

**PRIMARY HEALTH CARE CENTRES
and
FIRST REFERRAL LEVEL HOSPITALS**

PLANNING GUIDE

**EQUIPMENT AND RENEWABLE
RESOURCES**

August 2005

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1. Introduction

The health of children and women has been at the centre of UNICEF's agenda since its inception in 1946. This commitment was strengthened and reiterated by the Convention on the Rights of the Child in 1989 and more recently by the Millennium Development Goals and UNICEF's organizational priorities.

In 158 countries and territories, UNICEF works with governments and their partners to improve the availability of quality health care, and children's and women's access to it. Primary health care centres play a central role as they provide basic health care to communities. They constitute the entry point into the country health system. Their activities are supported by health care services at the first referral level. Improving services at both levels has a major impact on national health indicators and helps governments in fulfilling their national and international health care provision commitments and goals.

Making suitable supplies available, accessible and affordable is fundamental to these efforts. In this context, UNICEF has taken the initiative to develop this Planning Guide, the first of its kind. It aims to facilitate the planning and procurement process for medical devices and supplies for primary and first referral level health care services.

The Planning Guide approaches both levels of facilities from a functional perspective, describing the scope of their services and activities, then translating these into medical equipment and supplies required. The impact on the mechanical, electrical and engineering systems has also been identified for each of the items described. This Guide does not provide a standard model or essential list but is relevant in a wide variety of situations.

UNICEF Supply Division oversees the organization's global supply and logistics operations. It ensures that high quality supplies reach children and their families in a timely manner. The Division also supports UNICEF field offices and Procurement Services customers globally. Throughout its procurement, UNICEF maintains the highest ethical standards. Through Procurement Services, partners can call upon the experience of UNICEF's extensive network and team of multi-disciplinary professionals to assist with and coordinate all aspects of their procurement, from needs assessment to distribution. As a key part of its efforts, UNICEF offers capacity building to governments and their partners to help them become self-sufficient.

Acronyms

AIDS	Acquired Immune Deficiency Syndrome
A&E	Accident and Emergency
CBR	Community-Based Rehabilitation
CSSD	Central Sterile Supply Department
CTG	Cardiotocography
ENT	Ear, Nose and Throat
EPI	Expanded Programme on Immunization
FRL	First Referral Level
GP	General Practitioner
Hb	Haemoglobin
HFD	Habit forming drug cupboard
HIV	Human Immunodeficiency Virus
ICU	Intensive Care Unit
IV	Intravenous
NBR	National Building Requirements
OPD	Out-Patient Department
OT	Operating Theatre
PHC	Primary Health Care
PHLS	Primary Health Laboratory Services
POP	Plaster of Paris
PPM	Planned Preventive Maintenance
PR	Per rectum
PV	Per vagina
PVC	Poly Vinyl Chloride
SS	Stainless Steel
S/S	Sharp/Sharp
TST	Time Steam Temperature
TTO	To Take Out (medicines)
UNICEF	United Nations Children's Fund
USG	Ultrasonography
WHO	World Health Organization

Items that are standard in UNICEF's Supply Catalogue are identified with their corresponding S-number.

How to read a table

Sq	Item description	Q	C	M	E
001	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
002	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
003	S0002077 Refrigerator, 140 l + 20 l (*)	1			E
004	S5005500 Chair, stackable, without armrests	20			
005	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	4			
006	Basket, waste-paper, metal (*)	2			

C: Equipment items that impact on the construction of the building (for example items that are wall or ceiling mounted).

M: Items that have an impact on the mechanical engineering infrastructure (for example items requiring hot and/or cold water supply or/and sewage drainage)

E: Impact on the electrical installation of the hospital (in general, it concerns high voltage requirements, but could also be low voltage such as data communication or nurse call)

2. Primary Health Care Centres: Functional description, planning of equipment and renewable resources

2.1 Primary Health Care Centre

2.2 Delineations

2.3 Typical Floor Plan

2.4 Room-by-room description and planning of a typical primary health centre

- 2.4.01 Waiting/Multipurpose
- 2.4.02 Toilet (public)
- 2.4.03 Nurse Station
- 2.4.04 Clean Utility
- 2.4.05 Toilet (staff)
- 2.4.06 Resuscitation (optional)
- 2.4.07 Consultation/Examination (including reproductive health)
- 2.4.08 Treatment/Dressing/Injection
- 2.4.09 2-Bed Room (Optional)
- 2.4.10 Toilet (Patient)
- 2.4.11 Delivery Room
- 2.4.12 Toilet (Patient)
- 2.4.13 Soiled Utility/Laundry
- 2.4.14 Primary Health Laboratory

2.1 Primary Health Care Centre

Primary health care is a package of basic health services, which should be available, accessible, affordable and acceptable to the whole population. It is usually the first contact children and their communities have with the national health system.

In addition to health promotion and disease prevention services, a primary health care centre provides ambulatory curative care. It may for this purpose have a few beds for observation or for awaiting referral/transportation to a higher level hospital. Furthermore, it also serves as a facility which patients are referred to from dispensaries and village health workers for services and activities such as ante- and post-natal care or family planning, nutritional advice and health education.

Commonly it is run by paramedical staff, with doctors on scheduled visits. The team includes at least a registered nurse, a midwife, a medical assistant, and two or three auxiliary staff. The typical catchment area would be a population of 5,000 to 10,000 people, depending on the geographic factors.

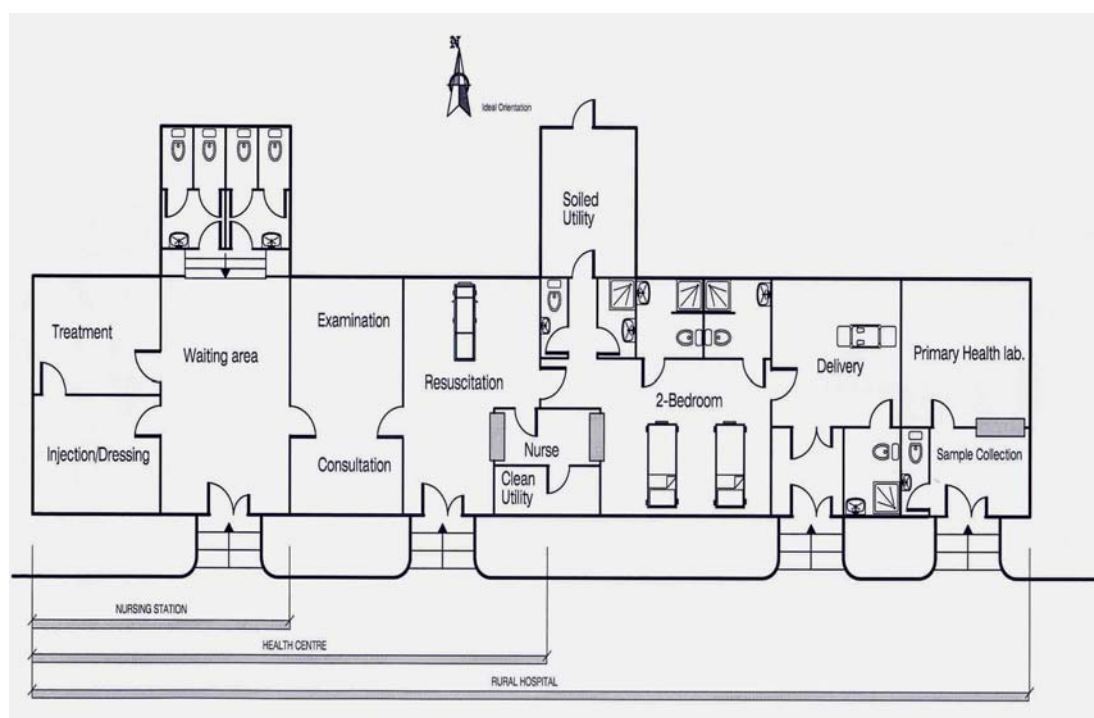
2.2 Delineations

Medical devices and renewable resources are planned on the basis of the functional programme that allows the centre to fulfil its role as primary health care provider. For practical reasons, the functional programme is divided into rooms with activities. These activities are then translated into devices and renewable resources that are required, on a room-by-room basis.

The following factors should be taken into account when using tables:

- (i) national health policies with regard to primary health services provision,
- (ii) appropriateness of the physical environment of the facility assessment,
- (iii) capacity and capabilities of the staffing,
- (iv) operational expenses (maintenance, consumables, etc.) that follow the initial investment,
- (v) that quantities mentioned will have to be matched with the actual capacity and occupancy of the facility.

2.3 Typical layouts for primary health care



A centre that only includes the first few rooms (Treatment, Injection/Dressing, Waiting area) is a nurse station or health post. When the facility also provides consultation/examination and resuscitation services, it is a health centre. Further extending the scope of services results into the centre becoming a rural hospital [1].

2.4 Room-by-room description and planning of a typical primary health centre

2.4.01 Waiting/Multipurpose (25 m²)

The waiting area should be situated as close as possible to the entrance of the PHC centre. It must be large enough to accommodate the chairs and space for the activities as discussed below.

Activities:

Waiting area;

Health education sessions concerning the prevailing health problems and the methods of preventing and controlling them available to the population of the country. The scope of health education is determined by the needs of the community, but mainly centres around the basic elements of primary healthcare:

- Maintenance of general health and well being;
- Nutrition;
- Safe water and basic sanitation;
- Mother and child;
- Immunization;
- Local endemic diseases;
- Prevention of blindness;
- General illness and injuries; and
- The provision of essential medicines.

Equipment:

Sq	Item description	Q	C	M	E
001	Seating, 4 seats on frame, with table, 2.50 m	5			
002	Basket, waste-paper, metal	1			

Renewable/Disposable:

Please note that educational material is stored in different locations within the clinic.

2.4.02 Toilets (public) (8 m²)

Sufficient and accessible toilets facilities should be allocated to manage the patient load including handicapped patients. The public toilets should be situated in such a manner that the normal functioning of the clinic is not impaired with patients waiting to utilize ablution facilities. Hand wash and hygiene posters posted on walls, strengthen the educational aspect.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	3			
002	Dispenser, paper towel, metal	3			
003	Dispenser, soap, hand operated	3			

Renewable/Disposable:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Hand wash soap/liquid/optional
002	Paper for paper dispenser/Optional
003	S055200 Soap, toilet, bar, approx.110g, wrapped

2.4.03 Nurse Station (10 m²)

The nurse station is situated adjacent to the waiting area, easily accessible from and to the rest of the clinic. Sufficient space should be allocated to this area to accommodate the furniture and ease staff flow.

Activities:

This area is utilized as a communication and correspondence centre:

- Patient problems – Patient-referral letters;
- Administrative problems – Letters to and from supervisors;
- Communication for patient referrals to higher level providers (first referral level and/or ambulance services, as well as health workers.)

Administration health care activities:

- Registration;
- Clinic records;
- Laboratory records;
- Ward register;
- Discharge letter;
- Antenatal card;
- Child health card;
- Report forms;
- Monthly report form;
- Posters and leaflets.

Administration of equipment and funds:

- Requisition forms;
- Stock ledgers;
- Issue vouchers and inventories;
- Cash books, receipts and petty-cash vouchers;
- Minutes of meetings.

Medicine control point.

Information and patient reporting, and a reference point for the appropriate area for treatment or a clinic session.

Equipment:

Sq	Item description	Q	C	M	E
001	Telephone Unit (optional)	1	C		E
002	Radio, two way (optional)	1			E
003	Wall clock	1			E
004	S0005021 Cupboard, st., 2 doors, 4 shelves, adjust.	1			
005	Chair, desk, height adjustable	1			
006	S5005500 Chair, folding, steel	2			
007	Counter, reception, 2.50 m	1	C		E
008	Basket, waste-paper, metal	1			
009	Board, bulletin, framed, 1.20 x 0.70 m	1			

Renewable/Disposable:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Card Antenatal
002	Card child health
003	Cash books, receipts and petty-cash vouchers
004	Clinic records
005	Laboratory records
006	Monthly report form
007	Clinic records
008	Laboratory records

009	Monthly report form
010	Posters and leaflets
011	Registration
012	Report forms
013	Requisition forms
014	Stock ledgers
015	Vouchers and Inventory forms
016	Pens
017	Paper/Writing blocks
018	Ward register

2.4.04 Clean Utility (8 m²)

The clean utility should be situated in close proximity of the clinical activities e.g. delivery room, resuscitation room and treatment/consulting room. Due to operational space limitation, sterilising for clinic use is done in this area. Sufficient space and shelving should be allocated to accommodate storage of diverse utensils.

Activities:

- Immunization vaccine to be kept in the refrigerator and controlled at 4 °C and recorded;
- Cold chain maintenance;
- Packing and sterilising of instruments and drapes;
- Instrument sets allocated in the different areas;
- Maintenance of sterility; and
- Storage utensils with control of minimum and maximum levels.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1			
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m	1	C	M	
004	S0002077 Refrigerator, 140 l + 20 l	1			E
005	Blanket, adult, ward-type, blue	4			
006	Blanket, baby wrapping, flannel, ward-type, white	10			
007	Mask, face, cotton, theatre-type, green	40			
008	Gown, ward-type, adult, white	10			
009	Pillow, ward-type, white	10			
010	Sheet, bed, ward-type, white	10			
011	Sheet, draw, ward-type, white	20			
012	Towel, adult, ward-type, white	20			
013	Towel, instrument, 1.40 x 1.60 m, theatre-type, green	50			
014	Towel, instrument, 1.80 x 2.85 m, theatre-type, green	50			
015	Towel, hand, white	1			
016	Dispenser, paper towel, metal	1			
017	Dispenser, soap, hand operated	1			
018	Shelf, coated steel, 5 levels, starter, 1.00 m	3			
019	S0005021 Cupboard, st., 2 doors, 4 shelves, adjust.	2			
020	S0150000 Stand, infusion, wheel, double hook	1			
021	S0156000 Sterilizer, steam, 39L	1	C	M	E
022	Sterilizer/washer, steam, 1 door, 0.40 x 0.40 x 0.60 m, w generator (optional)	1	C	M	E
023	Basket, instruments, 0.24 x 0.25 x 0.06 m	3			
024	Basket, instruments, 0.12 x 0.25 x 0.06 m	2			
025	Box, st. st., with hinged lid, small, 0.25 x 0.10 x 0.05 m	2			

026	S0106000 Drum, st. st., sterilizing, diam 16 cm x 12 cm	2			
027	S0107700 Drum, st. st., sterilizing, diam 26 cm x 17 cm	1			
028	ice pack for vaccine carrier	5			
029	Wheelchair, non-foldable, universal	1			
030	S0002093 Vacc.carrier, Apex IVC-8F, PIS E4/68-M	5			

Renewable/Disposable:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Liquid hand wash
002	Steriliz/Ren - 005 Sterilization Paper
003	Steriliz/Ren - 001 Tape, Paper, Adhesive, 1.8 mm x 50 m
004	Steriliz/Ren - 002 Tape, Autoclave (3 sizes)
005	Steriliz/Ren - 003 Self-sealing, steam sterilization pouches (5 sizes)
006	Steriliz/Ren - 004 Self-sealing, chemical sterilization pouches (5 sizes)
007	S0514000 Brush,hand,scrubbing,plastic /EA
008	S0552000 Soap,toilet,bar,approx.110g,wrapped
009	S0558100 Indicator,TST control spot/PAC-300
010	Cloth-011 Drape, Surgical, woven(1 X 1 m)
011	Cloth-012 Drape, Surgical, woven(1 X 1,5 m)

2.4.05 Toilet (staff) (6 m²)

Staff toilet to be utilized by staff only, to be kept locked at all times, space for personal belongings.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	2			
002	Dispenser, paper towel, metal	2			
003	Dispenser, soap, hand operated	2			

Renewable/Disposable:

Please note that these items are the essentials and are not limited to utilization in this area.

Sq	Item description
001	Hand wash soap/liquid/Optional
002	Paper for paper dispenser/Optional
003	S055200 Soap, toilet, bar, approx.110g, wrapped

2.4.06 Resuscitation (optional) (20 m²)

This area is optional and activities can also be conducted within the treatment room for practical and economical reasons. The equipment in this area should then be allocated to the operational space (e.g. treatment room) where these activities will take place. This area is used to stabilise adult and paediatric patients, in the course of emergency, to maintain an airway and fluid maintenance for transfer to the next level of care.

Activities:

- Performed by a medical practitioner or registered nurse/midwife;
- To diagnose emergencies;
- Basic resuscitation of maintaining airway with, airway tube and manual resuscitation equipment;
- To place a I.V. cannula and maintain fluid balance;
- To utilize emergency drugs if qualified to do so;
- To manage emergency documentation and transfer arrangements, e.g. ambulance and clinical records compilation.

Equipment:

Sq	Item description	Q	C	M	E
001	S0101605 Trolley, dressing, st., 2 trays	1			
002	Stretcher patient, epoxy coated, with fixed patient support	1			
003	Cabinet, instrument, single door, 0.45m	1			
004	S5005500 Chair, folding, steel	1			
005	S0150000 Stand, infusion, wheel, double hook	1			
006	S0190000 Pedal bin, st. st	1			
007	Trolley, oxygen, complete	1			E
008	S0683200 Blood pressure meter, sphygmomanometer, mercury, adult	1			
009	S0683300 Blood pressure meter, sphygmomanometer, mercury, child	1			
010	S0845001 Resuscitator, hand-oper., adult, set	1			
011	S0119300 Light,examination,mobile,220-12V	1			E
012	Stethoscope, dual head	1			

Renewable/Disposable:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Misc/r/p-006 Oxygen mask, adult
002	Misc/r/p-007 Oxygen mask, paediatric size
003	Misc/r/p-008 Oxygen, nasal cannula
004	Tube/Cath-041 Airway Guedel, (00 - Neonatal)
005	Tube/Cath-042 Airway Guedel, (0 - Paediatric)
006	Tube/Cath-043 Airway Guedel, (1 - Child)
007	Tube/Cath-044 Airway Guedel, (2 - Adolescent)
008	Tube/Cath-045 Airway Guedel, (3 - Adult)
009	Tube/Cath-046 Airway Guedel, (4 + 5 – Adult Large)
010	Tube/Cath-047 Bubble Tubing
011	Tube/Cath-048 Silicone Rubber Tubing
012	Misc/inj/s-002 Set, Infusion, paediatric, precision
013	Misc/inj/s-003 Set, Infusion, Scalp vein
014	Misc/inj/s-004 Set, Infusion "Y", Luer lock, air inlet
015	0 Webcol/Optional
016	S0481052 Thermometer,clinical, 35-42C /EA
017	S0385000 Tourniquet,latex rubber,75cm /EA
018	S0481052 Thermometer,clinical, 35-42C /EA

019	S0385000	Tourniquet,latex rubber,75cm /EA
020	S1531510	Chlorhexidine conc. sol. 5%/BOT-100ml
021	S0519600	Cotton wool,500g,roll,non-ster (Make cotton wool balls)
022	S0503025	Bandage,elastic,7.5cmx5m,roll
023	S0709210	Cannula,IV short,18G,ster,disp /EA
024	S0709220	Cannula,IV short,20G,ster,disp /EA
025	S0709225	Cannula,IV short,22G,ster,disp /EA
026	S0709230	Cannula,IV short,24G,ster,disp /EA
027	S0744300	Needle,scalp vein,25G,ster,disp /EA
028	S0744400	Needle,scalp vein,21G,ster,disp /EA
029	S0782413	Syringe,dispos,luer,10ml,ster /BOX-100
030	S0782405	Syringe,dispos,luer,5ml,ster /BOX-100
031	S0782205	Syringe,dispos,luer,2ml,ster /BOX-100
032	S0747432	Needle,disp,21x1.5"ster /BOX-100
033	S0747452	Needle,disp,23x1"ster /BOX-100
034	S0747420	Needle,disp,19x1.5"ster /BOX-100
035	S0782208	Safety box for used syrgs/ndls 5l/BOX-25
036	S0503010	Tape,adhesive,Z.O.,2.5cmx5m /EA
037	S0503000	Tape,adhesive,Z.O.,7.5cmx5m /EA
038	S0523005	Compress,gauze,10x10cm,n/ster/PAC-100

2.4.07 Consultation/Examination (including reproductive health) (15 m²)

Patients needing privacy should be accommodated here. The room should be fitted with a door. If there is no door, bed screens should be provided in the form of a screen on wheels or a curtain to shield the couch area. This room should be close to the waiting area where seating is available and easily accessible. The booking schedule should be known to all employees and care taken not to overbook the facility.

