatric Medicine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunopathology</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Admissions Unit</th>
<th>OBDs</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of daycases</td>
<td>5,534</td>
<td></td>
</tr>
<tr>
<td>Number of stays of 1 day</td>
<td>245</td>
<td></td>
</tr>
<tr>
<td>Number of stays of 2 days</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td>Number of stays of 3 days</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>Number of stays of 4 days</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Number of stays of 5 days</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>4,994</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

**Assumption**

- Occupied bed days allocated to daycases: 0.75
- Maximum days stay in medical elective unit: 5
- Number of days open per year: 365
- Occupancy: 82%
The table below details the workings required to calculate the provision of various modalities of Radiology Services. It also allows for an element of equipment usage per modality:

**RADIOLOGY DEPARTMENT PROJECTIONS**

<table>
<thead>
<tr>
<th>Assumption</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours of Operation</td>
<td>8</td>
</tr>
<tr>
<td>Days of Operation</td>
<td>5</td>
</tr>
<tr>
<td>Weeks of Operation</td>
<td>48</td>
</tr>
<tr>
<td>Utilisation in Minutes</td>
<td>115200</td>
</tr>
<tr>
<td>Per Year Hrs per year</td>
<td>1920</td>
</tr>
<tr>
<td>Actual Utilisation @ 80%</td>
<td>92160</td>
</tr>
<tr>
<td>CT/MRI Utilisation = 90%</td>
<td>103680</td>
</tr>
</tbody>
</table>

### Non-Interventional

<table>
<thead>
<tr>
<th>Modality</th>
<th>Total</th>
<th>Procedure Times</th>
<th>Fractional Equipment Demand</th>
<th>Equipment Demand</th>
<th>In %s</th>
<th>Out Patient</th>
<th>Equipment requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IP</td>
</tr>
<tr>
<td>CT</td>
<td>10352</td>
<td>10</td>
<td>0.998456</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>MRI</td>
<td>0</td>
<td>45</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Obs Ultrasound</td>
<td>13441</td>
<td>20</td>
<td>2.916883</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Non-Obs Ultrasound</td>
<td>26208</td>
<td>20</td>
<td>5.6875</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Radiosotope</td>
<td>2866</td>
<td>45</td>
<td>1.399414</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Radiograph</td>
<td>13631</td>
<td>15</td>
<td>22.18603</td>
<td>23</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Fluoroscopy</td>
<td>5496</td>
<td>30</td>
<td>1.789062</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
An example operational principles proforma is set out overleaf. This example covers ambulatory care including:

- day surgery
- day investigations
- outpatients

### 1 Scope of Service

<table>
<thead>
<tr>
<th>Ambulatory services will consist of 3 elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>- outpatients</td>
</tr>
<tr>
<td>- day surgery</td>
</tr>
<tr>
<td>- day investigations</td>
</tr>
</tbody>
</table>

Outpatient services to provide a focus for patients referred for a specialised opinion

Undertake the diagnosis of disease by means of specialist consultation and examination supported by a range of diagnostic tests

- provide follow up and monitoring of the condition of outpatients, day patients and discharged inpatients
- Day surgery services to:
  - provide suggested intervention to those who can be discharged on the same day (within 23 hours)
  - provide facility for primary care to undertake minor procedures
- Day investigations
- The priorities of a day care facility for
  - Endoscopy/gastroscopy procedures
  - Medical day procedures
## Operational Principles

### 2 Workload/activity indicators

- Estimated day case bed requirement based on current activity levels (2000/01 is 85 bed/places)
- Projected day case bed requirement is 100 bed/places. This figure takes account of demographic changes, changes in LoS and requirements to meet waiting time targets as set out in the National Plan