Activities:

- Ante-natal clinic sessions;
- Baby weighing should be performed in this area or moved to the waiting area, where a "well baby" clinic could be held;
- Educational material could be used in this area or moved to the reception area for group education;
- Vital signs monitoring; and
- Safe injection practices.

Equipment:

Sq	Item description	Q	C	M	E
001	Work table, 1 sink, with cabinets under the table top, 1.50 m	1	C	M	
002	S0361020 Sheet, waterproof, Macintosh, ward-type	1			
003	Towel, hand, white	1			
004	Dispenser, paper towel, metal	1			
005	Dispenser, soap, hand operated	1			
006	Desk, office, single pedestal, 1.20 x 0.70 m	1			
007	Cabinet, instrument, single door, 0.45m	1			
008	Chair, desk, height adjustable	2			
009	S5005500 Chair, folding, steel	2			
010	S0169005 Stool, adjustable, on castors	1			
011	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
012	S0184500 Table, examination, dismant, w/access	1			
013	Footstool, one step, epoxy coated steel	1			
014	S0190000 Pedal bin, st. st	1			

015	S114600 Measuring mat, length, child, 0-3 years	1			
016	S1712000 Anatomy-chart pregnancy set, set of 8 (*)	1			
017	S0777000 Speculum, grave, medium	1			
018	S0777500 Speculum, grave, small	1			
019	S0778000 Speculum, grave, large	1			
020	Gen/Surg 002 Set, instruments, sutures	1			
021	S0683200 Blood pressure meter, sphygmomanometer, mercury, adult	1			
022	S0683300 Blood pressure meter, sphygmomanometer, mercury, child	1			
023	S0686500 Stethoscope, foetal, plastic or aluminium	1			
024	S0667000 Pelvimeter, Collyer type, external	1			
025	S0640000 Hammer, reflex	1			
026	S0660050 Otoscope set, cased	1			E
027	S0661500 Ophthalmoscope, direct	1			E
028	S0119300 Light,examination,mobile,220-12V	1			E
029	S0145520 Scale, infant, clinic, metric,16kg x 10g	1			
030	S0140500 Scale, physician, adult, metric, 6-160kg	1			
031	S0145555 Scale (only) ,infant, spring, 25kg x 100g	1			
032	S0002061 Doppler, foetal	1			E
033	Stethoscope, dual head	1			
034	Stethoscope, paediatric head	1			
035	S0481052 Thermometer, clinical, glass	2			

Renewable/Disposable:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	0 Hand wash soap/liquid/Optional
002	0 Paper for paper dispenser/Optional
003	S055200 Soap, toilet, bar, approx.110g, wrapped
004	Misc/r/p-017 Cotton Tipped Applicator
005	Misc/r/p-016 Wooden Cervical Spatula
006	S0328001 Gloves,surg,6.5,ster,disp,pair /EA
007	S0328501 Gloves,surg,7,ster,disp,pair /EA
008	S0329001 Gloves,surg,7.5,ster,disp,pair /EA
009	S0330100 Gloves,gynaeco,6.5,ster,disp,pair /EA
010	S0330102 Gloves,gynaeco,7.5,ster,disp,pair /EA
011	S0330000 Gloves,exam,latex,small,disp /BOX-100
012	S0330011 Gloves,exam,latex,medium,disp /BOX-100
013	S0782413 Syringe,dispos,luer,10ml,ster /BOX-100
014	S0782405 Syringe,dispos,luer,5ml,ster /BOX-100
015	S0782205 Syringe,dispos,luer,2ml,ster /BOX-100
016	S0747432 Needle,disp,21x1.5"ster /BOX-100
017	S0747452 Needle,disp,23x1"ster /BOX-100
018	S0747420 Needle,disp,19x1.5"ster /BOX-100
019	S0782208 Safety box for used syrgrs/ndls 5l/BOX-25
020	S0305000 Apron,protection,plastic /EA
021	S0503010 Tape,adhesive,Z.O.,2.5cmx5m /EA
022	S0523005 Compress,gauze,10x10cm,n/ster/PAC-100
023	S0521900 Gauze,roll,90cmx100m,non-sterile

2.4.08 Treatment/Dressing/Injection (14 m²)

This area is optional and activities can be conducted in the consultation/examination room if space is limited. It should be considered as a clean area where sutures and wound care are rendered.

Activities:

- Immunization clinics and preparation of mass immunization;
- Minor suturing;
- Patients referred from hospital for dressing changes, or any wound dressing to be done in the dressing room; and
- Re-hydration therapy.

Equipment:

Sq	Item description	Q	C	M	E
001	S0101605 Trolley, dressing, st.st., 2 trays	1			
002	Work table, 1 sink, with cabinets under the table top, 1.50 m	1	C	M	
003	Cabinet, instrument, single door, 0.45m	1			
004	S0169005 Stool, adjustable, on castors	1			
005	S0184500 Table, examination, dismant, w/access	1			
006	Footstool, one step, epoxy coated steel	1			
007	S0190000 Pedal bin, st. st	1			
008	Dental-001 Dental syringe set	1			
009	Gen/Surg 001 Set, surgical instruments for dressing	1			
010	S0119300 Light,examination,mobile,220-12V	1			E

Renewable/Disposable:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Need/Can-004 Needle, dental sterile, 27G Long, Gray
002	Need/Can-005 Needle, dental sterile, 30G Short, Yellow
003	Need/Can-006 Needle, dental sterile 30G Extra Short, Yellow
004	S0539000 Pin, Safety, medium size/ Pac 12
005	S0565010 Sut,nonabs,DEC2,need 3/8 13mm,tri/BOX-36
006	S0565011 Sut,nonabs,DEC3,need 3/8 30mm,tri/BOX-36
007	S0565010 Sut,nonabs,DEC2,need 3/8 13mm,tri/BOX-36
008	S0746110 Scalpel blade,ster,disp,no.11
009	S0746310 Scalpel blade,ster,disp,no.15
010	S0746400 Scalpel blade,ster,disp,no.21
011	Misc/inj/s-002 Set, Infusion, paediatric, precision
012	Misc/inj/s-003 Set, Infusion, Scalp vein
013	Misc/inj/s-004 Set, Infusion "Y", Luer lock, air inlet
014	Misc/inj/s-005 Set, Infusion, Vented
015	S0709210 Cannula,IV short,18G,ster,disp
016	S0709220 Cannula,IV short,20G,ster,disp
017	S0709225 Cannula,IV short,22G,ster,disp
018	S0709230 Cannula,IV short,24G,ster,disp
019	S0744300 Needle,scalp vein,25G,ster,disp
020	S0503025 Bandage,elastic,7.5cmx5m,roll
021	S0523050 Compress,paraffin,10x10,ster/Box 10
022	S0328001 Gloves,Surg,6.5,ster,disp,pair /EA
023	S0328501 Gloves,surg,7,ster,disp,pair /EA
024	S0329001 Gloves,surg,7.5,ster,disp,pair /EA

025	S0330000	Gloves,exam,latex,small,disp /BOX-100
026	S0330011	Gloves,exam,latex,medium,disp /BOX-100
027	S0521900	Gauze,roll,90cmx100m,non-ster
028	S0523005	Compress,gauze,10x10cm,n/ster/PAC-100
029	S0523055	Compress,gauze,10x10cm,ster/PAC-5
030	S0519600	Cotton wool,500g,roll,non-ster /EA
031	S0782110	Syringe,2ml,w/needle,21Gx1.5"/BOX-100
032	S0782111	Syringe,5ml,w/needle,21Gx1.5"/BOX-100
033	S0782112	Syringe,10ml,w/needle,21Gx1.5"/BOX-100
034	S0782209	Syringe,A-D,BCG,0.1ml,w/ndl,ster/BOX-100
035	S0782220	Syringe,reuse,EPI,0.5ml/BOX-10
036	S0747440	Needle,disp,22G(0.7x30mm),ster/BOX-100
037	S0747445	Needle,disp,25G(0.5x16mm),ster/BOX-100
038	S0747452	Needle,disp,23G(0.6x25mm),ster/BOX-100
039	S0782208	Safety box f.used syrgs/ndls 5lt/BOX-25
040	S0504000	Tape,adhesive,Z.O,perforated,10cmx5m
041	S0503010	Tape,adhesive,Z.O.,2.5cmx5m
042	S1531510	Chlorhexidine conc. sol. 5% /BOT-100 ml
043	S1553100	Iodine solution 2.5% /BOT-30 ml
044	S0323300	Catheter,Foley,CH10,ster,disp
045	S0323301	Catheter,Foley,CH12,ster,disp
046	S0323302	Catheter,Foley,CH14,ster,disp
047	S0330500	Bag,urine,collecting,2000ml
048	Misc/inj/s-006	File for ampoules
049	Misc/r/p-005	Bag, urine, paediatric
050		Cotton wool bolls/Sterile

2.4.09 2-Bed Room (Optional) (14 m²)

Should the need arise; patients can be accommodated overnight in the clinic. The staff working in the primary healthcare clinic should be adequately trained and qualified to attend to these patients. If the patients' condition is of concern, the patient should be referred to the first referral hospital within the region.

Activities:

- Basic nursing care;
- Monitoring of vital signs.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed, standard, 2 sections, with mattress	2			
002	S0100804 Cot, baby, hospital type, wheel	1			
003	Cabinet, bedside, standard	2			
004	S5005500 Chair, folding, steel	2			
005	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
006	Screen, bed, three section, mobile	1			
007	Basket, waste-paper, metal	2			
008	S0345100 Pump, breast, manual, w/accessories	1			E
009	S0222020 Bedpan, adult, st. st.	2			
010	S0683200 Blood pressure meter, sphygmomanometer, mercury, adult	1			
011	S0683300 Blood pressure meter, sphygmomanometer, mercury, child	1			
012	S0686500 Stethoscope, foetal, plastic or aluminium	1			
013	Stethoscope, dual head	1			

Renewable/Disposable:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication). All the necessary disposables will be kept in a central storage area. No stock will be allocated here and disposables will depend on demand and drawn from the stock area.

2.4.10 Toilet (Patient) (3 m²)

This toilet is for in-patients who are staying in the two-bed room or the delivery area.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal	1			
003	Dispenser, soap, hand operated	1			

Renewable/Disposable:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Hand wash soap/liquid/Optional
002	Paper for paper dispenser/Optional
003	S055200 Soap, toilet, bar, approx.110g, wrapped
004	Misc/dres-008 Obstetrical Pads

2.4.11 Delivery Room (19 m²)

The delivery room should be easily accessible from the corridor passage at any time. Patients' privacy should be ensured. Adequate space and furniture for delivery management as well as for the mother's partner is required. There should be adequate space for any procedures necessary for resuscitation and/or the maintenance of a clear airway.

Activities:

- Only trained staff e.g. midwife/doctor to work in this area;
- Only uncomplicated deliveries to be done in this delivery room;
- Access to ambulance or emergency transport should be available to transport patients with undiagnosed complications to the first referral hospital;
- Delivery rooms will be used for all stages of labour, including recovery following birth if the bed facility is not available;
- A delivery bed with the infant cot and resuscitation equipment should be allocated here.
- Adequate space to accommodate furniture, patients and medical staff during the delivery procedure;
- Vaginal delivery with the mother in the lithotomy position (according to protocol and staff availability per clinic and the country where this clinic is situated).

Equipment:

Sq	Item description	Q	C	M	E
001	Wall clock	1			E
002	S0101605 Trolley, dressing, st.st., 2 trays	1			
003	Trolley, soiled linen, 1 ring	1			
004	S0361020 Sheet, waterproof, Macintosh, ward-type	1			
005	Towel, hand, white	1			
006	Dispenser, paper towel, metal	1			
007	Dispenser, soap, hand operated	1			
008	S0100804 Cot, baby, hospital type, wheel	1			

009	S0101000 Bed, labour, delivery, w/access	1			
010	Cabinet, instrument, single door, 0.45m	1			
011	S0169005 Stool, adjustable, on castors	1			
012	S0150000 Stand, infusion, wheel, double hook	1			
013	S0151001 Stand, single bowl, wheel, w/o bowl	1			
014	S0186502 Table, instr, Mayo type, st.st., mobile	1			
015	Screen, bed, three section, mobile	1			
016	Table, general care, newborns	1			E
017	Trolley, oxygen, complete	1			E
018	S0760640 Pump, suction, foot-operated	1			
019	S0791500 Vacuum extractor, Bird, manual, complete .set	1			
020	Gyn/Obs 007 Forceps, Wrigleys (optional)	1			
021	Gen/Surg 002 Set, instruments, sutures	1			
022	S0683200 Blood pressure meter, sphygmomanometer, mercury, adult	1			
023	S0686500 Stethoscope, foetal, plastic or aluminium	1			
024	Gyn/Obs 002 Set, instruments for delivery	1			
025	Gyn/Obs 003 Set, surgical instruments for episiotomy	1			
026	S0845000 Resuscitator, hand-oper., infant/child, set	1			
027	S0119300 Light,examination,mobile,220-12V	1			E
028	S0145520 Scale, infant, clinic, metric,16kg x 10g	1			
029	S0002061 Doppler, foetal	1			E
030	Stethoscope, paediatric head	1			

Renewable/Disposable:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	S0514000 Brush,hand,scrubbing,plastic /EA
002	S0305000 Apron,protection,plastic /EA
003	0 Liquid hand soap /soap dispenser
004	S0552000 Soap, toilet, bar, 110g, wrapped /EA
005	S0319000 Extractor,mucus,20ml,ster,disp /EA
006	S0374010 Tube,suction,CH08,L50cm,ster,disp /EA
007	S0374015 Tube,suction,CH10,L50cm,ster,disp /EA
008	S0374025 Tube,suction,CH14,L50cm,ster,disp /EA
009	Tube/Cath-047 Bubble Tubing
010	Misc/r/p-019 Connectors For Plastic Tubing
011	S0322010 Catheter,urethral, CH12, ster,disp /EA
012	S0323010 Catheter,urethral CH14,ster,disp /EA
013	S0330500 Bag,urine,collecting,2000ml /EA
014	Misc/inj/s-002 Set, Infusion, paediatric, precision
015	Misc/inj/s-003 Set, Infusion, Scalp vein
016	Misc/inj/s-004 Set, Infusion "Y", Luer lock, air inlet
017	Misc/inj/s-005 Set, Infusion, Vented
018	S0709210 Cannula,IV short,18G,ster,disp /EA
019	S0709220 Cannula,IV short,20G,ster,disp /EA
020	S0709225 Cannula,IV short,22G,ster,disp /EA
021	S0709230 Cannula,IV short,24G,ster,disp /EA
022	S0744300 Needle,scalp vein,25G,ster,disp /EA
023	S0744400 Needle,scalp vein,21G,ster,disp /EA
024	S0503010 Tape,adhesive,Z.O.,2.5cmx5m /EA
025	S0523055 Compress, gauze, 10x10 cm, ster /PAC-5

026	S0523005	Compress, gauze, 10x10cm, n/ster, PAC/100
027	S0521900	Gauze, roll, 90cmx100m, non-ster/EA
028	S0519600	Cotton wool, 500g, roll, non-ster /EA
029	S0566005	Tape umbilical, 3mmx50m, non-ster /EA
030	Misc/r/p-013	Umbilical Cord Clamp/Optional
031	S0782208	Safety box for used syrgs/ndls 5l/BOX-25
032	S0782413	Syringe, dispos, luer, 10ml, ster /BOX-100
033	S0782405	Syringe, dispos, luer, 5ml, ster /BOX-100
034	S0782205	Syringe, dispos, luer, 2ml, ster /BOX-100
035	S0747432	Needle, disp, 21x1.5"ster /BOX-100
036	S0747452	Needle, disp, 23x1"ster /BOX-100
037	S0747420	Needle, disp, 19x1.5"ster /BOX-100
038	S0564004	Sut, abs, DEC2, need 3/8 26mm, tri/BOX-36
039	S0564013	Sut, abs, DEC3, need 3/8 50mm, round / BOX-36
040	S0564020	Sut, abs, DEC4, need 3/8 36mm, tri / BOX-36
041	Misc/dres-008	Obstetrical Pads
042	0	Sampson Bleeze Neonatal Resuscitator/Optional
043	Tube/Cath-041	Airway Guedel, (00 - Neonatal)
044	Tube/Cath-042	Airway Guedel, (0 - Paediatric)
045	Tube/Cath-043	Airway Guedel, (1 - Child)
046	Tube/Cath-044	Airway Guedel, (2 - Adolescent)
047	Tube/Cath-045	Airway Guedel, (3 - Adult)
048	Tube/Cath-046	Airway Guedel, (4 + 5 – Adult Large)
049	0	1 mask, size 1 neonate
050	0	1 mask, size 4 adult
051	0	1 mask, size 5 adult
052	S0328001	Gloves, surg, 6.5, ster, disp, pair
053	S0328501	Gloves, surg, 7, ster, disp, pair
054	S0329001	Gloves, surg, 7.5, ster, disp, pair
055	S0329501	Gloves, surg, 8, ster, disp, pair
056	S0329901	Gloves, surg, 8.5, ster, disp, pair
057	S0330010	Gloves, exam, latex, small, disp/BOX-100
058	S0330011	Gloves, exam, latex, medium, disp/BOX-100
059	S0330012	Gloves, exam, latex, large, disp/BOX-100
060	S0330100	Gloves, gynaeco, 6.5, ster, disp, pair
061	S0330102	Gloves, gynaeco, 7.5, ster, disp, pair
062	S0330104	Gloves, gynaeco, 8.5, ster, disp, pair

2.4.12 Toilet (patient) (3 m²)

This toilet is for in-patients who are staying in the two-bed room or the delivery area.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal	1			
003	Dispenser, soap, hand operated	1			

Renewable/Disposable:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Hand wash soap/liquid/Optional
002	Paper for paper dispenser/Optional
003	S055200 Soap, toilet, bar, approx.110g, wrapped
004	Misc/dres-008 Obstetrical Pads

2.4.13 Soiled utility/Laundry (8 m²)

All cleaning utensils for housekeeping are stored here. The room also serves as the temporary storage point and testing area for specimens. In this room, the products and specimens are collected if a disposal room is not allocated. There should be easy access to cleaning equipment and materials for emptying and filling of buckets, and the routine servicing and cleaning of equipment. There should be unrestricted access to the sink – which should have hot and cold water. The room should be well ventilated so that cleaning equipment can dry quickly.

Activities:

- Urine testing;
- Examination of placentas;
- Washing of instruments;
- Linen soaking and washing; and
- Waste management.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktop, st. st., 2 sinks, laundry type	1			
002	Trolley, soiled linen, 1 ring	1			
003	S0187004 Trolley, general purpose, st.st., mobile, 2 trays	1			
004	Bin, disposal, mobile, with lid	1			
005	Tub, wash, oval, plastic, 65 litre	1			
006	Worktable, 1 sink, with cabinets under the table top, 1.50 m	1	C	M	
007	Washer/extractor, 10 kg, semi-automatic	1		M	E
008	S2182000 Tub, wash, oval, galvanized steel, 65 litre	1			
009	Rack, mobs	1			
010	S2170000 Pail w/bail, handle, polyethylene, 10 litre	3			
011	Set, cleaning utensils, broom, mob, etc.	1			
012	Shelf, coated steel, 5 levels, starter, 1.00 m	1			
013	S0005021 Cupboard, st., 2 doors, 4 shelves, adjust.	1			

Renewable/Disposable:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Plastic Bags
002	Cleaning Materials
003	Laundry Detergent
004	Non sterile disposable gloves

2.4.14 Primary Health Laboratory (14 m²)

For a comprehensive functional description of the laboratory services offered at primary health level, please refer to WHO publications [2,3].

Activities:

Some common diseases in developing countries for which the primary health care laboratory might play a determinant role include:

Parasitic diseases diagnosed by direct microscopic examination or after staining: malaria, onchocerciasis, trypanosomiasis, filariasis, schistosomiasis, vaginal trichomoniasis, amoebiasis, ancylostomiasis and other parasites diagnosed in stools [2];

Bacterial diseases diagnosed by microscopic examination after staining: Tuberculosis, leprosy, sexually transmitted infective agents, and meningococcal and pneumococcal meningitis, acute respiratory infections, diarrhoeal diseases;

Other conditions, particularly non-communicable, such as anaemia, diabetes and eclampsia [3].

Equipment:

Sq	Item description	Q	C	M	E
001	Work table, laminated top, with cabinets under the table top, 2.00 m	1			
002	Work table, 1 sink, with cabinets under the table top, 1.50 m	1	C	M	
003	S0002077 Refrigerator, 140 l + 20 l	1			E
004	Shelf, coated steel, 5 levels, starter, 1.00 m	1			
005	S0169005 Stool, adjustable, on castors	2			
006	S0190000 Pedal bin, st. st	1			
007	Sterilizer, steam, bench top, 0.20 x 0.20 x 0.45 m, w generator (*)	1		M	E
008	Incinerator, laboratory, small (Sited outside building)	1			
009	S0385000 Tourniquet, latex rubber, 75cm	2			
010	S0948200 Counting chamber, for hemacytometer	2			
011	Westergreen ESR rack	1			
012	Hand tally counter	1			
013	Rinse, pipettes/burettes	1			
014	Drying rack for glass and plastic ware	2			
015	Manual differential cell counter up to 100 cells	1			
016	Ren/Lab 058 Test tube rack, metal to hold 20 tubes/ dia.15mm	8			
017	Test tube clamp, wooden, 13 to 19mm diameter	2			
018	Erlenmeyer flask, narrow mouth, heat-resistant glass, 100 ml	3			
019	Erlenmeyer flask, narrow mouth, heat-resistant glass, 250 ml	3			
020	Erlenmeyer flask, narrow mouth, heat-resistant glass, 500 ml	2			
021	Erlenmeyer flask, narrow mouth, heat-resistant glass, 1000 ml	1			
022	Volumetric flask, with stopper, 100 ml	1			
023	Volumetric flask, with stopper, 250 ml	1			
024	Volumetric flask, with stopper, 500 ml	1			
025	Volumetric flask, with stopper, 1000 ml	2			
026	Test tube, glass, heat resistant, 75 x 10 mm	100			
027	Test tube, glass, heat resistant, 100 x 12 mm	50			
028	Test tube, glass, heat resistant, 150 x 16 mm	50			
029	Pipette, 2 ml	15			
030	Pipette, WBC Diluting with white bead	10			
031	Pipette, RBC Diluting with white bead	5			
032	Pipette, volumetric, bulb, 1 ml	4			
033	Pipette, volumetric, bulb, 5 ml	4			
034	Pipette, graduated, 1 ml	10			
035	Pipette, graduated, 5 ml	10			

036	Pipette, graduated, 10 ml	10			
037	Funnel, glass, 65 mm diameter	3			
038	Funnel, glass, 100 mm diameter	3			
039	Funnel, glass, 125 mm diameter	1			
040	Dropping Bottles with stoppers, 30 ml	10			
041	Dropping Bottles with Ground Glass Stopper/Pipette, 30 ml	6			
042	Dropping Bottles with Ground Glass Stopper/Pipette, 50 ml	6			
043	Amber Glass Reagent Bottles, narrow mouth, 250 ml	6			
044	Amber Glass Reagent Bottles, narrow mouth, 500 ml	10			
045	Amber Glass Reagent Bottles, narrow mouth, 1000 ml	6			
046	Petri dish with lid, glass, 90 mm diameter	3			
047	Broad tipped forceps, Steel about 115mm long	5			
048	S2270500 Scissors, all purpose, sharp, 180mm	1			
049	S2170200 Pail ,w/bail handle, galvan.steel, 12 litre	1			
050	Test tube brush	3			
051	Brush for bottle and flasks	3			
052	Funnel, polypropylene, 150 mm diameter	1			
053	Funnel, polypropylene, 100 mm diameter	1			
054	Drying rack for glass slides	1			
055	S0745500 Scalpel handle Nr. 4, stainless steel, for No.22 blades	1			
056	Plastic basin, 7 litre	1			
057	Plastic basin, 13 litre	1			
058	S0957105 Microscope, binocular, 3 objectives	1			E
059	Centrifuge, micro haematocrit, 12000 rpm	1			E
060	Centrifuge, general, 6 x 15 ml	1			E
061	Rotator	1			E
062	Balance, precision, 2200 g, <> 10 mg	1			E
063	Bath, water, precision, 15 l (optional)	1			E
064	Stirrer, hotplate, electric	1			E
065	S0952415 Oven, drying cabinet, 53 l, up to 300 °C	1			E
066	Filtration system	1			
067	S0167600 Water distilling apparatus, 2 l/h	1		M	E
068	Diluter / dispenser, manual	4			
069	Pipette, piston, set 7 sizes	1			
070	Photometer, clinical chemistry, small baths and single analysis	1			E
071	S0000536 Haemoglobin meter	1			E
072	S0000532 Analyser, glucose, manual, strip type	1			E
073	Blood typing/grouping plate	5			
074	S0922100 Box, empty, for 100 microscope slides	1			
075	S0934001 Cover glass, microscope slides/BOX-100	1			
076	S0969000 Slide,microscope,plain,76x26mm/BOX-100	1			
077	Burette, pipette rinsing, set	1			
078	S0983400 Timer, 60 min	1			E
079	Burner, Bunsen	1		M	
080	Thermometer, laboratory, -10 to 120 C	1			
081	S0580000 Urinary test set, complete	1			

Renewable/Disposable:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Buckets and/or basins, plastic
002	Beaker 100 ml, glass or polypropylene
003	Bottles or containers
004	Universal containers, 28 ml capacity
005	Urine specimen, glass or plastic
006	Sputum specimens
007	Stool specimens
008	Brushes for cleaning bottles, flasks and test-tubes
009	Bunsen burner or spirit lamp
010	Centrifuge tubes, 15 ml capacity
011	Cylinder, graduated 100 ml capacity, glass or polypropylene
012	Flasks
013	Erlenmeyer, narrow mouth, glass (heat resistant), 100 ml and 250 ml
014	Volumetric, glass or polypropylene, with stopper, 100 ml and 250 ml
015	Funnel, glass or polypropylene
016	Microhaematocrit capillaries
017	Microscope slides, 75 x 22 mm
018	Coverglasses, square (22 x 22 mm) and/or rectangular
019	Pasteur pipettes, plastic disposable
020	Pipettes 10 ml 20 , L (0.02 ml) for haemoglobin and WBC dilution
021	Staining rack or tray to hold slides for staining
022	Stoppers, various sizes, plastic, rubber and/or cork
023	Teats, rubber
024	Test tubes, glass or polypropylene, 75 x 10 mm, 75 x 12mm and 100 x 12mm
025	Test tubes, heat-resistant glass, 150 x 16 mm
026	Thermometer (0-50 °C)
027	Wire loop
028	Improved Neubauer chamber for cell counting by microscopy
029	Glass-writing pen/pencil
030	Lancets, disposable
031	Lens cleaning paper
032	Oil for microscope immersion lens
033	Filter paper
034	Universal indicator paper, pH 1 -10
035	Set, instruments, blood sample collection

Basic Reagents:

Sq	Item description
001	Acetone
002	Ethanol 95%
003	Methanol
004	Buffer tablets for phosphate buffers (pH 6.8 and 7.2)
005	EDTA anticoagulant
006	Formalin (35-40%)
007	Hypochlorite, for disinfection
008	Sodium chloride (saline solution)
009	Sodium dichromate (cleaning solution)
010	Thymol crystals (for specimen preservation)
011	Xylene

Urinary screen tests:

Reagent test strips can be read visually against a colour scale to obtain a semi-quantitative approximation. They are available for among others the following analyses: glucose, protein, erythrocytes (haemoglobin), bilirubin, nitrite, pH. They may also include ketones and urobilinogen.

Diagnostic kits:

A diagnostic kit is a package containing two or more reagents and/or other materials and a method protocol designed for undertaking a specified analytic procedure. The reagents listed above are often available as diagnostic kits.

3. First Referral Hospitals: Functional description, planning of equipment and renewable resources

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3.1 Hospitals at First Referral Level

In order to succeed, primary health care must have an unwavering support from the top in the form of a clear, firm national policy – but its full realisation depends critically on the people at the first referral level who are charged with the management and implementation of primary health care strategies. This makes the first referral level a pivotal one in the country's health care delivery system.

The term first referral level is used here to describe a hospital at district level. It is responsible for a defined rural or urban geographical area containing a defined population and governed by a politico-administrative organisation such as a district health management team.

The functions and responsibilities of a first referral level hospital could be summarised as follows:

- (i) it is an important support for other health services, and for health care in general, in the geographical area,
- (ii) it provides wide-ranging technical and administrative support and education and training for primary health care, and
- (iii) it provides an effective, affordable health care service for a defined population, with their full participation, in cooperation with agencies in the district that have similar concerns.

The size of a hospital at first referral level has a direct relation with its bed capacity, which in turn is a function of the size of the population served and its burden of disease pattern. The grouping of populations around this type of health facilities vary. In general first referral level hospitals serve communities of typically 50,000 people, sometimes up to 500,000 people.

The range of medical services offered differs from one country to another according to the:

- pattern of prevalent diseases,
- size and density of the population,
- geographic and climate conditions,
- level of economic development,
- socio-cultural infrastructure,
- quality and quantity of health resources,
- national policy for health,
- availability of medical and para-medical personnel.

When, for example, the pattern of prevalent diseases in a district vary widely in type and complexity, it may be impossible to treat all of them. Some may require the intervention of highly specialized physicians and the use of sophisticated, expensive medical equipment. Patients should then be transferred from the first referral level hospital to a tertiary level one in the region or province.

A hospital at first referral level should, however, be able to serve 85 - 95% of the medical needs in the district. For practical reasons the services provided been divided into,

- 1) Essential Clinical Services,
- 2) Essential Clinical Support Services,
- 3) Essential Non-Clinical Support Services, and
- 4) Administrative Services.

The extent to which the last two groups of services can be provided is flexible, depending on local financial, social and cultural circumstances.

3.2 Delineations

The functional programme for the departments in the hospital, with a total capacity of approximately 100 beds, describes the different entities and services. Besides its significance with regard to facility planning, it represents a basis for the organizational philosophy of the hospital as well as for the operational procedures. It distinguishes the following headings:

- Description/Activities per room
- Equipment per room
- Renewable/Consumables per department
- Capacity of the department
- Location of the department

The departments dealing with administration, logistics and ancillary services are not fully elaborated on in the Planning Guide.

Medical devices and renewable resources are planned on the basis of the functional programme, incorporating a level of sophistication, which allows the first referral level hospital to fulfil its role as care provider. For practical reasons, the functional programme is divided into rooms with activities. These activities are then translated into devices and renewable resources that are required, on a room-by-room basis.

3.3 Room-by-room description and planning for a typical first referral level hospital

3.3.1 Essential Clinical Services

- 3.3.1.1 Medical Ward, 30 beds
- 3.3.1.2 Surgical Ward, 30 beds
- 3.3.1.3 Paediatric Ward, 15 beds
- 3.3.1.4 Maternity Ward, 25 beds
- 3.3.1.5 Delivery Suite, 2 rooms
- 3.3.1.6 Surgical Suite, 2 theatres
- 3.3.1.7 Accident and Emergency
- 3.3.1.8 General Outpatient Department

3.3.1.1 Medical Ward, 30 beds

Description/Activities:

There are no radical significant differences between the requirements of medical and surgical wards and only minor differences between those of the other specialties. The unit is designed to meet the medical and nursing needs of the patients admitted. Patients are admitted to the ward via emergency, outpatient or doctor referral, walking, by wheel chair or patient trolley. The main characteristic of the ward in comparison to the departments of a hospital is that it provides the range of facilities necessary to meet basic human needs but in a controlled way. It provides shelter, maintained temperature, ventilation, cleanliness, noise control, privacy and, as far as possible, general comfort. It also provides services such as a supply of food, linen and other items, and the removal of waste products and used materials of all kinds.

The medical ward includes 30 beds within the following structure:

- 01 Staff Toilet
- 02 Clean Utility
- 03 Nurse Station
- 04 Clean Linen Room
- 05 Single Bed Room
- 06 Toilet
- 07 Single Bed Room
- 08 Toilet
- 09 6-Bed Bay
- 10 6-Bed Bay
- 11 6-Bed Bay
- 12 6-Bed Bay
- 13 Toilet (20)
- 14 2-Bed Room
- 15 2-Bed Room
- 16 Treatment/Dressing/Injection
- 17 Store, equipment, inpatient
- 18 Kitchen
- 19 Bathroom
- 20 Soiled Utility
- 21 Cleaner's room.

01. Staff Toilet

Activities:

Separate to patient ablution facilities, the inclusion of space for staff lockers would be practical.

Equipment:

Sq	Item description	Q	C	M	E
001	Hand dryer, electric (optional)	1	C		E
002	Towel, hand, white	1			
003	Dispenser, paper towel, metal (optional)	1	C		
004	Dispenser, soap, hand operated (optional)	1	C		

02. Clean Utility

Activities:

The clean utility/preparation room is used for storing all supplies, both clean and sterile, and for preparing and storing dressing trolleys used in the wards.

The room should be near the nurse station and with restricted access for patients or unauthorised individuals.

A medical ward has a large store of medicines that should be locked if unattended.

Secure storage is necessary for drugs, including controlled drugs, medicines, lotions and a small working stock of clean and sterile supplies.

Space is needed to assemble and prepare equipment for clinical procedures and to park the medicine trolley.

Medicine control and schedule medicine control (drug book maintenance, etc.).

A clinical wash-hand basin is required

IV fluid preparation.

Injection preparation.

Trolley for vital-sign monitoring e.g. temperature control, blood pressure measurement.

Refrigerated medication control.

Important fridge temperature control.

No food to be stored in this fridge.

Sphygmomanometer, thermometers etc. that are not available at the bedside are to be stored and utilized from this area.

Please note that some of the above-mentioned activities could also be allocated to the treatment and dressing room if space is available.

Equipment:

Sq	Item description	Q	C	M	E
001	Work table, laminated top, with cabinets under the table top, 2.00 m	1	C		
002	Work table, 1 sink, with cabinets under the table top, 1.50 m	1	C	M	
003	S0002077 Refrigerator, 140 l + 20 l	1			E
004	Shelf, coated steel, 5 levels, starter, 1.00 m	2			
005	Cabinet, medicine, single door, with dangerous drug compartment, 0.60 m	1			

03. Nurse Station

Activities:

Base where the focus of communication is directed regarding patients, relatives and clinical support staff.

The nurse station is located centrally, to maximise patient care.

Theoretically, progressive nursing care requires that patients be positioned in the wards according to their level of dependence and nursing needs, the highly dependent patients being closest to the staff base.

Allocated strategically to assist incoming doctors with ward rounds.

Bulk of administrative Activities: are located here, e.g. for patient needs as well as staff administration.

Important that the emergency trolley (crash cart) is situated in close proximity to the nurse station and is plugged in to electrical power for the defibrillator and monitor at all times. This trolley must be checked and sealed, and rechecked if the seal is broken.

Equipment:

Sq	Item description	Q	C	M	E
001	Wall clock (*)	1	C		E
002	Trolley, patient records	1			
003	Trolley, medicine distribution, polymer, multi-drawer system	1			
004	S0005021 Cabinet, ., double door, 4 shelves, adjust. (*)	1			
005	Chair, desk, height adjustable (*)	1			
006	S5005500 Chair, stackable, without armrests	2			
007	Basket, waste-paper, metal (*)	1			
008	Cart, crash, with defibrillator, with oxygen, adult	1			E
009	Set, diagnostic, oto / ophthalmic	1			
010	S0683300 Sphygmomanometer, aneroid	1			
011	Stethoscope, dual head (*)	1			
012	S0481052 Thermometer, clinical, glass (*)	3			
013	Viewer, double field, x-ray film	1	C		E

04. Clean Linen Room

Activities:

Sufficient linen allocation for use on the ward allocated in this room (medical ward, incontinent patients, majority old patients, etc.).

Linen allocation, bed sheets, mackintosh, draw sheets, pillow cases and bed spread - in this document the linen is located in the laundry linen store.

Minimum and maximum levels of linen allocation for the optimal functioning of the unit.

Must be kept locked.

Trolley to be used for bed linen changes during patient hygiene and pressure area care.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, clean linen distribution	1			
002	S0005021 Cabinet, double door, 1.00 m	1			

05. Single Bed Room

Activities:

Single bed rooms are allocated for critically ill, ill patients or high risk patients e.g. infectious, or those with immune deficiencies.

The hospital should allocate a single bed room for high dependency cases.

Here the activities should be delivered by senior staff with experience in ICU.

An emergency call system for professional medical assistance should be in place and staff trained to utilize the system, according to policy and procedures.

Resuscitation equipment must be close by.

Basic nursing care rendered.

Clinical procedures: administration of oxygen, airway suctioning.

Back rest for fowlers position and footstool for patient comfort.

Important nurse/patient interaction e.g. elderly and disorientated patients.

Hand washing and containment of infection control.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	1	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	1		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	1		M	
004	Bed, standard, 2 sections, with mattress	1			
005	Cabinet, bedside, with over bed table	1			
006	S5005500 Chair, stackable, without armrests	1			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	1			
009	Basket, waste-paper, metal	1			
010	Monitor, patient, portable, 3-channel	1			E

06. Toilet

Activities:

It is advantageous to have a toilet located next to the single-bed room.
Usually this facility is allocated in the centre of the ward as a separate ablution block for male and female patients with bath, toilet and wash hand basins.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

07. Single Bed Room

Activities:

Single bed rooms are allocated for critically ill, ill patients or high risk patients e.g. infectious, and or those with immune deficiencies.
Basic nursing care rendered.
Clinical procedures: administration of oxygen, airway suctioning.
Back rest for fowlers position and footstool for patient comfort.
Important nurse/patient interactions e.g. elderly and disorientated patients.
Hand washing and containment of infection control.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	1	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	1		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	1		M	
004	Bed, standard, 2 sections, with mattress	1			
005	Cabinet, bedside, with over bed table	1			
006	S5005500 Chair, stackable, without armrests	1			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	1			
009	Basket, waste-paper, metal	1			

08. Toilet

Activities:

It is advantageous to have a toilet located next to the single-bed room.
Usually this facility is allocated in the centre of the ward as a separate ablution block for male and female patients with bath, toilet and wash hand basins.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

09. 6-Bed Bay

Activities:

Basic nursing care rendered.
Clinical procedures: administration of oxygen, airway suctioning.
Back rest for fowlers position and footstool for patient comfort.
Important nurse/patient interactions e.g. elderly and disorientated patients.
Hand washing and containment of infection control.
The unit should be flexible in order to address the treatment needs of infectious cases, so that isolation requirements could be adhered to if necessary.
These units accommodate male and female patients and appropriate ablution facilities are a necessity.
Patients leaving wards after treatment for certain chronic illnesses, e.g. diabetes, asthma, hypertension, chronic obstructive pulmonary disease, and tuberculosis need continued care.
Hospital staff must refer them to primary care facilities and cooperate with other health workers in providing appropriate long-term surveillance.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	6	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	6		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	6		M	
004	Bed, standard, 2 sections, with mattress	6			
005	Cabinet, bedside, with over bed table	6			
006	S5005500 Chair, stackable, without armrests	6			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	6			
009	Screen, bed, three section, mobile	6			
010	Basket, waste-paper, metal	2			

10. 6-Bed Bay

Activities:

Basic nursing care rendered.
Clinical procedures: administration of oxygen, airway suctioning.
Back rest for fowlers position and footstool for patient comfort.
Important nurse/patient interactions e.g. elderly and disorientated patients.
Hand washing and containment of infection control.
The unit should be flexible in order to address the treatment needs of infectious cases, so that isolation requirements could be adhered to if necessary.

These units accommodates male and female patients and appropriate ablution facilities are a necessity.

Patients leaving wards after treatment for certain chronic illnesses, e.g. diabetes, asthma, hypertension, chronic obstructive pulmonary disease, and tuberculosis need continued care.

Hospital staff must refer them to primary care facilities and cooperate with other health workers in providing appropriate long-term surveillance.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	6	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	6		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	6		M	
004	Bed, standard, 2 sections, with mattress	6			
005	Cabinet, bedside, with over bed table	6			
006	S5005500 Chair, stackable, without armrests	6			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	6			
009	Screen, bed, three section, mobile	6			
010	Basket, waste-paper, metal	2			

11. 6-Bed Bay

Activities:

Basic nursing care rendered.

Clinical procedures: administration of oxygen, airway suctioning.

Back rest for fowlers position and footstool for patient comfort.

Important nurse/patient interactions e.g. elderly and disorientated patients.

Hand washing and containment of infection control.

The unit should be flexible in order to address the treatment needs of infectious cases, so that isolation requirements could be adhered to if necessary.