### 3 Configuration

- Outpatients to be located at XXX
- Outpatients to have diagnostic support of plain film and ultrasound, ? CT
- OPD at XXX to include:
  - women’s (obstetrics and gynaecology)
  - vascular requiring Medical Physics support
  - oncology/haematology based within a dedicated unit
  - Day surgery to be located to allow single site surgery
- Endoscopy 26 places 3 rooms
- ECRP utilizing 16 rooms
- Oncology and Haematology investigations to remain in own unit
- Paediatric investigations in one unit and day surgery patients in discrete unit on the ward
### Operational Principles

<table>
<thead>
<tr>
<th>4</th>
<th>Key relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPD to be contiguous with outpatient diagnostic support</td>
<td></td>
</tr>
<tr>
<td>Potential for near patient testing in OPD</td>
<td></td>
</tr>
<tr>
<td>East of access between OPD and therapy areas</td>
<td></td>
</tr>
<tr>
<td>Dedicated area for day case theatres</td>
<td></td>
</tr>
<tr>
<td>Day theatres contiguous with reception and bed/trolley access</td>
<td></td>
</tr>
<tr>
<td>Emergency/inpatient medical investigations to be located with main diagnostic on BRI site</td>
<td></td>
</tr>
<tr>
<td>Elective medical investigations to be in discrete areas</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5</th>
<th>Work Patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPD 2 sessions per day (9.00 – 1.0 and 1.00 – 5.00) Mon – Fri</td>
<td></td>
</tr>
<tr>
<td>OPD sized in 2 sessions but future could include evening/weekend department or direct access and needs of primary care</td>
<td></td>
</tr>
<tr>
<td>Day surgery 8am – 10pm Mon – Fri overnight stays admitted to specialty beds</td>
<td></td>
</tr>
</tbody>
</table>

| 6 | Patient Flow |
Operational Principles

1 Medical Investigations Elective

- Reception
  - Main Waiting
  - Endoscopy
    - Sub wait
  - Other scoping
    - Sub wait
  - Procedures
    - Sub wait
  - change

- Endoscopy
- Other scoping
- Procedures

- Chair/trolley recovery
  - change
  - Radiology
  - Post procedure
  - Interview/consult