These units accommodates male and female patients and appropriate ablution facilities are a necessity.

Patients leaving wards after treatment for certain chronic illnesses, e.g. diabetes, asthma, hypertension, chronic obstructive pulmonary disease, and tuberculosis need continued care.

Hospital staff must refer them to primary care facilities and cooperate with other health workers in providing appropriate long-term surveillance.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	6	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	6		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	6		M	
004	Bed, standard, 2 sections, with mattress	6			
005	Cabinet, bedside, with over bed table	6			
006	S5005500 Chair, stackable, without armrests	6			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	6			
009	Screen, bed, three section, mobile	6			
010	Basket, waste-paper, metal	2			

12. 6-Bed Bay

Activities:

Basic nursing care rendered.
Clinical procedures: administration of oxygen, airway suctioning.
Back rest for fowlers position and footstool for patient comfort.
Important nurse/patient interactions e.g. elderly and disorientated patients.
Hand washing and containment of infection control.
The unit should be flexible in order to address the treatment needs of infectious cases, so that isolation requirements could be adhered to if necessary.
These units accommodate male and female patients and appropriate ablution facilities are a necessity.
Patients leaving wards after treatment for certain chronic illnesses, e.g. diabetes, asthma, hypertension, chronic obstructive pulmonary disease, and tuberculosis need continued care.
Hospital staff must refer them to primary care facilities and cooperate with other health workers in providing appropriate long-term surveillance.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	6	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	6		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	6		M	
004	Bed, standard, 2 sections, with mattress	6			
005	Cabinet, bedside, with over bed table	6			
006	S5005500Chair, stackable, without armrests	6			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	6			
009	Screen, bed, three section, mobile	6			
010	Basket, waste-paper, metal	2			

13. Toilet

Activities:

It is advantageous to have a toilet located next to the 6 bed bay.
Usually this facility is allocated in the centre of the ward as a separate ablution block for male and female patients with bath, toilet and wash hand basins.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

14. 2- Bed Room

Activities:

Two bed rooms are allocated for ill patients or high risk patients e.g. infectious patients.
Basic nursing care rendered.
Clinical procedures: administration of oxygen, airway suctioning.
Back rest for fowlers position and footstool for patient comfort.
Important nurse/patient interactions e.g. elderly and disorientated patients.
Hand washing and containment of infection control.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	2	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	2		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	2		M	
004	Bed, standard, 2 sections, with mattress	2			
005	Cabinet, bedside, with over bed table	2			
006	S5005500 Chair, stackable, without armrests	2			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	2			
009	Screen, bed, three section, mobile	2			
010	Basket, waste-paper, metal	1			

15. 2- Bed Room

Activities:

Two bed rooms are allocated for ill patients or high risk patients e.g. infectious patients.
Basic nursing care rendered.
Clinical procedures: administration of oxygen, airway suctioning.
Back rest for fowler's position and footstool for patient comfort.
Important nurse/patient interactions e.g. elderly and disorientated patients.
Hand washing and containment of infection control.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	2	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	2		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	2		M	
004	Bed, standard, 2 sections, with mattress	2			
005	Cabinet, bedside, with over bed table	2			
006	S5005500 Chair, stackable, without armrests	2			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	2			
009	Screen, bed, three section, mobile	2			
010	Basket, waste-paper, metal	1			

16. Treatment/Dressing/Injection

Activities:

Based on the policy and procedures of hospital utilisation, e.g. for dressings and other sterile procedures.
According to procedure and policies, sterile sets must be ordered from CSSD and returned to CSSD after utilization.
Some policies might require the setting up of trolleys and then procedures are performed at the bedside.
This is a clean area and dusting is of vital importance.
Injection preparation as well as intra-venous setting can be done here if the clean utility is not located behind the nurse station.
Medical procedures, such as vena section etc. can be undertaken here.

Equipment:

Sq	Item description	Q	C	M	E
001	S0101605 Trolley, dressing, st. st., 2 trays (*)	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	2	C	M	
004	Refrigerator, under counter model, 110 l	1			E
005	Cabinet, instrument, double door, 0.90 m	1			
006	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
007	S0184500 Couch, examination, enamelled st. frame, adjustable head (*)	1			
008	Footstool, one step, epoxy coated steel (*)	1			
009	S0150000 Stand, infusion, st. st., mobile	1			
010	S0190000 Pedal bin, st. st (*)	1			
011	S0119300 Light,examination,mobile,220-12V (*)	1			E

17. Store, equipment

Activities:

Equipment allocated under basic planning is stored in this room.
It is most important that sufficient floor space and shelving should be available.
Sufficient electrical plugs should be available to keep the electrical equipment plugged in and keep batteries charged.
Medical staff should be trained to use the equipment available.

Equipment:

Sq	Item description	Q	C	M	E
001	Patient transfer, roller system	1			
002	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
003	Chart holder, bed mounting	40			
004	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	4			
005	S0150000 Stand, infusion, st. st., mobile	3			
006	Screen, bed, three section, mobile (*)	3			
007	Trolley, bedpans and urinals, mobile	1			
008	Trolley, oxygen, complete (*)	1			
009	Hoist, patient	1			E
010	S0760605 Pump,suction,portable,220V,w/access	1			E
011	S0222020 Bedpan, st. st. (*)	10			
012	S0210000 Basin, kidney, stainless steel,475ml	5			
013	Wheelchair, non-foldable, universal (*)	1			
014	Gen.surg-001 Dressing set	1			
015	Glass, urine, plastic, 250ml	5			
016	S0640000 Hammer, reflex (*)	1			
017	S0119300 Light,examination,mobile,220-12V (*)	1			E
018	Scale, weight, adult, digital	1			E

18. Kitchen

Activities:

The ward kitchen is equipped to cater for ward occupants and special dietary requirements are referred to the main kitchen, e.g. a low salt diet, fat free, diabetic diet, etc.
Facilities are required for staff to prepare beverages and light snacks, especially for diabetic patients.
Washing and storing crockery and cutlery.
Storing of a limited quantity of dried foods.
Refrigerated storage of milk, etc., no medication and blood products must be in this refrigerator.
Equipment should include a stainless steel sink and drainer.

An electric boiler must be available to prepare beverages for patients.
Kitchen utensils for dishing up, and the utilization of a bain-marie trolley from the main kitchen to serve patients meals.

Equipment:

Sq	Item description	Q	C	M	E
001	Microwave oven, medium power range (optional)	1			E
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	2	C		
003	S0002077 Refrigerator, 140 l + 20 l	1			E
004	Boiler, water, 12 l	1			E
005	Cabinet, cutlery	1			
006	S0190000 Pedal bin, st. st	1			

19. Bathroom

Activities:

Mobile patients use this area for personal hygiene, immobile patients are cared for in bed.
The availability of a nurse call system is important. If no nurse call is built in, a hand bell should be issued to patients; Staff should be aware of patients in the bathroom, to avoid medico/legal hazards.
Include a bath mat and bath aids, e.g. a patient hoist.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

20. Soiled utility

Activities:

The functions undertaken in the soiled utility room are unpleasant, so there should be sufficient extractor-fans as well as disposable gloves to perform these functions.
The room also serves as the temporary storage point and testing area for specimens for urine analysis and stool specimen preparation for example to be sent away for laboratory analysis.
Bulky items such as bedpans with their carriers are located here.
A wash basin, with trays and mouth wash cups, to assist immobile patients with personal hygiene is available here.
These activities may generate significant noise levels and care should be taken to eliminate noise. Thus the soiled utility should be situated in an area which is preferably not too close to patient rooms, but not too distant for functionality or creating an extra burden on nursing staff.
This should be used as a temporary disposal area, if a disposal room is not allocated, and a temporary storage point for linen, and contaminated items for destruction at a later stage.
Storage area for containers e.g. kidney dishes or bowls (nausea etc.).

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	3			
002	S0187004 Trolley, general purpose, st.st., mobile, 2 trays (*)	1			
003	Bin, disposal, mobile, with lid (*)	1			
004	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
005	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
006	Tub, wash, oval, galvanized steel, 65 l (*)	1			
007	Towel, hand, white (*)	1			
008	Dispenser, paper towel, metal (optional) (*)	1	C		
009	Dispenser, soap, hand operated (optional) (*)	1	C		
010	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			

011	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	2			
012	Trolley, bedpans and urinals, mobile	1			
013	S0222020 Bedpan, st. st. (*)	10			
014	S0210000 Basin, kidney, -stainless steel,475ml	5			
015	Urinal, st. st.	10			
016	Bedpan, orthopedic, st. st.	5			
017	Glass, urine, plastic, 250ml	5			

21. Cleaner's Room

Activities:

The janitor/cleaners' room is the base from which domestic services staff provide a cleaning service to the in-patient department.

There should be easy access to cleaning equipment and materials for emptying and filling buckets, and the routine servicing and cleaning of equipment.

There should be unrestricted access to the sink – which should have hot and cold water.

The room should be well ventilated so that equipment can dry quickly.

Cleaners' trolleys should be equipped with colour coded buckets for clean and dirty water.

Cleaners' cloths should be colour coded and cleaners must adhere to the coding for infection control purposes. These activities should adhere to hospital policies and protocols.

Mops to be stored in mop rack.

Heavy duty machines e.g. high speed strip and buffing machines located in main housekeeping area (domestic area). These items are available to keep costs down and can be utilized on request for heavy floor maintenance in wards.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m	1	C	M	
002	Trolley, cleaning	1			
003	Rack, mops	1			
004	Pail w/bail, handle, polyethylene,10 l	2			
005	Set, cleaning utensils, broom, mop, etc.	1			
006	Shelf, coated steel, 5 levels, starter, 1.00 m	1			

Renewable/Consumables:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Administration Sets – 15 Drop
002	Administration Sets - 60 Drop
003	Airways – Guedel 3
004	Airways – Guedel 4
005	Airways – Guedel 5
006	Alcohol Swabs
007	Anti-Embolism Stockings
008	Applicator - Wooden (Orange Stick)
009	Aprons - Disposable
010	Aqua-packs Oxygen humidifier
011	Bag, Enterostomy, opening, disposable + Clamp
012	Bags - Refuse - All Colours and Sizes
013	Bags - Urine
016	Bandage - Crepe
015	Bandage - Suspension
014	Bandage- Conforming

018	Bands - Patient I.D. Pink
017	Bands - Patient I.D. White
019	Bands - Patient I.D. Yellow
020	Batteries - Medical & General
021	Beakers Feeding
022	Bedpan Covers
023	Bibs, Feeding - Adult
024	Biopsy Needles
025	Blood Administration Sets
027	Blood Sampling Needle 20 G, disposable, sterile
028	Blood Sampling Needle 21 G, disposable, sterile
029	Blood Sampling Scalp vein 23 G, disposable, sterile
030	Blood Sampling Tube, Vacuum 5ml (Vacutainer)
032	Blood Sampling Tube, Vacuum EDTA 5ml (Vacutainer)
031	Blood Sampling Tube, Vacuum Heparinised 5ml (Vacutainer)
026	Blood Sampling Vacutainer Holder
033	Bottles - Suction - Glass/Plastic
034	Braun Splints (Arm)
035	Bubble tubing box
036	Burn Dressings
037	Cannula, IV short,18G,ster,disp
038	Cannula, IV short,20G,ster,disp
039	Cannula, IV short,22G,ster,disp
040	Cannula, IV short,24G,ster,disp
041	Cannula - Nasal-Oxygen
042	Caps - Mop/Bonnet Type
045	Catheter - Jacques
043	Catheter Introducer - Plastic
044	Catheter Sup-Pubic, CH 10, 1.65 cm, sterile, disp., adult
046	Central Venous Pressure Sets
047	Chest, Electrode, Monitor
048	Chest Drainage Kit
049	Cleansing Swabs – Sterile
050	Cleansing Swabs Non-Sterile
051	Cold/Hot Packs
052	Colostomy Bags
053	Combur Tests
055	Connector, Biconical Autoclavable
056	Connector, T/Y
054	Connectors - Plastic – Tapered
057	Container, Sample, sputum, plastic, non-sterile
058	Container, Sample, urine, plastic, non-sterile, 60 ml
059	Cotton Buds
060	Cotton Wool Balls - Sterile/Non-Sterile
061	Cotton Wool Rolls
062	Covers - PVC - Mattress/Bed Wedge
047	CVP – Cannulae
063	Cytological Fixative Spray
064	Dental Needles
065	Drain, Thoracic + Trocar, sterile, disp, CH 24
066	Drawsheet,plastic,90x180cm
067	Dressings – Wound

074	Face Mask Water Repellent
075	Feeding Tubes 12
076	Feeding Tubes 14
077	Feeding Tubes 16
078	Flatus Tubes
079	Foley Catheters – Latex/Silicone Size 10
080	Foley Catheters – Latex/Silicone Size 12
081	Foley Catheters – Latex/Silicone Size 14
082	Foley Catheters – Latex/Silicone Size 16
083	Gauze Absorbent Ribbon
092	Gloves – Household Large
091	Gloves – Household Medium
087	Gloves – Surgical Size 6
088	Gloves – Surgical Size 7
089	Gloves – Surgical Size 7 ½
090	Gloves – Surgical Size 8
086	Gloves, exam, latex, large, disp
085	Gloves, exam, latex, medium, disp
084	Gloves, exam, latex, small, disp
093	Hand wash Antiseptic Liquid (Hibiscrub)
094	Hand wash Povidone (Betadine)
095	Hot Packs
097	Incontinence Sheaths
096	Intubation stylet, adult, 15 Ch
098	Invalid Feeding Cups/Beakers
099	K.Y. Jelly
100	Kits - Chest Drainage
101	Latex Tubing
102	Linen Savers
103	Litmus Paper - Red/Blue
104	Manometer Spinal Fluid
109	Mask – Poly Mask
105	Masks - Nebulizer/Oxygen
106	Masks – Oxygen 24 %
107	Masks – Oxygen 28 %
108	Masks – Oxygen 40 %
110	Mouthpiece - Peak Flow meter
111	Nail Brushes - Autoclavable/Disposable
112	Nasal Oxygen Cannula
114	Needle,disp,15G
115	Needle,disp,18G
116	Needle,disp,21G
117	Needle,disp,22G
118	Needle,disp,23G
119	Needle,disp,25G
113	Needles – Butterfly 23G
120	Oxygen T Pieces
121	Oxygen Tubing
122	Pads - Sanitary - Regular
123	Paper E.C.G.
124	Paraffin Gauze
125	Preformed E.T. Tubes - Cuffed

126	Queen Charlotte Face Masks
127	Razor Medical - Disposable - Single Edge
128	Rubber Bath Mat - Non-Slip
131	Ryles/Levin Tubes 16 (Duodenal Tubes)
129	Ryles/Levins Tubes 12 (Duodenal Tubes)
130	Ryles/Levins Tubes 14 (Duodenal Tubes)
132	Safety Pins Large
133	Safety Pins Medium
134	Sharps Containers (Safety Box/used syringes and needles)
135	Shrouds
136	Soap,toilet,bar,approx.110g,wrapped
137	Spatulas - Tongue
140	Spigots Large
139	Spigots Medium
138	Spigots Small
141	Spinal Fluid Manometer
144	Spinal Needle, disp,20G(0.9x90mm),sterile
142	Spinal Needle, disp,22G(0.7x40mm),sterile
143	Spinal Needle, disp. 22G(0.7x90mm),sterile
145	Spray Bottles - Plunger Operated
146	Sputum Mugs/Bags
147	Straws Medical Drinking
148	Surgical Spirits
152	Syringes 10 ml
150	Syringes 2 ml
153	Syringes 20 ml
151	Syringes 5 ml
155	Syringes 50 ml Conical Tip
154	Syringes 50 ml Luer Lock
149	Syringes Insulin
160	Tape - Elastic Adhesive Plaster - White 10 cm
159	Tape - Elastic Adhesive Plaster - White 5 cm
163	Tape Micropore 10 cm
161	Tape Micropore 2.5 cm
162	Tape Micropore 5 cm
158	Tape Surgical Adhesive Hypo-Allergenic
157	Tape,adhesive,Z.O.,perforated,10cmx5m
156	Tape,adhesive,Z.O.,2.5cmx5m
164	Thermometer,clinical,30-40C
165	Thermometer,clinical,35-42C
166	Thermometers Fridge
167	Tourniquet, latex rubber,75cm
168	Tracheotomy Tubes Size 3
169	Tracheotomy Tubes Size 4
68	Tube, Endo-tracheal, disp. + connector, 6.5 mm, balloon
69	Tube, Endo-tracheal, disp. + connector, 7 mm, balloon
70	Tube, Endo-tracheal, disp. + connector, 7.5 mm, balloon
71	Tube, Endo-tracheal, disp. + connector, 8 mm, balloon
72	Tube, Endo-tracheal, disp. + connector, 8.5 mm, balloon
73	Tube, Endo-tracheal, disp. + connector, 9 mm, balloon
170	Tube,Suction,CH10,L125cm,ster,disp
171	Tube,Suction,CH12,L125cm,ster,disp

172	Tube,Suction,CH16,L125cm,ster,disp
173	Urine Meters (S.G. Meter)
174	Vena- section set (Needle and container)

Capacity, Medical ward:

The total capacity of the medical ward is 30 beds, and an assumption of 85% occupancy will provide approximately 9,308 patient days per year. Considering an average length of stay of 9 days per admission, this will allow for 1,034 admissions per year.

The throughput and occupancy of this department will fluctuate and be influenced by seasonal ailments, endemic illnesses and their epidemiology, e.g. gastro-enteritis or influenza symptoms resulting in pneumonia.

A country with a population with specific medical conditions, e.g. diabetes, heart conditions, etc. will have higher occupancy and should manage the department accordingly.

The average length of stay on a ward can be reduced if patients are referred to a primary health care facility for follow up and management, in order to free capacity for more acute cases in hospital.

Location, Medical ward:

Should be located close to the laboratory and if possible not too far from the imaging facility.

A communication and emergency call system should be in place to alert physicians and enable easy access to the ward to attend to emergency cases.

Access to the ward for medical patients, should include a lift, and/or a disabled ramp for wheelchairs and trolleys if located on a high level.

3.3.1.2 Surgical Ward, 30 beds

Description/Activities:

There are no significant differences between the requirements of medical and surgical wards, and only minor differences between those of the other specialized wards. The units are designed to meet the surgical and nursing needs of the patients admitted. Patients admitted to ward via emergency, out-patient or doctor referral, walking, by wheel chair or patient trolley.

The main characteristic of the ward in comparison to the departments of a hospital is that it provides the range of facilities necessary to meet basic human needs but in a controlled way. It provides shelter, maintained temperature, ventilation, cleanliness, noise control, privacy and, as far as possible, general comfort. It also provides services such as a supply of food, linen and other items, and the removal of waste products and used materials of all kinds.

The surgical ward, 30 beds, will encompass the following:

- 01 Staff Toilet
- 02 Clean Utility
- 03 Nurse Station
- 04 Clean Linen Room
- 05 Single Bed Room
- 06 Toilet
- 07 Single Bed Room
- 08 Toilet
- 09 6-Bed Bay
- 10 6-Bed Bay
- 11 6-Bed Bay
- 12 6-Bed Bay
- 13 Toilet (20)
- 14 2-Bed Room
- 15 2-Bed Room
- 16 Treatment/Dressing/Injection
- 17 Store, equipment, inpatient
- 18 Kitchen
- 19 Bathroom
- 20 Soiled Utility
- 21 Cleaner's room

01. Staff Toilet

Activities:

Separate to patient ablution facilities, the inclusion of space for staff lockers would be practical.

Equipment:

Sq	Item description	Q	C	M	E
001	Hand dryer, electric (optional)	1	C		E
002	Towel, hand, white	1			
003	Dispenser, paper towel, metal (optional)	1	C		
004	Dispenser, soap, hand operated (optional)	1	C		

02. Clean Utility

Activities:

The clean utility/preparation room is used for storing all supplies, both clean and sterile, and for preparing and storing dressing trolleys used in the wards.

The room should be near the nurse station and with restricted access for patients or unauthorised individuals.

A medical ward has a large store of medicines that should be locked if unattended.

Secure storage is necessary for drugs, including controlled drugs, medicines, lotions and a small working stock of clean and sterile supplies.

Space is needed to assemble and prepare equipment for clinical procedures and to park the medicine trolley.

Medicine control and schedule medicine control (drug book maintenance, etc.).

A clinical wash-hand basin is required

IV fluid preparation.

Injection preparation.

Trolley for vital-sign monitoring, e.g. temperature control, blood pressure measurement.

Refrigerated medication control.

Important fridge temperature control.

No food to be stored in this fridge.

Sphygmomanometer, thermometers, etc. that is not available at the bedside are to be stored and utilized from this area.

Please note that some of the above-mentioned activities could also be allocated to the treatment and dressing room if space is available.

Equipment:

Sq	Item description	Q	C	M	E
001	Work table, laminated top, with cabinets under the table top, 2.00 m	1	C		
002	Work table, 1 sink, with cabinets under the table top, 1.50 m	1	C	M	
003	S0002077 Refrigerator, 140 l + 20 l	1			E
004	Shelf, coated steel, 5 levels, starter, 1.00 m	2			
005	Cabinet, medicine, single door, with dangerous drug compartment, 0.60 m	1			

03. Nurse Station

Activities:

Base where the focus of communication is directed regarding patients, relatives and clinical support staff.

Nurse station is located centrally, to maximise patient care.

Theoretically, progressive nursing care requires that patients be positioned in the wards according to their level of dependence and nursing needs, the highly dependent patients being closest to the staff base.

Allocated strategically to assist incoming doctors with ward rounds.

Bulk of administrative activities are located here, e.g. for patient needs as well as staff administration.

Important that the emergency trolley (crash cart) is situated in close proximity to the nurse station and is plugged in to electrical power for the defibrillator and monitor at all times. This trolley must be checked and sealed, and rechecked if the seal is broken.

Equipment:

Sq	Item description	Q	C	M	E
001	Wall clock (*)	1	C		E
002	Trolley, patient records	1			
003	Trolley, medicine distribution, polymer, multi-drawer system	1			
004	S0005021 Cabinet, ., double door, 4 shelves, adjust. (*)	1			
005	Chair, desk, height adjustable (*)	1			
006	S5005500 Chair, stackable, without armrests	2			
007	Basket, waste-paper, metal (*)	1			
008	Cart, crash, with defibrillator, with oxygen, adult	1			E
009	Set, diagnostic, oto / ophthalmic	1			
010	S0683300 Sphygmomanometer, aneroid	1			
011	Stethoscope, dual head (*)	1			
012	S0481052 Thermometer, clinical, glass (*)	3			
013	Viewer, double field, x-ray film	1	C		E

04. Clean Linen Room

Activities:

Sufficient linen allocation for use on the ward allocated in this room (medical ward, incontinent patients, majority old patients, etc.).

Linen allocation, bed sheets, mackintosh, draw sheets, pillow cases and bed spread - in this document the linen is located in the laundry linen store.

Minimum and maximum levels of linen allocation for the optimal functioning of the unit.

Must be kept locked.

Trolley to be used for bed linen changes during patient hygiene and pressure area care.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, clean linen distribution	1			
002	S0005021 Cabinet, double door, 1.00 m	1			

05. Single Bed Room

Activities:

Single bed rooms are allocated for major post surgical patients or for high risk patients.

Basic nursing care is provided.

Clinical procedures include the administration of oxygen, airway suctioning.

Back rest for fowlers position and footstool for patient comfort.

Important nurse/patient interaction, e.g. elderly and disorientated patients.

Hand washing and containment of infection control.

Monkey chain utilization for positioning.

Using a bed cradle for patient comfort.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	1	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	1		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	1		M	

004	Bed, standard, 2 sections, with mattress	1			
005	Cabinet, bedside, with over bed table	1			
006	S5005500 Chair, stackable, without armrests	1			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	1			
009	Basket, waste-paper, metal	1			
010	Monitor, patient, portable, 3-channel	1			E

06. Toilet

Activities:

It is advantageous to have a toilet located next to the single-bed room.
Usually this facility is allocated in the centre of the ward as a separate ablution block for male and female patients with bath, toilet and wash hand basins.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

07. Single Bed Room

Activities:

The same activities as mentioned in the previous single bed room.
The surgical ward will accommodate orthopaedic patients who could require traction devices.
Balkan-frame and pulleys allocated in store room to be set up where necessary.
Fracture boards for patients with femur fractures available.
Connection of Thomas splint, traction cord and weight undertaken.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	1	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	1		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	1		M	
004	Bed, standard, 2 sections, with mattress	1			
005	Cabinet, bedside, with over bed table	1			
006	S5005500 Chair, stackable, without armrests	1			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	1			
009	Basket, waste-paper, metal	1			

08. Toilet

Activities:

It is advantageous to have a toilet located next to the single-bed room.
Usually this facility is allocated in the centre of the ward as a separate ablution block for male and female patients with bath, toilet and wash hand basins.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

09. 6-Bed Bay

Activities:

Basic nursing care and personal hygiene rendered.
Clinical procedures: administration of oxygen, airway suctioning.
Vital sign observation, wound observation (oozing from wounds), etc.
Back rest for fowlers position and footstool for patient comfort.
Important nurse/patient interaction, e.g. elderly and disorientated patients.
Hand washing and infection containment.
Post-operative nursing: Nil by mouth, intermittent suctioning with gomco-suction, naso-gastric tube care, Foleys catheter care.
Pain management as prescribed.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	6	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	6		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	6		M	
004	Bed, standard, 2 sections, with mattress	6			
005	Cabinet, bedside, with over bed table	6			
006	S5005500 Chair, stackable, without armrests	6			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	6			
009	Screen, bed, three section, mobile	6			
010	Basket, waste-paper, metal	2			

10. 6-Bed Bay

Activities:

Privacy for patients through the use of bed screens.
Basic nursing care and personal hygiene undertaken.
Clinical procedures: administration of oxygen, airway suctioning.
Vital sign observation, oozing from wounds, etc.
Back rest for fowlers position and footstool for patient comfort.
Important nurse/patient interaction e.g. elderly and disorientated patients.
Hand washing and infection containment.
Post operative nursing: Nil by mouth, intermittent suctioning with gomco-suction, naso-gastric tube care, Foleys catheter care.
Pain management as prescribed.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	6	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	6		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	6		M	
004	Bed, standard, 2 sections, with mattress	6			
005	Cabinet, bedside, with over bed table	6			
006	S5005500 Chair, stackable, without armrests	6			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	6			
009	Screen, bed, three section, mobile	6			
010	Basket, waste-paper, metal	2			

11. 6-Bed Bay

Activities:

Basic nursing care and personal hygiene rendered.
Clinical procedures: administration of oxygen, airway suctioning.
Vital sign observation, wound observation (oozing from wounds), etc.
Back rest for fowlers position and footstool for patient comfort.
Important nurse/patient interaction, e.g. elderly and disorientated patients.
Hand washing and infection containment.
Post-operative nursing: Nil by mouth, intermittent suctioning with gomco-suction, naso-gastric tube care, Foleys catheter care.
Pain management as prescribed.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	6	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	6		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	6		M	
004	Bed, standard, 2 sections, with mattress	6			
005	Cabinet, bedside, with over bed table	6			
006	S5005500 Chair, stackable, without armrests	6			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	6			
009	Screen, bed, three section, mobile	6			
010	Basket, waste-paper, metal	2			

12. 6-Bed Bay

Activities:

Basic nursing care and personal hygiene rendered.
Clinical procedures: administration of oxygen, airway suctioning.
Vital sign observation, wound observation (oozing from wounds), etc.
Back rest for fowlers position and footstool for patient comfort.
Important nurse/patient interaction, e.g. elderly and disorientated patients.
Hand washing and infection containment.
Post-operative nursing: Nil by mouth, intermittent suctioning with gomco-suction, naso-gastric tube care, Foleys catheter care.
Pain management as prescribed.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	6	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	6		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	6		M	
004	Bed, standard, 2 sections, with mattress	6			
005	Cabinet, bedside, with over bed table	6			
006	S5005500 Chair, stackable, without armrests	6			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	6			
009	Screen, bed, three section, mobile	6			
010	Basket, waste-paper, metal	2			

13. Toilet

Activities:

Usually this facility is located in the centre of the ward as a separate ablution block for male and female patients, with bath, toilet and wash hand basins.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

14. 2- Bed Room

Activities:

Two bed rooms are allocated for ill patients or high risk patients, e.g. infectious patients. Basic nursing care is rendered, e.g. bed rest or a post operative bed bath, oral hygiene, etc. Clinical procedures: administration of oxygen, airway suctioning. Back rest for fowlers position and footstool for patient comfort. Important nurse/patient interaction, e.g. elderly and disorientated patients. Hand washing and containment of infection control. Vital sign monitoring 4 times hourly, or as required, e.g. daily. Pain management and medication administered as per hospital protocol.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	2	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	2		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	2		M	
004	Bed, standard, 2 sections, with mattress	2			
005	Cabinet, bedside, with over bed table	2			
006	S5005500 Chair, stackable, without armrests	2			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	2			
009	Screen, bed, three section, mobile	2			
010	Basket, waste-paper, metal	1			

15. 2- Bed Room

Activities:

Two-bed rooms are allocated for ill patients or high risk patients, e.g. infectious patients.
Basic nursing care rendered.
Clinical procedures: administration of oxygen, airway suctioning.
Back rest for fowlers position and footstool for patient comfort.
Important nurse/patient interaction, e.g. elderly and disorientated patients.
Hand washing and containment of infection control.
Routine post-operative care to be rendered, pressure area care.
Ensure patient privacy, by using screen facilities.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	2	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	2		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	2		M	
004	Bed, standard, 2 sections, with mattress	2			
005	Cabinet, bedside, with over bed table	2			
006	S5005500 Chair, stackable, without armrests	2			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	2			
009	Screen, bed, three section, mobile	2			
010	Basket, waste-paper, metal	1			

16 Treatment/Dressing/Injection

Activities:

Based on the policy and procedures of hospital utilization e.g. for dressings and other sterile procedures.
According to procedure and policies, sterile sets must be ordered from CSSD and returned to CSSD after utilization.
Some policies might require the setting up of trolleys and then procedures are performed at the bedside.
This is a clean area and dusting is of vital importance.
Injection preparation as well as intravenous setting can be done here if the clean utility is not located behind the nurse station.
Post operative procedures, for instance shortening drains, the renewal of dressings, the removal of sutures, etc.

Equipment:

Sq	Item description	Q	C	M	E
001	S0101605 Trolley, dressing, st. st., 2 trays (*)	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	2	C	M	
004	Refrigerator, under counter model, 110 l	1			E
005	Cabinet, instrument, double door, 0.90 m	1			
006	S0169005 Stool, height adjustable with gasspring, mobile, st. st.	1			
007	S0184500 Couch, examination, enamelled st. frame, adjustable head (*)	1			
008	Footstool, one step, epoxy coated steel (*)	1			
009	S0150000 Stand, infusion, st. st., mobile	1			
010	S0190000 Pedal bin, st. st (*)	1			
011	S0119300 Light,examination,mobile,220-12V (*)	1			E

17. Store, equipment, inpatient

Activities:

Equipment allocated under basic planning is stored in this room.
It is most important that sufficient floor space and shelving should be available.
Sufficient electrical plugs should be available to keep the electrical equipment plugged in and keep batteries charged.
Surgical staff should be trained to use the equipment available.

Equipment:

Sq	Item description	Q	C	M	E
001	Patient transfer, roller system	1			
002	S0187004 Trolley, general purpose ,st.st.,mobile, 2 trays (*)	1			
003	Chart holder, bed mounting	40			
004	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	4			
005	S0150000 Stand, infusion, st. st., mobile	3			
006	Screen, bed, three section, mobile (*)	3			
007	Trolley, bedpans and urinals, mobile	1			
008	Trolley, oxygen, complete (*)	1			
009	Hoist, patient	1			E
010	S0760605 Pump,suction,portable,220V,w/access	1			E
011	S0222020 Bedpan, st. st. (*)	10			
012	S0210000 Basin, kidney, stainless steel,475ml	5			
013	Wheelchair, non-foldable, universal (*)	1			
014	Gen.surg-001 Dressing set	1			
015	Glass, urine, plastic, 250ml	5			
016	S0640000 Hammer, reflex (*)	1			
017	S0119300 Light,examination,mobile,220-12V (*)	1			E
018	Scale, weight, adult, digital	1			E

18. Kitchen

Activities:

The ward kitchen is equipped to cater for ward occupants and special dietary requirements are referred to the main kitchen, e.g. a low salt diet, fat free, diabetic diet, etc.
Facilities are required for staff to prepare beverages and light snacks, especially for diabetic patients.
Washing and storing crockery and cutlery.
Storing of a limited quantity of dried foods.
Refrigerated storage of milk etc., no medication and blood products must be in this refrigerator.
Equipment should include a stainless steel sink and drainer.
An electric boiler must be available to prepare beverages for patients.
Kitchen utensils for dishing up, and the utilization of a bain-marie trolley from the main kitchen to serve patients meals.

Equipment:

Sq	Item description	Q	C	M	E
001	Microwave oven, medium power range (optional)	1			E
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	2	C		
003	S0002077 Refrigerator, 140 l + 20 l	1			E
004	Boiler, water, 12 l	1			E
005	Cabinet, cutlery	1			
006	S0190000 Pedal bin, st. st	1			

19. Bathroom

Activities:

Mobile patients use this area for personal hygiene; immobile patients are cared for in bed.
The availability of a nurse call system is important. If no nurse call is built in, a hand bell should be issued to patients. Staff should be aware of patients in the bathroom.
Include a bath mat and bath aids, e.g. a patient hoist.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

20. Soiled utility

Activities:

The functions undertaken in the soiled utility room are unpleasant, so there should be sufficient extractor-fans, as well as disposable gloves to perform these functions.
The room also serves as the temporary storage point and testing area for specimens for urine analysis and stool specimen preparation for example to be sent away for laboratory analysis.
Bulky items such as bedpans with their carriers are located here.
A wash basin, with trays and mouthwash, cups to assist immobile patients with personal hygiene is available here.
Sputum mugs are stored here.
These activities may generate significant noise levels and care should be taken to eliminate noise. Thus the soiled utility should be situated in an area which is preferably not too close to patient rooms, but not too distant for functionality or creating an extra burden on nursing staff.
Disposal area, if a disposal room is not allocated, and a temporary storage point for linen, and contaminated items for destruction at a later stage.
Storage area for containers, e.g. kidney dishes or bowls (nausea, etc.).

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	3			
002	S0187004 Trolley, general purpose ,st.st.,mobile, 2 trays (*)	1			
003	Bin, disposal, mobile, with lid (*)	1			
004	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
005	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
006	Tub, wash, oval, galvanized steel, 65 l (*)	1			
007	Towel, hand, white (*)	1			
008	Dispenser, paper towel, metal (optional) (*)	1	C		
009	Dispenser, soap, hand operated (optional) (*)	1	C		
010	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
011	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	2			
012	Trolley, bedpans and urinals, mobile	1			
013	S0222020 Bedpan, st. st. (*)	10			
014	S0210000 Basin,kidney,stainless steel,475ml	5			
015	Urinal, st. st.	10			
016	Bedpan, orthopaedic , st. st.	5			
017	Glass, urine, plastic, 250ml	5			

21. Cleaner's Room

Activities:

The janitor/cleaner's room is the base from which domestic services staff provides a cleaning service to the inpatient department.

There should be easy access to cleaning equipment and materials for emptying and filling buckets, and the routine servicing and cleaning of equipment.

There should be unrestricted access to the sink – which should have hot and cold water.

The room should be well ventilated so that equipment can dry quickly.

Cleaners' trolleys should be equipped with colour coded buckets for clean and dirty water.

Cleaners' cloths should be colour coded and cleaners must adhere to the coding for infection control purposes. These activities should adhere to hospital policies and protocols.

Mops to be stored in mop rack.

Heavy duty machines e.g. high speed strip and buffing machines located in main housekeeping area (domestic area). These items are available to keep costs down and can be utilized on request for heavy floor maintenance in wards.

Equipment:

Sq	Item description	Q	C	M	E
002	Trolley, cleaning	1			
003	Rack, mops	1			
004	Pail w/bail, handle, polyethylene, 10 l	2			
005	Set, cleaning utensils, broom, mop, etc.	1			
006	Shelf, coated steel, 5 levels, starter, 1.00 m	1			

Renewable/Consumables:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Airways – Guedel 3
002	Airways – Guedel 4
003	Airways – Guedel 5
004	Alcohol Swabs
005	Aprons - Disposable
006	Aqua-packs Oxygen humidifier
007	Bag, Enterostomy, opening, disposable + Clamp
008	Bags - Refuse - All Colours and Sizes
009	Bags - Urine
012	Bandage - Crepe
011	Bandage - Suspension
010	Bandage- Conforming
013	Batteries - Medical & General
014	Beakers Feeding
015	Bedpan Covers
016	Bibs, Feeding - Adult
017	Biopsy Needles
018	Blood Administration Sets
020	Blood Sampling Needle 20 G, disposable, sterile
021	Blood Sampling Needle 21 G, disposable, sterile
022	Blood Sampling Scalp vein 23 G, disposable, sterile
023	Blood Sampling Tube, Vacuum 5ml (Vacutainer)
025	Blood Sampling Tube, Vacuum EDTA 5ml (Vacutainer)
024	Blood Sampling Tube, Vacuum Heparinised 5ml (Vacutainer)
019	Blood Sampling Vacutainer Holder
026	Bottles - Suction - Glass/Plastic
027	Braun Splints (Arm)
028	Bubble tubing box
029	Burn Dressings
034	Cannula - Nasal-Oxygen
030	Cannula, IV short,18G,ster,disp
031	Cannula, IV short,20G,ster,disp
032	Cannula, IV short,22G,ster,disp
033	Cannula, IV short,24G,ster,disp
035	Caps - Mop/Bonnet Type
038	Catheter - Jacques
036	Catheter Introducer - Plastic
037	Catheter Sup-Pubic, CH 10, 1.65 cm, sterile, disp., adult
039	Central Venous Pressure Sets
040	Chest, Electrode, Monitor
041	Chest Drainage Kit
042	Cleansing Swabs – Sterile
043	Cleansing Swabs Non-Sterile
044	Cold/Hot Packs
045	Colostomy Bags
046	Combur Tests
048	Connector, Biconical Autoclavable
049	Connector, T/Y

047	Connectors - Plastic – Tapered
050	Container, Sample, sputum, plastic, non-sterile
051	Container, Sample, urine, plastic, non-sterile, 60 ml
052	Cotton Buds
053	Cotton Wool Balls - Sterile/Non-Sterile
054	Cotton Wool Rolls
055	Covers - PVC - Mattress/Bed Wedge
040	CVP – Cannulae
056	Cytological Fixative Spray
057	Dental Needles
058	Drain, Thoracic + Trocar, sterile, disp, CH 14
059	Drain, Thoracic + Trocar, sterile, disp, CH 24
060	Drawsheet,plastic,90x180cm
061	Dressings – Wound
068	Face Mask Water Repellent
069	Foley Catheters – Latex/Silicone Size 10
070	Foley Catheters – Latex/Silicone Size 12
071	Foley Catheters – Latex/Silicone Size 14
072	Gauze Absorbent Ribbon
081	Gloves – Household Large
080	Gloves – Household Medium
076	Gloves – Surgical Size 6
077	Gloves – Surgical Size 7
078	Gloves – Surgical Size 7 ½
079	Gloves – Surgical Size 8
075	Gloves, exam, latex, large, disp
074	Gloves, exam, latex, medium, disp
073	Gloves, exam, latex, small, disp
082	Hand wash Antiseptic Liquid (Hibiscrub)
083	Hand wash Povidone (Betadine)
084	Hot Packs
087	I.D Bands - Patient Yellow
086	I.D. Bands - Patient Pink
085	I.D. Bands - Patient White
090	I.V. Administration Sets – 15 Drop
091	I.V. Administration Sets - 60 Drop
092	I.V. Set, Infusion “Y”, Luer lock, air inlet
089	Incontinence Sheaths
088	Intubation stylet, adult, 15 Ch
093	K.Y. Jelly
094	Kits - Chest Drainage
095	Latex Tubing
096	Linen Savers
097	Litmus Paper - Red/Blue
098	Manometer Spinal Fluid
099	Masks - Nebulizer/Oxygen
100	Masks – Oxygen 40 %
101	Nail Brushes - Autoclavable/Disposable
102	Nasal Oxygen Cannula
112	Needle, spinal disp,20G(0.9x90mm),sterile
110	Needle, spinal disp,22G(0.7x40mm),sterile
111	Needle, spinal disp. 22G(0.7x90mm),sterile