- Home
- Admissions
Operational Principles

2 Day surgery

Reception

Children’s

Children’s change

Children’s lounge/play area

Prep room

Theatre/induced

1st stage

Recovery on table

2nd stage

Trolley/Recliner

3rd stage

Chair

Change

Departure lounge

Adults

Children’s cubicles

Adult lounge
## Functional Content

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Aggregation/Department</th>
<th>Size m²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>New</td>
</tr>
<tr>
<td>1.00</td>
<td>In Patient Accommodation</td>
<td></td>
</tr>
<tr>
<td>1.01</td>
<td>General Surgery</td>
<td>1,729</td>
</tr>
<tr>
<td>1.02</td>
<td>Orthopaedic Surgery</td>
<td>1,687</td>
</tr>
<tr>
<td>1.03</td>
<td>Maxillo-Facial/ENT</td>
<td>701</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>4,117</td>
</tr>
<tr>
<td>1.04</td>
<td>Intensive Care Unit</td>
<td>730</td>
</tr>
<tr>
<td>1.05</td>
<td>High Dependency Unit</td>
<td>528</td>
</tr>
<tr>
<td>1.06</td>
<td>Coronary Care Unit</td>
<td>552</td>
</tr>
<tr>
<td>1.07</td>
<td>Medical /Surgical Admissions Unit</td>
<td>1,140</td>
</tr>
<tr>
<td>1.08</td>
<td>Urology Unit</td>
<td>917</td>
</tr>
<tr>
<td>1.09</td>
<td>Children's Accommodation</td>
<td>250</td>
</tr>
<tr>
<td>1.10</td>
<td>Gynae Unit</td>
<td>530</td>
</tr>
<tr>
<td>1.11</td>
<td>Decant Facilities</td>
<td>530</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>8,234</td>
</tr>
<tr>
<td>2.00</td>
<td>Out Patient Accommodation</td>
<td></td>
</tr>
<tr>
<td>2.01</td>
<td>General Outpatient Clinic</td>
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</tr>
<tr>
<td>2.02</td>
<td>Chest Clinic</td>
<td>80</td>
</tr>
<tr>
<td>2.03</td>
<td>Chronic Pain Clinic</td>
<td>0</td>
</tr>
<tr>
<td>2.04</td>
<td>ENT Clinic</td>
<td>524</td>
</tr>
<tr>
<td>2.05</td>
<td>Audiology and Hearing Aid Clinic</td>
<td>336</td>
</tr>
<tr>
<td>2.06</td>
<td>Fracture &amp; Orthopaedic Clinic</td>
<td>755</td>
</tr>
<tr>
<td>2.07</td>
<td>Genito Urinary Clinic</td>
<td>166</td>
</tr>
<tr>
<td>2.08</td>
<td>Ophthalmology Clinic</td>
<td>636</td>
</tr>
<tr>
<td>2.09</td>
<td>Oral, Maxillo, Dental Clinic</td>
<td>402</td>
</tr>
<tr>
<td>2.10</td>
<td>Cardiology/ECG Clinic</td>
<td>257</td>
</tr>
<tr>
<td>2.11</td>
<td>Early Pregnancy Unit</td>
<td>0</td>
</tr>
<tr>
<td>2.12</td>
<td>Dietetics</td>
<td>0</td>
</tr>
<tr>
<td>2.13</td>
<td>Rehabilitation</td>
<td>163</td>
</tr>
<tr>
<td>2.14</td>
<td>Diabetes Unit</td>
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</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>4,885</td>
</tr>
<tr>
<td>3.00</td>
<td>Treatment &amp; Diagnostic Facilities</td>
<td></td>
</tr>
<tr>
<td>3.01</td>
<td>Accident &amp; Emergency</td>
<td>1,221</td>
</tr>
<tr>
<td>3.02</td>
<td>Operating Theatre Department</td>
<td>2,630</td>
</tr>
<tr>
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<td>Day Surgery</td>
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<tr>
<td>3.04</td>
<td>Radiology</td>
<td>2,039</td>
</tr>
<tr>
<td>3.05</td>
<td>Endoscopy</td>
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<tr>
<td>3.06</td>
<td>Vascular</td>
<td>0</td>
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<tr>
<td>------</td>
<td>----------</td>
<td>---</td>
</tr>
<tr>
<td>3.07</td>
<td>Planned Investigations Unit</td>
<td>681</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>8,029</td>
</tr>
<tr>
<td>4.00</td>
<td>Clinical Support</td>
<td></td>
</tr>
<tr>
<td>4.01</td>
<td>Pathology Department</td>
<td>1,538</td>
</tr>
<tr>
<td>4.02</td>
<td>Pharmacy</td>
<td>690</td>
</tr>
<tr>
<td>4.03</td>
<td>Mortuary</td>
<td>492</td>
</tr>
<tr>
<td>4.03</td>
<td>Electro-Biomedical Equipment</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>2,720</td>
</tr>
<tr>
<td>5.00</td>
<td>Non-Clinical Support</td>
<td></td>
</tr>
<tr>
<td>5.01</td>
<td>Main Entrance (excluding Retail)</td>
<td>442</td>
</tr>
<tr>
<td>5.02</td>
<td>Clinical Administration Department</td>
<td>1,213</td>
</tr>
<tr>
<td>5.03</td>
<td>Directorate Administration Department</td>
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</tr>
<tr>
<td>5.04</td>
<td>Anaesthetics Admin. Department</td>
<td>262</td>
</tr>
<tr>
<td>5.05</td>
<td>Medical Records Department</td>
<td>985</td>
</tr>
<tr>
<td>5.06</td>
<td>On Call Suite</td>
<td>374</td>
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<td>5.07</td>
<td>Spiritual Care Centre</td>
<td>165</td>
</tr>
<tr>
<td>5.08</td>
<td>Receipt and Distribution</td>
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</tr>
<tr>
<td>5.09</td>
<td>Porters Department</td>
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<td></td>
<td>Sub-Total</td>
<td>3,441</td>
</tr>
<tr>
<td></td>
<td>Costing Net Totals</td>
<td>27,308</td>
</tr>
<tr>
<td></td>
<td>Retail adjustment</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>Adjusted Totals for Comparison</td>
<td>27,608</td>
</tr>
<tr>
<td></td>
<td>Add 12% Communications</td>
<td>3,277</td>
</tr>
<tr>
<td></td>
<td>Add 12% Plant Accommodation</td>
<td>3,277</td>
</tr>
<tr>
<td></td>
<td>Energy Centre</td>
<td>900</td>
</tr>
<tr>
<td></td>
<td>Retail / Food</td>
<td>700</td>
</tr>
<tr>
<td></td>
<td>Gross Total Areas</td>
<td>34,162</td>
</tr>
</tbody>
</table>
An example operational policy and schedule of accommodation for acute ward/bed areas is provided overleaf. It is the policies and schedules which form the core of the design brief and the key headings/sections of this example should be followed.
Service Design Group for Emergency and Non Elective