104	Needle,disp,15G
105	Needle,disp,18G
106	Needle,disp,21G
107	Needle,disp,22G
108	Needle,disp,23G
109	Needle,disp,25G
103	Needles – Butterfly 23G
113	Oxygen T Pieces
114	Oxygen Tubing
115	Pads - Sanitary - Regular
116	Paper E.C.G.
117	Paraffin Gauze
118	Prefomed E.T. Tubes - Cuffed
119	Queen Charlotte Face Masks
120	Razor Medical - Disposable - Single Edge
121	Rubber Bath Mat - Non-Slip
122	Ryles/Levins Tubes 12 (Duodenal Tubes)
123	Ryles/Levins Tubes 14 (Duodenal Tubes)
124	Ryles/Levins Tubes 16 (Duodenal Tubes)
127	S.G. Meter (Urine Meters)
125	Safety Pins Large
126	Safety Pins Medium
128	Sharps Containers (Safety Box/used syringes and needles)
129	Shrouds
130	Soap,toilet,bar,approx.110g,wrapped
131	Spatulas - Tongue
134	Spigots Large
133	Spigots Medium
132	Spigots Small
135	Spinal Fluid Manometer
136	Spray Bottles - Plunger Operated
137	Sputum Mugs/Bags
138	Straws Medical Drinking
139	Surgical Spirits
143	Syringes 10 ml
141	Syringes 2 ml
144	Syringes 20 ml
142	Syringes 5 ml
146	Syringes 50 ml Conical Tip
145	Syringes 50 ml Luer Lock
140	Syringes Insulin
151	Tape - Elastic Adhesive Plaster - White 10 cm
150	Tape - Elastic Adhesive Plaster - White 5 cm
154	Tape Micropore 10 cm
152	Tape Micropore 2.5 cm
153	Tape Micropore 5 cm
149	Tape Surgical Adhesive Hypo-Allergenic
148	Tape,adhesive,Z.O,perforated,10cmx5m
147	Tape,adhesive,Z.O.,2.5cmx5m
155	Thermometer,clinical,30-40C
156	Thermometer,clinical,35-42C
157	Thermometers Fridge

158	Tourniquet, latex rubber,75cm
159	Tracheotomy Tubes Size 3
160	Tracheotomy Tubes Size 4
162	Traction (Cervical) Cloth Head Halter
163	Traction (Pelvic Belt) (Various sizes)
164	Traction (Skin traction Kit)
161	Traction cord
162	Tube, Endo-tracheal, disp. + connector, 6.5 mm, balloon
163	Tube, Endo-tracheal, disp. + connector, 7 mm, balloon
164	Tube, Endo-tracheal, disp. + connector, 7.5 mm, balloon
165	Tube, Endo-tracheal, disp. + connector, 8 mm, balloon
166	Tube, Endo-tracheal, disp. + connector, 8.5 mm, balloon
167	Tube, Endo-tracheal, disp. + connector, 9 mm, balloon
165	Tube,Suction,CH10,L125cm,ster,disp
166	Tube,Suction,CH12,L125cm,ster,disp
167	Tube,Suction,CH16,L125cm,ster,disp

Capacity, Surgical ward:

The total capacity of the surgical ward is 30 beds, and an assumption of 80% occupancy will provide approximately 8,760 patient days per year. Considering an average length of stay of 7 days per admission, this will allow for 1,251 admissions per year or 3.5 admissions per day. Keep in mind that the surgical ward occupancy will most probably be higher during the week, because of the blocked operating theatre time schedule during the week. Allocate time for emergencies after hours and at weekends.

Location, Surgical ward:

This ward would preferable be situated close to the operating theatre and surgical ICU, if this department is included. Access to these areas should be unrestricted and possible quickly, especially in emergency situations. Access to and support from imaging and laboratory departments.

3.3.1.3 Paediatric Ward, 15 beds

Description/Activities:

The paediatric ward will house children (patients) up to the age of 12 years. This unit will accommodate boys and girls, and operate as a multi-disciplinary unit, meaning that it will house medical and surgical care and/or patients for investigations.

In the paediatric ward, provision should be made for the primary caregiver to accompany the child, where possible. This is particularly necessary in the case of children under the age of three or four; older children do not usually need the same degree of support. The presence of the mother in the hospital provides an opportunity for health education: nurses can explain how to handle a sick child, how to perform simple nursing tasks, and how to prevent sickness in the family in future, particularly through proper immunization.

The paediatric ward provides the range of facilities necessary to meet basic paediatric needs, but in a controlled way. It provides shelter, a maintained temperature, ventilation, cleanliness, noise control, privacy and, as far as possible, general comfort. It also provides services such as a supply of food, linen and other items, and the removal of waste products and used materials of all kinds.

The main entrance to the paediatric unit should be provided with an electronic security device controlled from the nurse's station. If no electronic security is in place, special attention must be given to children's security.

The paediatric ward will include the following:

- 01 Staff Toilet
- 02 Clean Utility
- 03 Nurse Station
- 04 Clean Linen Room
- 05 Single Bed Room, paediatric (0-4)
- 06 Toilet
- 07 Single Bed Room, paediatric (4-12)
- 08 Toilet
- 09 Single Bed Room, paediatric (0-4)
- 10 Toilet
- 11 6-Bed Bay, Paediatric (0-4)
- 12 6-Bed Room, Paediatric (4-12)
- 13 Toilet (10)
- 14 Nursing Mothers Room (6)
- 15 Treatment/Dressing/Injection
- 16 Store, equipment, inpatient, paediatric
- 17 Kitchen
- 18 Bathroom
- 19 Soiled Utility
- 20 Cleaner's room

01. Staff Toilet

Activities:

Separate to patient ablution facilities, the inclusion of space for staff lockers would be practical.

Equipment:

Sq	Item description	Q	C	M	E
001	Hand dryer, electric (optional)	1	C		E
002	Towel, hand, white	1			
003	Dispenser, paper towel, metal (optional)	1	C		
004	Dispenser, soap, hand operated (optional)	1	C		

02. Clean Utility

Activities:

The clean utility/preparation room is used for storing all supplies, both clean and sterile, and for preparing and storing dressing trolleys used in the wards.

The room should be near the nurse station and with restricted access for patients or unauthorised individuals.

A medical ward has a large store of medicines that should be locked if unattended.

Secure storage is necessary for drugs, including controlled drugs, medicines, lotions and a small working stock of clean and sterile supplies.

Space is needed to assemble and prepare equipment for clinical procedures and to park the medicine trolley.

Medicine control and schedule medicine control (drug book maintenance, etc.).

A clinical wash-hand basin is required

IV fluid preparation.

Injection preparation.

Trolley for vital-sign monitoring e.g. temperature control, blood pressure measurement.

Refrigerated medication control.

Important fridge temperature control.

No food to be stored in this fridge.

Sphygmomanometer, thermometers, etc. that are not available at the bedside are to be stored and utilized from this area.

Please note that some of the above-mentioned activities could also be allocated to the treatment and dressing room if space is available.

Equipment:

Sq	Item description	Q	C	M	E
001	Work table, laminated top, with cabinets under the table top, 2.00 m	1	C		
002	Worktable, 1 sink, with cabinets under the table top, 1.50 m	1	C	M	
003	S0002077 Refrigerator, 140 l + 20 l	1			E
004	Shelf, coated steel, 5 levels, starter, 1.00 m	2			
005	Cabinet, medicine, single door, with dangerous drug compartment, 0.60 m	1			

03. Nurse Station

Activities:

Base where the focus of communication is directed regarding patients, relatives and clinical support staff.

Nurse station is located centrally, to maximise patient care.

Theoretically, progressive nursing care requires that patients be positioned in the wards according to their level of dependence and nursing needs, the highly dependent patients being closest to the staff base.

Allocated strategically to assist incoming doctors with ward rounds.

Bulk of administrative activities are located here, e.g. for patient needs as well as staff administration.

It is advisable to have the front door entrance secured and a bell situated at the entrance to limit unauthorised access and for children's protection.

Control of emergency trolley is of vital importance and protocol should be adhered to, e.g. checking the trolley daily or using the protected seal concept meaning if the seal is broken it needs to be rechecked and sealed. It is sensible to keep this trolley in the clean utility and out-of-reach of children.

Equipment:

Sq	Item description	Q	C	M	E
001	Wall clock (*)	1	C		E
002	Trolley, patient records	1			
003	Trolley, medicine distribution, polymer, multi-drawer system	1			
004	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
005	Chair, desk, height adjustable (*)	1			
006	S5005500 Chair, stackable, without armrests	2			
007	Basket, waste-paper, metal (*)	1			
008	Cart, crash, with defibrillator, with oxygen, adult and child	1			E
009	Set, diagnostic, oto / ophthalmic	1			
010	S0683200 Sphygmomanometer,(adult),aneroid	1			
011	Stethoscope, paediatric head (*)	1			
012	S0481052 Thermometer, clinical, glass (*)	3			
013	Viewer, double field, x-ray film	1	C		E

04. Clean Linen Room

Activities:

Sufficient linen allocation for use on the ward allocated in this room (medical ward, incontinent patients, majority old patients, etc.).

Linen allocation, bed sheets, mackintosh, draw sheets, pillow cases and bed spread - in this document the linen is located in the laundry linen store.

Minimum and maximum levels of linen allocation for the optimal functioning of the unit.

Must be kept locked.

Trolley to be used for bed linen changes during patient hygiene and pressure area care.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, clean linen distribution	1			
002	Cabinet, double door, 1.00 m	1			

05. Single Bed Room, Paediatric (0-4)

Activities:

Single bed rooms are allocated for ill paediatric patients or high risk patients.

Basic nursing care rendered.

Clinical procedures: administration of oxygen, airway suctioning.

It is convenient to have a baby-change work top to assist in child care activities.

These rooms can be interchangeable with bassinets and/or infant beds (cots).

Hand washing and containment of infection control.

It is advisable to have a viewer or observation window on the paediatric ward to assist nursing staff in managing paediatric patients.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	1	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	1		M	

003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	1		M	
004	Bed, infant, with mattress, 1.30 x 0.80 m	1			
005	S0100804 Cot, baby, hospital type, wheel trolley (*)	1			
006	Cabinet, bedside, with over bed table	1			
007	S5005500 Chair, stackable, without armrests	2			
008	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
009	Basket, waste-paper, metal (*)	2			

06. Toilet:

Activities:

Usually this facility is allocated in the centre of the ward as an ablution block with bath, toilet and wash hand basins with toilets and urinals.

Paediatric size toilets and wash hand basins should be installed for children's comfort.

It is important that the thermostat temperature is turned lower to prevent burns if children accidentally open taps.

Children should not utilize these facilities without being accompanied by an adult or nursing staff.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

07. Single Bed Room, Paediatric (4-12)

Activities:

The patient age range determines the activities in this ward but should be kept in mind that it is a single bed facility and could be interchanged to accommodate any age group depending on demand.

Single bed rooms should be reserved for children with infectious diseases or sepsis but could be used for uninfected cases as well.

Cleaning and disinfection of ward post discharge of infectious patients.

Basic nursing care and vital sign monitoring with airway suctioning equipment in place for effective and efficient care.

This is a multi-disciplinary ward and patients with traction treatment can be accommodated here, as well as medical or surgical patients.

Balkan-frame and pulleys allocated in store room can be utilized here.

Fracture boards for patients with femur fractures.

Connection for Thomas splint, traction cord and weight set up here.

This is a very isolated area for children that need long term hospitalisation. It is preferable to accommodate children amongst other children.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	1	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	1		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	1		M	
004	Bed, standard, 2 sections, with mattress	1			
005	Cabinet, bedside, with over bed table	1			
006	S5005500 Chair, stackable, without armrests	1			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	1			

009	Basket, waste-paper, metal	1			
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08. Toilet

Activities:

Usually this facility is allocated in the centre of the ward as an ablution block with bath, toilet and wash hand basins with toilets and urinals.

Paediatric size toilets and wash hand basins should be installed for children's comfort.

It is important that the thermostat temperature is turned lower to prevent burns if children accidentally open taps.

Children should not utilize these facilities without being accompanied by an adult or nursing staff.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

09. Single Bed Room, Paediatric (0-4)

Activities:

Single bed rooms are allocated for ill paediatric patients or high risk patients.

Basic nursing care rendered.

Clinical procedures: administration of oxygen, airway suctioning.

It is convenient to have a baby-change work top to assist in child-care activities.

These rooms can be interchangeable with bassinets and/or infant beds (cots).

Hand washing and containment of infection control.

It is advisable to have a viewer or observation window on the paediatric ward to assist nursing staff in managing paediatric patients.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	1	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	1		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	1		M	
004	Bed, infant, with mattress, 1.30 x 0.80 m	1			
005	S0100804 Cot, baby, hospital type, wheel trolley (*)	1			
006	Cabinet, bedside, with overbed table	1			
007	S5005500 Chair, stackable, without armrests	2			
008	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
009	Basket, waste-paper, metal (*)	2			

10. Toilet

Activities:

Usually this facility is allocated in the centre of the ward as an ablution block with bath, toilet and wash hand basins with toilets and urinals.

Paediatric size toilets and wash hand basins should be installed for children's comfort.

It is important that the thermostat temperature is turned lower to prevent burns if children accidentally open taps.

Children should not utilize these facilities without being accompanied by an adult or nursing staff.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

11. 6-Bed Bay, Paediatric (0-4)

Activities:

Basic nursing care rendered, including hygiene activities and feeding.
 Clinical procedures: administration of oxygen, airway suctioning.
 Vital sign observation, observe for wound oozing, etc.
 Hand washing and containment of infection control.
 Post operative nursing: Nil by mouth, and pain management as prescribed.
 Because of the multidisciplinary approach, the proximity of infectious patients can create additional infection risks.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	6	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	6		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	6		M	
004	Bed, infant, with mattress, 1.30 x 0.80 m	6			
005	Bassinet, baby, with trolley, with mattress	6			
006	Cabinet, bedside, with over bed table	6			
007	S5005500 Chair, stackable, without armrests	6			
008	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
009	Table, enamelled st. frame, padded top, baby dressing, 1.00 x 0.50	1			
010	Screen, bed, three section, mobile	3			
011	Basket, waste-paper, metal	3			

12. 6-Bed Bay, Paediatric (4-12)

Activities:

Using curtain track is a more functional option than bed screens.
 Basic nursing care rendered, hygiene activities undertaken.
 Clinical procedures: administration of oxygen, airway suctioning.
 Vital sign observation, oozing from wounds, etc.
 Back rest for fowlers position and footstool for patient comfort.
 Important nurse/patient interaction, e.g. elderly and disorientated patients.
 Hand washing and containment of infection control.
 Post operative nursing: Nil by mouth, pain management as prescribed, medication and injection administration.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	6	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	6		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	6		M	
004	Bed, standard, 2 sections, with mattress	6			
005	Cabinet, bedside, with over bed table	6			
006	S5005500 Chair, stackable, without armrests	6			

007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
008	Footstool, one step, epoxy coated steel	6			
009	Screen, bed, three section, mobile	6			
010	Basket, waste-paper, metal	2			

13. Toilets

Activities:

Usually this facility is allocated in the centre of the ward as an ablution block with bath, toilet and wash hand basins with toilets and urinals.

Paediatric size toilets and wash hand basins should be installed for children's comfort.

It is important that the thermostat temperature is turned lower to prevent burns if children accidentally open taps.

Children should not utilize these facilities without being accompanied by an adult or nursing staff.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

14. Nursing Mothers Room (6)

Activities:

This facility is not always available, but is very necessary especially for children between 0 – 4 years of age.

The mothers can assist nursing staff with caring for babies.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed, domestic, with mattress	6			
002	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
003	Cabinet, bedside, with over bed table	6			
004	S5005500 Chair, stackable, without armrests	2			
005	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m	1			
006	Basket, waste-paper, metal	2			

15. Treatment/Dressing/Injection

Activities:

Based on the policy and procedures of hospital utilization, e.g. for dressings and other sterile procedures.

According to procedure and policies, sterile sets must be ordered from CSSD and returned to CSSD after utilization.

Some policies might require the setting up of trolleys and then procedures are performed at the bedside.

This is a clean area and dusting is of vital importance.

Injection preparation as well as intravenous setting can be done here if the clean utility is not located behind the nurse station.

Post operative procedures for instance shortening of drains, renewal of dressings, removal of sutures etc.

Equipment:

Sq	Item description	Q	C	M	E
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001	S0101605 Trolley, dressing, st. st., 2 trays (*)	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
004	Cabinet, instrument, double door, 0.90 m	1			
005	S0169005 Stool, height adjustable with gasspring, mobile, st. st.	1			
006	S0184500 Couch, examination, enamelled st. frame, adjustable head (*)	1			
007	Footstool, one step, epoxy coated steel (*)	1			
008	S0190000 Pedal bin, st. st (*)	1			
009	S0119300 Light,examination,mobile,220-12V (*)	1			E
010	Viewer, double field, x-ray film	1	C		E

16. Store, equipment, inpatient

Activities:

Equipment allocated under basic planning is stored in this room.

It is most important that sufficient floor space and shelving should be available.

Sufficient electrical plugs should be available to keep the electrical equipment plugged in and keep batteries charged.

Paediatric staff should be capable of utilising equipment that is allocated to this department.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
002	S0100804 Cot, baby, hospital type, wheel trolley (*)	1			
003	Chart holder, bed mounting	20			
004	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	2			
005	S0150000 Stand, infusion, st. st., mobile	1			
006	Screen, bed, three section, mobile (*)	4			
007	Trolley, bedpans and urinals, mobile	1			
008	Heater, radiant, newborns, mobile	2			E
009	Trolley, oxygen, complete (*)	1			
010	S0760605 Pump,suction,portable,220V,w/access	1			E
011	Bedpan, child, st. st.	8			
012	S0210000 Basin, kidney, stainless steel,475ml	5			
013	kidney dish, small, st. st.	5			
014	S0002043 Warmer, mattress, baby, electric/SET	2			E
015	Gen.surg-001 Dressing set	1			
016	Ventilator, intensive care, adult / child (basic)	1		M	E
017	Glass, urine, plastic, 250ml	5			
018	S0640000 Hammer, reflex (*)	1			
019	Scale, weight, babies, digital	1			E

17. Kitchen

Activities:

A specialized milk kitchen is required and this may be shared with a nursery. If the unit contains less than 20 beds/cots, then infant feeds may be prepared in a special area within the ward kitchen. A double basin wash-up facility and wash hand basin must be supplied.

The ward kitchen must be equipped to cater for the ward occupants and ordering special diets should be made from main kitchen, e.g. soft diets, sloppy diets, etc.

Facilities are required for staff to prepare beverages and light snacks especially for diabetic patients.

Washing and storing crockery and cutlery.

Refrigerated storage of milk, etc. No medication and blood products should be kept in this refrigerator.

Equipment should include a stainless steel sink and drainer.

An electric boiler should be available to prepare hot beverages for patients.

Kitchen utensils must be supplied for dishing up and using the bain-marie trolley from the main kitchen to serve patients' meals.

Equipment:

Sq	Item description	Q	C	M	E
001	Microwave oven, medium power range (optional)	1			E
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	2	C		
003	S0002077 Refrigerator, 140 l + 20 l	1			E
004	Boiler, water, 12 l	1			E
005	Cabinet, cutlery	1			
006	S0190000 Pedal bin, st. st	1			

18. Bathroom

Activities:

Mobile patients use this area for personal hygiene, immobile patients are cared for in bed.

Availability of a nurse call system is important. If no nurse call system is supplied, a hand bell should be offered to patients. Staff should accompany paediatric patients to the bathroom to prevent medico/legal hazards.

It is important to control the water temperature to reduce medico/legal risks of burns.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

19. Soiled utility

Activities:

The functions undertaken in the soiled utility room are unpleasant, so there should be sufficient extractor-fans as well as disposable gloves to perform these functions.

The room also serves as the temporary storage point and testing area for specimens for urine analysis and stool specimen preparation for example to be sent away for laboratory analysis.

Bulky items such as bedpans with their carriers are located here.

A wash basin, with trays and mouthwash cups, to assist immobile patients with personal hygiene is available here.

Sputum mugs stored here.

These activities may generate significant noise levels and care should be taken to eliminate noise. Thus the soiled utility should be situated in an area which is preferably not too close to patient rooms, but not too distant for functionality or creating an extra burden on nursing staff.

Disposal area, if a disposal room is not allocated, and a temporary storage point for linen, and contaminated items for destruction at a later stage.

Storage area for containers e.g. kidney dishes or bowls (nausea etc.).