OPERATIONAL POLICY AND SCHEDULE OF ACCOMMODATION: ACUTE WARDS
Service Design Group for Emergency and Non Elective

OPERATIONAL POLICY AND SCHEDULE
OF ACCOMMODATION: ACUTE WARDS

Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Scope Of Service</td>
<td>01</td>
</tr>
<tr>
<td>2. Activity Indicators</td>
<td>02</td>
</tr>
<tr>
<td>3. Functional Content</td>
<td>03</td>
</tr>
<tr>
<td>4. Functional Relationships</td>
<td>04</td>
</tr>
<tr>
<td>5. Operational Policies</td>
<td>05</td>
</tr>
<tr>
<td>6. Supporting Services</td>
<td>07</td>
</tr>
<tr>
<td>7. Facility Requirements</td>
<td>09</td>
</tr>
<tr>
<td>8. Description Of Accommodation</td>
<td>11</td>
</tr>
</tbody>
</table>
1. Scope of Service

The general acute wards provide in patient accommodation for all medical and surgical specialties with the exception of:

- In-patients in the Emergency Admissions Unit
- In-patients in Post Acute wards
- Obstetrics and Gynaecology – new women’s unit
- Neonatology
- Children – new children’s unit
- Day Case / Short Stay Beds
- Critical Care (including CCU)
- Dermatology
- Renal
- Rheumatology
- Urology

The acute wards will be split into dedicated medical wards and dedicated surgical wards.

This policy assumes that the wards required are general in nature and can be applied to any of the specialties included e.g.

- General Surgery
- T&O
- General Medicine
- Geriatric Medicine
- Neurosciences
2. Activity Indicators

The following table details the current and projected activity of the acute in patient specialties covered by this operational policy:

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Current (Elective &amp; Emergency) Excluding Day Cases</th>
<th>Projected* (Elective + Non Elective)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Surgery</td>
<td>3587</td>
<td>3623</td>
</tr>
<tr>
<td>T&amp;O</td>
<td>2595</td>
<td>3257</td>
</tr>
<tr>
<td>General Medicine</td>
<td>9097</td>
<td>6290</td>
</tr>
<tr>
<td>Geriatric Medicine</td>
<td>5043</td>
<td>5447</td>
</tr>
</tbody>
</table>

Service Trends

The following points detail both local and national issues which will have an impact on service provision:

- The National Beds Inquiry prescribes that acute wards should be planned at 82% occupancy level;
- There is increasing support for the separation of emergency and elective streams of patients. This is reflected in the developments of DTCs.
The overall level of provision on the acute site amounts to XXXX beds.