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	3			
002	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
003	Bin, disposal, mobile, with lid (*)	1			
004	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
005	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	

006	Tub, wash, oval, galvanized steel, 65 l (*)	1			
007	Towel, hand, white (*)	1			
008	Dispenser, paper towel, metal (optional) (*)	1	C		
009	Dispenser, soap, hand operated (optional) (*)	1	C		
010	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
011	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	2			
012	Trolley, bedpans and urinals, mobile	1			
013	S0222020 Bedpan, st. st. (*)	10			
014	S0210000 Basin, kidney, stainless steel,475ml	5			
015	Urinal, st. st.	10			
016	Bedpan, orthopaedic, st. st.	5			
017	Glass, urine, plastic, 250ml	5			

20. Cleaner's Room

Activities:

The janitor/cleaner's room is the base from which domestic services staff provide a cleaning service to the inpatient department.

There should be easy access to cleaning equipment and materials for emptying and filling buckets, and the routine servicing and cleaning of equipment.

There should be unrestricted access to the sink – which should have hot and cold water.

The room should be well ventilated so that equipment can dry quickly.

Cleaners trolleys should be equipped with colour coded buckets for clean and dirty water.

Cleaners cloths should be colour coded and cleaners must adhere to the coding for infection control purposes. These activities should adhere to hospital policies and protocols.

Mops to be stored in mop rack.

Heavy duty machines e.g. high speed strip and buffing machines located in main housekeeping area (domestic area). These items are available to keep costs down and can be utilized on request for heavy floor maintenance in wards.

It is important to disinfect after an infectious patient is discharged.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m	1	C	M	
002	Trolley, cleaning	1			
003	Rack, mops	1			
004	Pail w/bail, handle, polyethylene,10 l	2			
005	Set, cleaning utensils, broom, mop, etc.	1			
006	Shelf, coated steel, 5 levels, starter, 1.00 m	1			

Renewable/Consumables:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Airways – Guedel 0 (Paediatric)
002	Airways – Guedel 1 (Child)
003	Alcohol Swabs
004	Aprons - Disposable
005	Aqua-packs Oxygen humidifier
006	Bag, Enterostomy, opening, disposable + Clamp
007	Bags - Refuse - All Colours and Sizes
008	Bags - Urine
009	Bandage- Conforming
010	Bandage - Suspension

011	Bandage - Crepe
012	Batteries - Medical & General
013	Beakers Feeding
014	Bedpan Covers
015	Bibs, Feeding - Children
016	Blood Administration Sets
017	Blood Sampling Vacutainer Holder
018	Blood Sampling Needle 20 G, disposable, sterile
019	Blood Sampling Needle 21 G, disposable, sterile
020	Blood Sampling Scalp vein 23 G, disposable, sterile
021	Blood Sampling Tube, Vacuum 5ml (Vacutainer)
022	Blood Sampling Tube, Vacuum Heparinised 5ml (Vacutainer)
023	Blood Sampling Tube, Vacuum EDTA 5ml (Vacutainer)
024	Bottles - Suction - Glass/Plastic
025	Braun Splints (Arm)
026	Bubble tubing box
027	Burn Dressings
028	Cannula, IV short,18G,ster,disp
029	Cannula, IV short,20G,ster,disp
030	Cannula, IV short,22G,ster,disp
031	Cannula, IV short,24G,ster,disp
032	Cannula - Nasal-Oxygen
033	Caps - Mop/Bonnet Type
034	Catheter Introducer - Plastic
035	Catheter Sup-Pubic, CH 10, 1.65 cm, sterile, disp., child
036	Catheter - Jacques
037	Chest, Electrode, Monitor
038	Cleansing Swabs – Sterile
039	Cleansing Swabs Non-Sterile
040	Cold/Hot Packs
041	Colostomy Bags
042	Combur Tests
043	Connectors - Plastic – Tapered
044	Connector, Biconical Autoclavable
045	Connector, T/Y
046	Container, Sample, sputum, plastic, non-sterile
047	Container, Sample, urine, plastic, non-sterile, 60 ml
048	Cotton Buds
049	Cotton Wool Balls - Sterile/Non-Sterile
050	Cotton Wool Rolls
051	Covers - PVC - Mattress/Bed Wedge
052	Tube, Endo-tracheal, disp. + connector, 3 mm, w/o balloon
053	Tube, Endo-tracheal, disp. + connector, 3.5 mm, w/o balloon
054	Tube, Endo-tracheal, disp. + connector, 4 mm, w/o balloon
055	Tube, Endo-tracheal, disp. + connector, 4.5 mm, w/o balloon
056	Face Mask Water Repellent
057	Foley Catheters – Latex/Silicone Size 6
058	Foley Catheters – Latex/Silicone Size 8
059	Gauze Absorbent Ribbon
060	Gloves, exam, latex, small, disp
061	Gloves, exam, latex, medium, disp
062	Gloves, exam, latex, large, disp

063	Gloves – Surgical Size 6
064	Gloves – Surgical Size 7
065	Gloves – Surgical Size 7 ½
066	Gloves – Surgical Size 8
067	Gloves – Household Medium
068	Gloves – Household Large
069	I.D. Bands - Patient White
070	Hand wash Antiseptic Liquid (Hibiscrub)
071	Hand wash Povidone (Betadine)
072	I.D. Bands - Patient Pink
073	I.D Bands - Patient Yellow
074	Intubation stylet, paediatric, 10 Ch
075	Incontinence Sheaths
076	I.V. Administration Sets – 15 Drop
077	I.V. Administration Sets - 60 Drop
078	I.V. Set Buretrol (paediatric volume control)
079	I.V. Set, Infusion, paediatric, precision
080	K.Y. Jelly
081	Latex Tubing
082	Linen Savers
083	Litmus Paper - Red/Blue
084	Manometer Spinal Fluid
085	Masks - Nebulizer/Oxygen Paediatric
086	Masks – Oxygen Paediatric
087	Nail Brushes - Autoclavable/Disposable
088	Nasal Oxygen Cannula paediatric
089	Needles – Butterfly 23G
090	Needle,disp,18G
091	Needle,disp,21G
092	Needle,disp,22G
093	Needle,disp,23G
094	Needle,disp,25G
095	Needle, spinal disp,22G(0.7x40mm),sterile
096	Needle, spinal disp. 22G(0.7x90mm),sterile
097	Needle, spinal disp,20G(0.9x90mm),sterile
098	Oxygen Tubing
099	Paraffin Gauze
100	Queen Charlotte Face Masks
101	Razor Medical - Disposable - Single Edge
102	Rubber Bath Mat - Non-Slip
103	Ryles/Levins Tubes 6 (Duodenal Tubes)
104	Ryles/Levins Tubes 8 (Duodenal Tubes)
105	Ryles/Levins Tubes 10 (Duodenal Tubes)
106	Safety Pins Large
107	Safety Pins Medium
108	S.G. Meter (Urine Meters)
109	Sharps Containers (Safety Box/used syringes and needles)
110	Shroud Kit.(Child)
111	Soap,toilet,bar,approx.110g,wrapped
112	Spatulas - Tongue
113	Spigots Small
114	Spigots Medium

115	Spigots Large
116	Spinal Fluid Manometer
117	Spray Bottles - Plunger Operated
118	Straws Medical Drinking
119	Surgical Spirits
120	Syringes Insulin
121	Syringes 2 ml
122	Syringes 5 ml
123	Syringes 10 ml
124	Syringes 20 ml
125	Syringes 50 ml Conical Tip
126	Tape, adhesive, Z.O., 2.5cmx5m
127	Tape, adhesive, Z.O, perforated, 10cmx5m
128	Tape Surgical Adhesive Hypo-Allergenic
129	Tape - Elastic Adhesive Plaster - White 5 cm
130	Tape - Elastic Adhesive Plaster - White 10 cm
131	Tape Micropore 2.5 cm
132	Tape Micropore 5 cm
133	Tape Micropore 10 cm
134	Thermometer, clinical, 30-40C
135	Thermometer, clinical, 35-42C
136	Thermometers Fridge
137	Tourniquet, latex rubber, 75cm
138	Tracheotomy Tubes Sizes Paediatric
139	Traction cord
140	Traction (Skin traction Kit) for paediatrics
141	Tube, Suction, CH6
142	Tube, Suction, CH8
143	Tube, Suction, CH10

Capacity, paediatric ward:

If it is assumed that the ward has a total bed capacity of 14 beds, an average occupancy of 90% and an average stay of 12 days, the paediatric unit is able to support 4,560 patient days and 383 admissions per year.

Location, paediatric ward:

This is preferably on the ground floor, if there is more than one level to the building. If children are accommodated on higher level wards, security for windows etc. need to be in place. Easy access to the support services within the hospital complex.

3.3.1.4 Maternity Ward, 25 beds

Description/Activities:

A maternity unit is an area where babies are delivered and post natal care is given to both mother and baby.

Strict access control for visitors and unauthorised people, with a security system at the entrance door or as per hospital protocol is required.

This maternity ward will be considered as a rooming facility and limited nursery bassinets are allocated.

The delivery room is allocated in the maternity ward for practical reasons and to allow cost savings on staffing, enabling the maternity ward staff to cover the delivery rooms as well.

Maternity ward capacity accommodates 25 peri-natal beds and the room plan is as follows:

- 01 Staff Toilet
- 02 Clean Utility
- 03 Nurse Station
- 04 Isolation Room, baby
- 05 Milk Formula
- 06 Clean Linen Room
- 07 Single Bed Room
- 08 2-Bed Room
- 09 2-Bed Room
- 10 6-Bed Bay
- 11 6-Bed Bay
- 12 Toilet (10)
- 13 Nursery (8)
- 14 Store, equipment, inpatient
- 15 Kitchen
- 16 Bathroom
- 17 Soiled Utility
- 18 Cleaners room
- 19 Store, equipment, delivery
- 20 6-Bed Bay Labour
- 21 Toilet
- 22 Delivery Room
- 23 Toilet
- 24 Shower
- 25 Delivery Room
- 26 Soiled Utility

01. Staff Toilet

Activities:

Separate to patient ablution facilities, the inclusion of space for staff lockers would be practical.

Equipment:

Sq	Item description	Q	C	M	E
001	Hand dryer, electric (optional)	1	C		E
002	Towel, hand, white	1			
003	Dispenser, paper towel, metal (optional)	1	C		
004	Dispenser, soap, hand operated (optional)	1	C		

02. Clean Utility

Activities:

A clean utility/preparation room is required for the storage of all supplies. It should be clean and sterile, necessary for the care and treatment of female patients. It provides space for the preparation and assembly of items of equipment for diagnostic and therapeutic procedures.

The clean utility is situated either at the back of the nurse station or as close to the nurse station as possible.

The clean utility/preparation room is used for storing all supplies, both clean and sterile, and for preparing and storing dressing trolleys used in the wards.

The room should be near the nurse station with restricted access for patients and unauthorised individuals.

Secure storage is necessary for drugs, including controlled drugs, medicines, lotions and a small working stock of clean and sterile supplies.

Space is needed to assemble and prepare equipment for clinical procedures and to park the medicine trolley.

Medicine control and schedule medicine control (drug book maintenance, etc.).

A clinical wash-hand basin is required.

IV fluid preparation.

Injection preparation.

Trolley for vital-sign monitoring, e.g. temperature control, blood pressure measurement.

A refrigerator for medication with a temperature control is required. No food should be stored in this fridge.

Sphygmomanometer, thermometers etc. that are not available at the bedside are to be stored and utilized from this area.

Please note that some of the above-mentioned activities could also be allocated to the treatment and dressing room if space is available.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose, st.st., mobile, 2 trays (*)	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
004	S0002077 Refrigerator, 140 l + 20 l (*)	1			E
005	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	6			
006	S0150000 Stand, infusion, st. st., mobile	1			
007	Wheelchair, non-foldable, universal (*)	1			

03. Nurse Station

Activities:

The nurse station serves as a reception desk.
Should be strategically situated to enable nursing staff to monitor all visitors entering or leaving the unit.
It is the focus of communication between patients, relatives and clinical support staff.
The nurse station is located centrally, to maximise patient care.
Theoretically, progressive nursing care requires that patients be positioned in the wards according to their level of dependence and nursing needs, the highly dependent patients being closest to the staff base.
It is allocated strategically to assist incoming doctors with ward rounds.
The bulk of administrative activities are located here e.g. for patient needs as well as staff administration.
Important that the emergency trolley (crash cart) is situated in close proximity to the nurse station and is plugged in to electrical power for the defibrillator and monitor at all times.
This trolley must be checked and sealed and rechecked if the seal is broken.
Please note that this emergency trolley should be equipped with sufficient equipment and emergency drugs for the resuscitation of mother and baby.

Equipment:

Sq	Item description	Q	C	M	E
001	Wall clock (*)	1	C		E
002	Trolley, medicine distribution, polymer, multi-drawer system	1			
003	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	Basket, waste-paper, metal (*)	1			
006	Cart, crash, with defibrillator, with oxygen, adult and child	1			E
007	Set, diagnostic, oto / ophthalmic	1			
008	S0683200 Sphygmomanometer,(adult),aneroid	1			
009	S0683300 Sphygmomanometer,(child),aneroid	1			
010	S0686500 Stethoscope, foetal, plastic or aluminium (*)	1			
011	Stethoscope, dual head (*)	1			
012	Stethoscope, paediatric head (*)	2			
013	S0481052 Thermometer, clinical, glass (*)	2			

04. Isolation Room, baby

Activities:

The isolation room for the new born baby should always be staffed adequately.
At the very least it must be visible from the nursing station.
This area could also be utilized to stabilise babies and to prepare them for transfer to a higher level of care if advanced neonatal care is needed.
Babies with high risk symptoms and infectious conditions that need isolation should be admitted to this area.
A clinical basin must be provided.
A separate bathing facility should also be available.
Staff should be skilled and knowledgeable in management of equipment allocated to this area, no untrained staff should care for these babies.
A work surface where basic hygiene can be performed and nappy changing undertaken should be available.
Oxygen administration and suctioning techniques to be performed here for sick babies, and nursing babies with O2 Hoods, and monitoring the O2 % concentration with an O2 analyser.
An extraction ventilation system with air conditioning control to maintain and regulate room temperature is advantageous, or the room should be designed to avoid air - borne cross infections.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	1	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	1		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	1		M	
004	Container, trash, mobile, bin with lid	1			
005	Bassinet, baby, with trolley, with mattress	1			
006	Cabinet, bedside, with over bed table	1			
007	Chair, stackable, without armrests	2			
008	Table, enamelled st. frame, padded top, baby dressing, 1.00 x 0.50	1			
009	S0190000 Pedal bin, st. st	1			
010	Heater, radiant, newborns, mobile	1			E
011	Hood, oxygen, child	1		M	
012	Monitor, patient, portable, 3-channel	1			E

05. Milk Formula

Activities:

A dedicated milk kitchen which may be shared with a paediatric unit for formula preparation. A room or cupboard for the storage of commercially pre-packed baby foods, preparation of special formula baby feeds and the storage of baby bottles, teats, equipment and disposable items should be provided.

It is important to manage the milk kitchen flow from dirty to clean i.e. receiving dirty bottles, thorough the wash area and stored in the dirty area, and preparation and clean bottles kept in the clean area.

Sterilise in a microwave or with Milton sterilising fluid depending on the hospital policy for the clean area.

Refrigeration facilities are required for special baby formula feeds and mothers' milk feeds.

Prepare formula every 24 hours and do not use out-dated formula for babies.

For convenience there is a electrical mixer, but a hand mixer can also be utilized.

Please note that many of the items of equipment are optional.

Equipment:

Sq	Item description	Q	C	M	E
001	Microwave oven, medium power range (optional)	1			E
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
004	S0002077 Refrigerator, 140 l + 20 l (*)	1			E
005	Scale, kitchen type, 2000 g, <=> 20 g	1			
006	Washer, baby bottles (optional)	1		M	E
007	Mixer, infant formula	1			E
008	S0169005 Stool, height adjustable with gasspring, mobile, st. st.	1			
009	S0190000 Pedal bin, st. st (*)	1			
010	Warmer, baby bottle, electrical	1			E
011	Brush, baby bottle	5			

06. Clean Linen Room

Activities:

Sufficient linen allocation for use on the ward located in this room (surgical ward incontinent sheets for oozing).

Linen allocation, bed sheets, mackintosh, draw sheets, pillow cases and bed spreads - in this document the linen is located in the laundry linen store.

Minimum and maximum levels of linen provided for optimal functioning of the unit.

Must be kept locked.

Trolley to be used for bed linen changes during patient hygiene and vaginal swabbing rounds, according to protocol.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, clean linen distribution	1			
002	Cabinet, double door, 1.00 m	1			

07. Single Bed Room

Activities:

Can be utilized for private-paying patients.

For high risk patients, ante and post natal cases as well as for premature labour.

High dependency care of women with haemorrhaging, severe pre-eclampsia and eclampsia and who risk developing major complications affecting fluid and electrolyte balance.

A versatile structure means that beds could be used for ante as well as post natal patients.

Peri-natal care.

Clinical procedures administration of oxygen, airway suctioning.

Hand washing and containment of infection control.

A post natal ward with rooming facilities, for mothers to stay longer than a few hours.

The floor space must be big enough to accommodate two mothers and two bassinets, to adhere to room policy.

Curtain track or bed screens for patient privacy.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	1	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	1		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	1		M	
004	Bed, standard, 2 sections, with mattress (*)	1			
005	S0100804 Cot, baby, hospital type, wheel trolley (*)	1			
006	Cabinet, bedside, with over bed table	1			
007	S5005500 Chair, stackable, without armrests	2			
008	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
009	Screen, bed, three section, mobile (*)	1			
010	Basket, waste-paper, metal (*)	1			

08. 2-Bed Room

Activities:

Can be utilized for private-paying patients.
For high risk patients, ante and post natal cases as well as for premature labour.
High dependency care of women with haemorrhaging, severe pre-eclampsia and eclampsia and who risk developing major complications affecting fluid and electrolyte balance.
A versatile structure means that beds could be used for ante as well as post natal patients.
Clinical procedures administration of oxygen, airway suctioning.
Hand washing and containment of infection control.
A post natal ward with rooming facilities, for mothers to stay longer than a few hours.
The floor space must be big enough to accommodate two mothers and two bassinets, to adhere to room policy.
Curtain track or bed screens for patient privacy.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	2	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	2		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	2		M	
004	Bed, standard, 2 sections, with mattress (*)	2			
005	S0100804 Cot, baby, hospital type, wheel trolley (*)	2			
006	Cabinet, bedside, with overbed table	2			
007	S5005500 Chair, stackable, without armrests	4			
008	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
009	Screen, bed, three section, mobile (*)	2			
010	Basket, waste-paper, metal (*)	1			

09. 2-Bed Room

Activities:

Can be utilized for private-paying patients.
For high risk patients, ante and post natal cases as well as for premature labour.
High dependency care of women with haemorrhaging, severe pre-eclampsia and eclampsia and who risk developing major complications affecting fluid and electrolyte balance.
A versatile structure means that beds could be used for ante as well as post natal patients.
Clinical procedures administration of oxygen, airway suctioning.
Hand washing and containment of infection control.
A post natal ward with rooming facilities, for mothers to stay longer than a few hours.
The floor space must be big enough to accommodate two mothers and two bassinets, to adhere to room policy.
Curtain track or bed screens for patient privacy.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	2	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	2		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	2		M	
004	Bed, standard, 2 sections, with mattress (*)	2			
005	S0100804 Cot, baby, hospital type, wheel trolley (*)	2			
006	Cabinet, bedside, with overbed table	2			
007	S5005500 Chair, stackable, without armrests	4			
008	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
009	Screen, bed, three section, mobile (*)	2			
010	Basket, waste-paper, metal (*)	1			

10. 6-Bed Bay

Activities:

Peri-natal care, although this area could be allocated for post-natal patients.
Rooming in.
Breast feeding assistance.
Clinical procedures: administration of oxygen, airway suctioning.
Vital-sign monitoring.
Hand washing and containment of infection control.
Patient privacy through use of bed screens.
Swabbing of patients, perinea observation, etc.
Vital sign observation.
Post operative caesarean section: Nil by mouth, Foleys catheter care.
Pain management, as prescribed.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	6	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	6		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	6		M	
004	Bed, standard, 2 sections, with mattress (*)	6			
005	S0100804 Cot, baby, hospital type, wheel trolley (*)	6			
006	S5005500 Chair, stackable, without armrests	6			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
008	Footstool, one step, epoxy coated steel (*)	6			
009	Screen, bed, three section, mobile (*)	6			
010	Basket, waste-paper, metal (*)	2			

11. 6-Bed Bay

Activities:

Privacy of patients through use of bed screens.
Although this 6 bed bay could be utilized for peri-natal care, it can also be allocated for anti-natal patients if the other 6 bed bay is allocated for post natal patients.
Basic ant-natal care rendered, hygiene and progress of patient in labour.
Management of early premature labour, maintenance of IV fluids, Tendellenburg bed position and hourly observations performed or as per maternity ward policy.
Clinical procedures: administration of oxygen, airway suctioning.
Hand washing and containment of infection control.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	6	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	6		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	6		M	
004	Bed, standard, 2 sections, with mattress (*)	6			
005	S0100804 Cot, baby, hospital type, wheel trolley (*)	6			
006	S5005500 Chair, stackable, without armrests	6			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
008	Footstool, one step, epoxy coated steel (*)	6			
009	Screen, bed, three section, mobile (*)	6			
010	Basket, waste-paper, metal (*)	2			

12. Toilet

Activities:

Usually this facility is allocated in the centre of the ward as an ablution block with male and female facilities separate, including bath, toilet and wash hand basins.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

13. Nursery (8 cots)

Activities:

Multi and single-cot nurseries might be required.