The new capacity is comprised of:

<table>
<thead>
<tr>
<th>Existing Build Beds</th>
<th>XXX (plus XX elective short stay beds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Build Beds</td>
<td>XXX</td>
</tr>
<tr>
<td>Off site</td>
<td>XXX</td>
</tr>
<tr>
<td>Total</td>
<td>XXXX</td>
</tr>
</tbody>
</table>

Following analysis and taking into consideration the requirements for the Day case / short stay unit, paediatrics, dermatology, emergency admissions unit, renal unit, urology unit, women’s unit and paediatric SCBU services, calculations have shown that X wards of general medical, general surgical and post acute need to be provided within the new build.

This policy relates to the general and acute wards only.

The acute beds will be configured in X XX bed wards, which will be provided in the new accommodation.

The beds on the wards will be configured in the following way:

- 4 bed bays
- Single rooms
- Assisted single rooms (en suite)
4. Functional Relationships

The six new specialty wards should be located with direct access from the EAU and in close proximity to A&E, ITU and HDU, Operating theatres, Imaging department and Endoscopy suite. This is summarised as follows:

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Reason</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating theatres</td>
<td>For surgical beds</td>
<td>Essential</td>
</tr>
<tr>
<td>Imaging Dept</td>
<td>Ease of access</td>
<td>Important</td>
</tr>
<tr>
<td>EAU</td>
<td>Ease of access</td>
<td>Important</td>
</tr>
<tr>
<td>Endoscopy</td>
<td>Ease of access</td>
<td>Important</td>
</tr>
<tr>
<td>A&amp;E</td>
<td>Ease of Access</td>
<td>Desirable</td>
</tr>
<tr>
<td>ITU / HDU</td>
<td>Ease of Access</td>
<td>Essential</td>
</tr>
</tbody>
</table>
5. Operational Policies

General

Patients can be nursed either in a multi-bed room or a single room and can be grouped according to speciality or nursing dependency.

The design should allow for nursing male and female patients in the same section yet at the same time giving them privacy. In principle, however, male and female patients should be nursed on separate wards wherever possible.

There must be sufficient space in single rooms and behind curtains in multi-bed rooms to attend a patient in privacy with the bed partially stripped and a dressings trolley and other equipment in position.

Patients should also be able to sit out of the bed for short periods within the bed area, and there should be space for personal belongings within easy reach of the bed.

If doors are provided in the four bedrooms, they are likely to stand open most of the time. Patients should be able to see and speak to nurses as they move around the ward.

Patients can receive treatment in bed, at the bedside, in a bathroom or in a treatment room. A treatment room will be required for each ward. It will be used for dressings and other treatments, and also as an examination / interview room.

Sanitary facilities should not be grouped together but be sited within twelve meters of every bed and day area. All of the single rooms should have WCs and showers en suite. Disabled WC facilities (low sinks / hand rails etc) should be provided on each of the wards.

A patient / nurse call system is essential, but consideration must be given to the design of the handset. Seriously ill patients need only a simple pear-shaped bell push to call a nurse.

A change of environment is also desirable and this can be obtained in the day / dining areas.

Nursing staff will require easy supervision of and access to patients. There should be good observation of patients in the four-bedded bays, which should be grouped close to the staff base.
5. Operational Policies

The staff base should be as simple as possible providing sitting space for two people only. Patients’ notes and x-rays will be stored in a trolley at this point.

Patient admissions will be managed and undertaken at ward level. This function will be undertaken by the ward clerk.

Access to the Ward

The ward will function as a separate unit. The ward should not be used as a passageway to other areas. Where there is more than one entrance to the ward, the main entrance must be easily identifiable.

Internal noise should be kept to a minimum. Some noise can be eliminated by careful selection of materials and equipment. When it cannot be eliminated at source, careful planning may ensure that noises occur within enclosures separated from bed areas.

The ward will operate a visiting policy.

Consideration should be given to the security of the ward (especially wards with a higher potential for accommodating violent patients/relatives), with possible access via intercom and CCTV surveillance of the entrances.

Staffing

The following table details the WTE requirements for the current general surgical wards:

<table>
<thead>
<tr>
<th>Staff Member</th>
<th>Current WTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>G Grade</td>
<td>0.9</td>
</tr>
<tr>
<td>F Grade</td>
<td>2.8</td>
</tr>
<tr>
<td>E Grade</td>
<td>18.99</td>
</tr>
<tr>
<td>D Grade</td>
<td>11.22</td>
</tr>
<tr>
<td>A Grade</td>
<td>6.99</td>
</tr>
<tr>
<td>Support Worker 3</td>
<td>10.82</td>
</tr>
<tr>
<td>A&amp;C 4</td>
<td>1.0</td>
</tr>
<tr>
<td>A&amp;C 2</td>
<td>2.0</td>
</tr>
</tbody>
</table>
6. Supporting Services

Linen

Linen will be delivered on a “top up” system to the linen cupboard on the ward. The frequency of top up should be on a daily basis. Dirty linen will be collected and placed in bags for collection within the disposal holding area. This area should be close to the entrance of the ward to facilitate ease of removal by appropriate staff.

Rehabilitation

Rehabilitation for inpatients will generally be undertaken within the ward environment either at the bedside or in the treatment rooms. Occasionally patients will transfer to the main rehabilitation department.

Catering

See catering policy.

Pathology

It is anticipated that extensive use will be made of the pneumatic tube network for the delivery of samples to Pathology and Pharmacy. A pneumatic tube station may be located immediately outside the ward area and serve more than one ward.

Pharmacy

A clinical pharmacy service will be in operation to the wards. Clinical pharmacists will agree stock levels with nursing staff and be responsible for regular top-up to these levels.

Sterile Supplies

Sterile Supplies from the hospitals CSSD will be supplied on a “topping up” basis.
6. Supporting Services

<table>
<thead>
<tr>
<th>Waste Disposal</th>
<th>Portering Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>All items for disposal / linen for cleaning will be bagged on the ward and placed in the disposal holding area closer to the ward entrance.</td>
<td>See portering policy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Supplies</th>
<th>Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Supplies policy.</td>
<td>Routine maintenance services will be undertaken by estates staff. Certain items of planned preventative maintenance, such as air-conditioning filter changing will be undertaken on a cyclical basis and will be agreed with the ward sister in advance. Other items of maintenance, such as changing light bulbs and minor repairs will be initiated on a requisition system and ordered by the ward sister or appropriate designated person e.g. ward clerk.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Domestic Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Domestics policy.</td>
</tr>
</tbody>
</table>
## 7. Facility Requirements

Schedule of Accommodation for the acute wards

<table>
<thead>
<tr>
<th>Activity Space</th>
<th>Area of Each (sq.m)</th>
<th>Number Required</th>
<th>Total Area (sq.m.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-bed bay (4 beds)</td>
<td>58</td>
<td>2</td>
<td>116</td>
</tr>
<tr>
<td>En-suite bath/shower/wc/washbasin</td>
<td>4.50</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>En-suite bath/shower/wc/washbasin – assisted</td>
<td>4.50</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Multi-bed bay (2 beds)</td>
<td>24</td>
<td>2</td>
<td>48</td>
</tr>
<tr>
<td>En-suite bath/shower/wc/washbasin</td>
<td>4.50</td>
<td>1</td>
<td>4.50</td>
</tr>
<tr>
<td>En-suite bath/shower/wc/washbasin – assisted</td>
<td>4.50</td>
<td>1</td>
<td>4.50</td>
</tr>
<tr>
<td>Single Rooms</td>
<td>16</td>
<td>12</td>
<td>192</td>
</tr>
<tr>
<td>En-suite bath/shower/wc/washbasin</td>
<td>4.50</td>
<td>12</td>
<td>54</td>
</tr>
<tr>
<td>Patients Bath / WC / Wash</td>
<td>8.50</td>
<td>1</td>
<td>8.50</td>
</tr>
<tr>
<td>Day room/dining</td>
<td>20</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Quiet sitting space</td>
<td>9</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Quiet sitting space (women only)</td>
<td>10</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Multi purpose rehabilitation room (5 cubicles)</td>
<td>50</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>Ward Clerk Station/Reception</td>
<td>10</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Waiting Area</td>
<td>16</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Nurse Station</td>
<td>10</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Pharmaceuticals storage room</td>
<td>6</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Treatment room</td>
<td>16</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Clean utility</td>
<td>12</td>
<td>1</td>
<td>12</td>
</tr>
</tbody>
</table>
## 7. Facility Requirements

<table>
<thead>
<tr>
<th>Activity Space</th>
<th>Area of Each (sq.m)</th>
<th>Number Required</th>
<th>Total Area (sq.m.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview room</td>
<td>8</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Resuscitation Trolley Bay</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Wheelchair/Stretcher Bay</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Pantry/beverage making</td>
<td>12</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Linen Store</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Supplies Trolley Bay</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Controlled drug cupboard</td>
<td>1.5</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>Equipment Store</td>
<td>15</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Dirty Utility</td>
<td>9</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Disposal Hold</td>
<td>10</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Cleaners Room</td>
<td>8</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Staff Lockers</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Staff Rest Room &amp; Beverages</td>
<td>20</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Staff WC</td>
<td>4</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Staff Shower</td>
<td>6</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Switchroom</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Doctors Office</td>
<td>11</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Ward Co-ordinators Office</td>
<td>11</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Sub total</td>
<td></td>
<td></td>
<td>734</td>
</tr>
<tr>
<td><strong>Circulation at 30%</strong></td>
<td></td>
<td></td>
<td>220</td>
</tr>
<tr>
<td><strong>Acute Ward Accommodation (per ward)</strong></td>
<td></td>
<td></td>
<td>954</td>
</tr>
<tr>
<td><strong>3 Wards</strong></td>
<td></td>
<td></td>
<td>2862.50</td>
</tr>
</tbody>
</table>

Note: this schedule does not include visitors waiting areas outside the ward
8. Description of Accommodation

**Bed Areas**

The four-bedded bays should be directly opposite the nurse station; the single rooms should be sited as near to the nurse’s station as possible and have viewing windows;

Each four-bed bay will contain clinical hand washing facilities for medical and nursing staff;

Each bed will have a bed curtain which can be drawn around the bed to provide privacy for patients who are being examined, or who require privacy to perform ablutions etc.

Each bed should have at least two chairs associated with it for use by visitors;

Each bed will have storage facilities for clothes, personal effects etc. This could take the form of a built-in cupboard or a freestanding mobile cupboard;

Each bed should also have a small bedside locker on which a water jug and glasses can be stood for use by patients. If the storage cupboard chosen is freestanding, consideration should be given to making the bedside locker and clothes locker a single unit;

Each bed will also require an over-bed table upon which patients can receive their meals.

One of the four single bedrooms will have an anteroom with wash hand basin and changing space.

Each bed should have a dedicated locker for the patient’s medication.

**Nurse Base**

A nurse base will be provided immediately in front of two four bed bays. The nurse base should also have good visual access to the four single rooms which should be split either side of the two four bed bays in front of the nurse base.

The nurse base will provide facilities for two staff to sit and undertake administrative duties. Space should be provided for a computer terminal and printer.

The clean utility should be directly adjacent to the nurse base. The controlled drugs cupboard should be accessed from the nursing station or the clean utility.

Adequate storage cupboards for stationery etc should be provided under the nurse base counter and wall mounted behind it.
8. Description of Accommodation

The patient notes trolley (which should be lockable) will be kept at the nurse base and the resuscitation trolley should be easily accessible.

A separate office for the ward manager is required, situated close to the nurse base.

Sanitary and Washing Facilities

In order to economise on space, every bathroom should contain an associated W.C. and wash-hand basin. A height adjustable bath should also be provided in each bathroom.

Excluding the two single rooms with WCs and “wheel-in” shower en suite, washing and toilet facilities should be provided on the basis of one facility per bed bay;

All of the sanitary facilities, which relate to bed bays should be large enough to provide assistance for patients with limited mobility / disability and also include facilities such as low sinks / towel dispensers etc.

Day Room

A day/dining facility will be provided. One area will have two tables and four chairs per table for those patients who do not wish to dine in their beds.

A television and six easy chairs will also be provided for patients to sit and watch television. The room may also be used for those patients with large numbers of visitors.

Ward Clerk Station / Reception

This facility should be provided at the entrance to the wards. The ward clerk will supervise entry to the wards in accordance with the ward sister in charge. This should be a small office facility with a reception counter opening up on to the ward entrance. Only emergency admissions will be admitted to the wards.

Facilities will be provided for limited storage of stationery and the requisite admitting forms. If a computerised patient administration is to be utilised, there should be a computer terminal at this point for admissions to be recorded via the PAS system. There should be at least one chair at the reception for use by patients / visitors.
8. Description of Accommodation

Waiting Area

A small waiting area for up to 6 patients / visitors should be provided directly adjacent to the reception area.

A waiting area for visitors should also be located outside the ward. These areas should be provided for a group of wards depending on the design solution and the spaces should be based on 6-7 people waiting per ward served.

Interview Room

An interview room will be provided on each ward for use by multi-disciplinary teams to meet and interview patients and / or their families.

Seating should be provided for 4-5 persons

This room could also be used by psychiatric staff to interview patients

This room should be close to the ward reception area

Clean Utility

This room should be directly associated with the nurses station. It will be used for:

- Reception and storage of sterile packs, syringes and needles
- Storage of intravenous fluids
- Storage of lotions and medicines
- Storage of drugs including dangerous and scheduled drugs
- Assembly of items for patient treatment
- Washing of hands

Access to this room should be controlled by digital lock
8. Description of Accommodation

**Treatment Room**
This room should preferably be sited near to the clean utility. It will be used for:
- Routine examinations and dressings
- Carrying out clean clinical procedures
- Carrying out sterile procedures – change of dressing etc
- Interviewing and examining patients on admission and other occasions as necessary.

**Dirty Utility**
This room should be near the treatment room and within easy distance of the high dependency area. It will be used for:
- Macerating disposable bed pans and urinals
- Storage of bed pans and urinals
- Urine testing
- Disposal of fluid waste – dirty water, vomit, etc.

**Ward Pantry**
A water boiler should be included to enable beverages to be made; a tap for drinking water should be included. A hand washbasin, food disposal unit and dishwasher are also provided. Only cups and other small items of crockery etc are to be washed at ward level.

**Cleaners Room**
This room should preferably be near the entrance to the ward and will be used for storing and cleaning materials. A high / low sink will be provided.
 Offices

The following offices will be required:

- An office will be required near to the entrance for the ward clerk and should be directly linked to the ward.

- A doctor's office should be provided in which medical staff can hold confidential discussions, make telephone calls and write up medical notes. This should be located in close proximity to the nurse's base.

- Nursing staff / sisters office will be provided in which the ward sister can undertake administrative duties and hold small staff meetings with other staff. This should also be located in close proximity to the nurse’s base.

 Storage

Storage will be required for the following:

- Linen
- Items such as bed cradles, drip stands etc.
- Wheelchairs
- Resuscitation equipment
- Supplies trolley

 Other Accommodation

The following rooms are to be provided on the ward:

- Staff cloaks and toilets
- Facilities for teaching, seminars and clinical investigations for medical students and nurses. These facilities could be shared between wards.