To assist the containment of airborne infection and environmental conditions in nursery, adequate provision of engineering services is essential e.g. temperature control.

There should be a single entrance in order to control access.

At least one baby bath and mobile bassinets provide bathing facilities, in which case a tap for filling the bassinets, and a low basin for draining the bassinets should be provided.

A work surface for washing, drying and changing babies.

Apparatus for weighing of babies.

Piped or mobile suction and oxygen.

An emergency call system should be installed.

A viewing panel for the showing of babies.

Sufficient space to accommodate the equipment.

Only trained staff to work in this area.

Post caesarean babies to be nursed in incubator and skilled staff should be on hand to manage these babies.

Breast feeding to be done here and staff to support mothers with breast feeding and using the breast pump.

A bed screen should be available for privacy, if the mother requires it.

Staff should have the knowledge to manage babies with raised bilirubin and perform photo therapy treatment.

Capillary blood taking.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	4	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	4		M	
003	Flow meter, 0 - 15 l/min, oxygen w humidifier, wall outlet connection type (opt)	4		M	
004	Trolley, soiled linen, 2 rings.	1			
005	S0100804 Cot, baby, hospital type, wheel trolley (*)	8			
006	S5005500 Chair, stackable, without armrests	2			
007	S0169005 Stool, height adjustable with gasspring, mobile, st. st.	2			
008	Table, enamelled st. frame, padded top, baby dressing, 1.00 x 0.50	2			
009	S0150000 Stand, infusion, st. st., mobile	2			
010	Screen, bed, three section, mobile (*)	1			
011	S0190000 Pedal bin, st. st (*)	1			
012	Pump, infusion, drop controlled (Optional)	2			E
013	Heater, radiant, newborns, mobile	1			E
014	S0002064 Incubator, automatic	2		M	E
015	S0345100 Pump, breast, manual, w/accessories (*)	3			E
016	S0002048 Resuscitation, baby, Ambu(DIN)	1			

017	S0145520 Scale, infant, clinic, metric, 16 kg x 10g (*)	1			
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14. Store, equipment, inpatient

Activities:

Equipment allocated under basic planning is stored in this room.
It is most important that sufficient floor space and shelving should be available.
Sufficient electrical plugs should be available to keep the electrical equipment plugged in and keep batteries charged.
Medical staff should be trained to use the equipment available.

Equipment:

Sq	Item description	Q	C	M	E
001	Patient transfer, roller system	1			
002	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
003	Chart holder, bed mounting	40			
004	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	4			
005	S0150000 Stand, infusion, st. st., mobile	3			
006	Screen, bed, three section, mobile (*)	3			
007	Trolley, bedpans and urinals, mobile	1			
008	Trolley, oxygen, complete (*)	1			
009	Hoist, patient	1			E
010	S0760605 Pump,suction,portable,220V,w/access	1			E
011	S0222020 Bedpan, st. st. (*)	10			
012	S0210000 Basin, kidney, stainless steel,475ml	5			
013	Wheelchair, non-foldable, universal (*)	1			
014	Gen.surg-001 Dressing set	1			
015	Glass, urine, plastic, 250ml	5			
016	S0640000 Hammer, reflex (*)	1			
017	S0119300 Light,examination,mobile,220-12V (*)	1			E
018	Scale, weight, adult, digital	1			E

15. Kitchen

Activities:

The ward kitchen is equipped to cater for ward occupants and special diets are ordered from the main kitchen.
Facilities are required for staff to prepare beverages and light snacks, especially for diabetic patients.
Washing and storing crockery and cutlery.
Refrigerated storage of milk, etc., no medication and blood products must be in this refrigerator.
Equipment should include a stainless steel sink and drainer.
An electric boiler to prepare beverages for patients should be available.
Kitchen utensils should be stored for dishing up and using the bain-marie trolley from the main kitchen to serve patients meals.

Equipment:

Sq	Item description	Q	C	M	E
001	Microwave oven, medium power range (optional)	1			E
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	2	C		
003	S0002077 Refrigerator, 140 l + 20 l	1			E
004	Boiler, water, 12 l	1			E
005	Cabinet, cutlery	1			
006	S0190000 Pedal bin, st. st	1			

16. Bathroom

Activities:

Mobile patients use this area for personal hygiene; immobile patients are cared for in bed. The availability of a nurse call system is important. If no nurse call is built in, a hand bell should be issued to patients. Staff should be aware of patients in the bathroom, to avoid medico/legal hazards.
Include a bath mat and bath aids, e.g. a patient hoist.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

17. Soiled utility

Activities:

The functions undertaken in the soiled utility room are unpleasant, so there should be sufficient extractor-fans as well as disposable gloves to perform these functions. The room also serves as the temporary storage point and testing area for specimens for urine analysis and stool specimen preparation for example to be sent away for laboratory analysis. Bulky items such as bedpans with their carriers are located here. A wash basin, with trays and mouth wash cups, to assist immobile patients with personal hygiene is available here. These activities may generate significant noise levels and care should be taken to eliminate noise. Thus the soiled utility should be situated in an area which is preferably not too close to patient rooms, but not too distant for functionality or creating an extra burden on nursing staff. Disposal area, if a disposal room is not allocated, and a temporary storage point for linen, and contaminated items for destruction at a later stage. Storage area for containers, e.g. kidney dishes or bowls (nausea, etc.). Safety boxes with used syringes and needles that need to be incinerated are also stored here and then managed according to policy.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	3			
002	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
003	Bin, disposal, mobile, with lid (*)	1			
004	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
005	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
006	Tub, wash, oval, galvanized steel, 65 l (*)	1			
007	Towel, hand, white (*)	1			
008	Dispenser, paper towel, metal (optional) (*)	1	C		
009	Dispenser, soap, hand operated (optional) (*)	1	C		
010	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
011	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	2			
012	Trolley, bedpans and urinals, mobile	1			
013	S0222020 Bedpan, st. st. (*)	10			
014	S0210000 Basin, kidney, stainless steel,475ml	5			
015	Urinal, st. st.	10			
016	Bedpan, orthopaedic, st. st.	5			
017	Glass, urine, plastic, 250ml	5			

18. Cleaner's Room

Activities:

The janitor/cleaner's room is the base from which domestic services staff provide a cleaning service to the inpatient department.

There should be easy access to cleaning equipment and materials for emptying and filling buckets, and the routine servicing and cleaning of equipment.

There should be unrestricted access to the sink – which should have hot and cold water.

The room should be well ventilated so that equipment can dry quickly.

Cleaners' trolleys should be equipped with colour coded buckets for clean and dirty water.

Cleaners' cloths should be colour coded and cleaners must adhere to the coding for infection control purposes. These activities should adhere to hospital policies and protocols.

Mops to be stored in mop rack.

Heavy duty machines e.g. high speed strip and buffing machines located in main housekeeping area (domestic area). These items are available to keep costs down and can be utilized on request for heavy floor maintenance in wards.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m	1	C	M	
002	Trolley, cleaning	1			
003	Rack, mops	1			
004	S2170000 Pail w/bail, handle, polyethylene,10 l	2			
005	Set, cleaning utensils, broom, mop, etc.	1			
006	Shelf, coated steel, 5 levels, starter, 1.00 m	1			

19. Store, equipment, delivery

Activities:

Store area located close to the delivery and labour area for optimal efficiency.

Vacuum extractor easily accessible when needed in delivery room.

Patient trolley stored here.

Equipment:

Sq	Item description	Q	C	M	E
001	Patient transfer, roller system	1			
002	Stretcher patient, epoxy coated, with fixed patient support (*)	1			
003	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	2			
004	S0150000 Stand, infusion, st. st., mobile	2			
005	S0760605 Pump,suction,portable,220V,w/access	1			E
006	S0791500 Extractor, vacuum, Bird, manual, complete, set (*)	2			
007	Gen.surg-028 Circumcision set, newborns	1			
008	Gyn/Obs-002 Delivery set	1			
009	Gyn/Obs-007 Obstetric forceps	1			

20. 6-Bed Bay Labour

Activities:

Ante-natal progress: maternity cases are admitted here.

CTG monitoring and skilled staff required to utilize the equipment and interpret readings.

Management of IV therapy and in some cases assisting patients on induction for labour.

PV and PR (per vagina or per rectum) examinations.

Management of foetal Doppler during stages of labour.

Utilization of watch, to time contractions and document labour progress.

Bed screens for privacy.

Oxygen management if mother and baby require it.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	6	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	6		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	6		M	
004	Wall clock (*)	1	C		E
005	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
006	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
007	Bed, standard, 2 sections, with mattress (*)	6			
008	Cabinet, bedside, with over bed table	6			
009	S5005500 Chair, stackable, without armrests	6			
010	S0150000 Stand, infusion, st. st., mobile	6			
011	Screen, bed, three section, mobile (*)	6			
012	Basket, waste-paper, metal (*)	2			
013	Monitor, CTG, on trolley	2			E
014	S0002061 Doppler, foetal (*)	1			
015	Stethoscope, dual head (*)	2			

21. Toilet

Activities:

This toilet is allocated for labour ward patients.
It should be situated close to the labour ward.
Bowel cleaning (prepped) enema pre-delivery requires short distance to toilet facilities.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

22. Delivery Room

Activities:

Birth rooms will be used for all stages of labour including recovery following birth.
Transfer to obstetric theatre should be easy.
Rooms should be suitable for routine resuscitation procedures.
The ergonomic layout of delivery rooms should be suitable for the following:
A delivery bed with the infant cot and resuscitation equipment nearby.
Adequate space and furniture for the mother's partner is required. Three staff may be present in this area.
An operative vaginal delivery with the mother in the lithotomy position under local or epidural anaesthesia with obstetric, anaesthetic and paediatric medical and midwifery staff in attendance (according to protocol and staff availability per country).
There should be adequate space for any procedures necessary for resuscitation and/or the maintenance of a clear airway.
The insertion and maintenance of epidural anaesthesia during labour.
Space for maternal and foetal monitoring equipment, intravenous therapy, etc. should be made.
Sink with two lever-action taps is required.
Oxygen, suction for both mother and baby and infant warming must be provided in each delivery room.
Utilization of CTG machine and foetal Doppler.
Sufficient renewable/consumables should be allocated to the delivery rooms for the easy management of labour.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	1	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	1		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	1		M	
004	Wall clock (*)	1	C		E
005	S0101605 Trolley, dressing, st. st., 2 trays (*)	1			
006	Trolley, soiled linen, 2 rings.	1			
007	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
008	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
009	S0100804 Cot, baby, hospital type, wheel trolley (*)	1			
010	S0101000 Bed, delivery, standard, with mattress (*)	1			
011	S0150000 Stand, infusion, st. st., mobile	1			
012	Bucket, kick, st. st., mobile	1			
013	S0151001 Stand, single bowl, wheel, w/o bowl (*)	1			
014	S0186502 Table, instr, Mayo type, st.st. mobile (*)	1			
015	Pump, infusion, volumetric	1			E
016	Table, general care, newborns (*)	1		M	E
017	Trolley, oxygen, complete (*)	1			
018	Light, operating, 1 small copula, ceiling mount	1	C	M	E
019	S0002048 Resuscitation, baby, Ambu (DIN)	1			
020	Monitor, CTG, on trolley	1			E
021	S0002061 Doppler, foetal (*)	1			

23. Toilet

Activities:

This toilet is allocated for labour ward patients.
It should be situated close to the labour ward.
Bowel cleaning (prepped) enema pre-delivery requires short distance to toilet facilities.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

24. Shower

Activities:

This is a necessary facility in the labour ward, and should be easily accessible from the labour as well as delivery rooms.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

25. Delivery Room

Activities:

Birthing rooms will be used for all stages of labour including recovery following birth. Transfer to obstetric theatre should be easy. Rooms should be suitable for routine resuscitation procedures. The ergonomic layout of delivery rooms should be suitable for the following: A delivery bed with the infant cot and resuscitation equipment nearby. Adequate space and furniture for the mother's partner is required. Three staff may be present in this area. An operative vaginal delivery with the mother in the lithotomy position under local or epidural anaesthesia with obstetric, anaesthetic and paediatric medical and midwifery staff in attendance (according to protocol and staff availability per country). There should be adequate space for any procedures necessary for resuscitation and/or the maintenance of a clear airway. The insertion and maintenance of epidural anaesthesia during labour. Space for maternal and foetal monitoring equipment, intravenous therapy, etc. should be made. Sink with two lever-action taps is required. Oxygen, suction for both mother and baby and infant warming must be provided in each delivery room. Utilization of CTG machine and foetal Doppler. Sufficient renewable/consumables should be allocated to the delivery rooms for the easy management of labour.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	1	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	1		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	1		M	
004	Wall clock (*)	1	C		E
005	S0101605 Trolley, dressing, st. st., 2 trays (*)	1			
006	Trolley, soiled linen, 2 rings.	1			
007	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
008	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
009	S0100804 Cot, baby, hospital type, wheel trolley (*)	1			
010	S0101000 Bed, delivery, standard, with mattress (*)	1			
011	S0150000 Stand, infusion, st. st., mobile	1			
012	Bucket, kick, st. st., mobile	1			
013	S0151001 Stand, single bowl, wheel, w/o bowl (*)	1			
014	S0186502 Table, instr, Mayo type, st.st. mobile (*)	1			
015	Pump, infusion, volumetric	1			E
016	Table, general care, newborns (*)	1		M	E
017	Trolley, oxygen, complete (*)	1			
018	Light, operating, 1 small copula, ceiling mount	1	C	M	E
019	S0002048 Resuscitation, baby, Ambu(DIN)	1			
020	Monitor, CTG, on trolley	1			E
021	S0002061 Doppler, foetal (*)	1			

26. Soiled Utility

Activities:

The functions undertaken in the soiled utility room are unpleasant, so there should be sufficient extractor-fans as well as disposable gloves to perform these functions.

The room also serves as the temporary storage point and testing area for specimens for urine analysis and stool specimen preparation for example to be sent away for laboratory analysis. Bulky items such as bedpans with their carriers are located here.

A wash basin, with trays and mouth wash cups, to assist immobile patients with personal hygiene is available here.

These activities may generate significant noise levels and care should be taken to eliminate noise. Thus the soiled utility should be situated in an area which is preferably not too close to patient rooms, but not too distant for functionality or creating an extra burden on nursing staff.

Disposal area, if a disposal room is not allocated, and a temporary storage point for linen, and contaminated items for destruction at a later stage.

Inspection of placenta for completeness and documentation of findings on patient record.

Preparation for incineration and following protocol regarding waste management of human tissue.

Safety boxes with used syringes and needles that need to be incinerated are also stored here and managed according to policy.

Storage area for containers, e.g. kidney dishes or bowls (nausea, etc.).

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	3			
002	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
003	Bin, disposal, mobile, with lid (*)	1			
004	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
005	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
006	Tub, wash, oval, galvanized steel, 65 l (*)	1			
007	Towel, hand, white (*)	1			
008	Dispenser, paper towel, metal (optional) (*)	1	C		
009	Dispenser, soap, hand operated (optional) (*)	1	C		
010	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
011	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	2			
012	Trolley, bedpans and urinals, mobile	1			
013	S0222020 Bedpan, st. st. (*)	10			
014	S0210000 Basin, kidney, stainless steel,475ml	5			
015	Urinal, st. st.	10			
016	Bedpan, orthopaedic, st. st.	5			
017	Glass, urine, plastic, 250ml	5			

Renewable/Consumables:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

001	Airways – Guedel 0
002	Airways – Guedel 00
003	Airways – Guedel 3
004	Airways – Guedel 4
005	Airways – Guedel 5
006	Alcohol Swabs
007	Aprons - Disposable
008	Aqua-packs Oxygen humidifier
009	Bag urine baby
010	Bags - Refuse - All Colours and Sizes
011	Bags – Urine
012	Bandage - Crepe
013	Batteries - Medical & General
014	Bedpan Covers

015	Blood Administration Sets
016	Blood Sampling Needle 20 G, disposable, sterile
017	Blood Sampling Needle 21 G, disposable, sterile
018	Blood Sampling Scalp vein 23 G, disposable, sterile
019	Blood Sampling Tube, Vacuum 5ml (Vacutainer)
020	Blood Sampling Tube, Vacuum EDTA 5ml (Vacutainer)
021	Blood Sampling Tube, Vacuum Heparinised 5ml (Vacutainer)
022	Blood Sampling Vacutainer Holder
023	Bottles - Suction - Glass/Plastic
024	Braun Splints (Arm)
025	Bubble tubing box
026	Cannula - Nasal-Oxygen
027	Cannula, IV short,18G,ster,disp
028	Cannula, IV short,20G,ster,disp
029	Cannula, IV short,22G,ster,disp
030	Cannula, IV short,24G,ster,disp
031	Caps - Mop/Bonnet Type
032	Catheter - Jacques
033	Central Venous Pressure Sets
034	Chest, Electrode, Monitor
035	Cleansing Swabs – Sterile
036	Cleansing Swabs Non-Sterile
037	Cold/Hot Packs
038	Combur Tests
039	Connector, Biconical Autoclavable
040	Connector, T/Y
041	Connectors - Plastic – Tapered
042	Container, Sample, urine, plastic, non-sterile, 60 ml
043	Cotton Buds
044	Cotton Wool Balls - Sterile/Non-Sterile
045	Cotton Wool Rolls
046	Covers - PVC - Mattress/Bed Wedge
047	CVP – Cannulae
048	Cytological Fixative Spray
049	Drawsheet,plastic,90x180cm
050	Face Mask Water Repellent
051	Foley Catheters – Latex/Silicone Size 10
052	Foley Catheters – Latex/Silicone Size 12
053	Foley Catheters – Latex/Silicone Size 14
054	Gauze Absorbent Ribbon
055	Gloves – Household Large
056	Gloves – Household Medium
057	Gloves – Surgical Size 6
058	Gloves – Surgical Size 7
059	Gloves – Surgical Size 7 ½
060	Gloves – Surgical Size 8
061	Gloves, exam, latex, large, disp
062	Gloves, exam, latex, medium, disp
063	Gloves, exam, latex, small, disp
064	Hand wash Antiseptic Liquid (Hibiscrub)
065	Hand wash Povidone (Betadine)
066	Hot Packs

067	I.D Band Baby
068	I.D Bands - Patient Yellow
069	I.D. Bands - Patient Pink
070	I.D. Bands - Patient White
071	I.V. Administration Sets – 15 Drop
072	I.V. Administration Sets - 60 Drop
073	I.V. Set, Infusion “Y”, Luer lock, air inlet
074	Incontinence Sheets
075	Intubation stylet, adult, 15 Ch
076	IV Infusion set Buretrol
077	K.Y. Jelly
078	Latex Tubing
079	Linen Savers
080	Masks - Nebulizer/Oxygen
081	Masks – Oxygen 40 %
082	N.G Tubes 12
083	N.G Tubes 14
084	N.G. Tubes 16
085	Nail Brushes - Autoclavable/Disposable
086	Needle, spinal disp,20G(0.9x90mm),sterile
087	Needle, spinal disp,22G(0.7x40mm),sterile
088	Needle, spinal disp. 22G(0.7x90mm),sterile
089	Needle,disp,15G
090	Needle,disp,18G
091	Needle,disp,21G
092	Needle,disp,22G
093	Needle,disp,23G
094	Needle,disp,25G
095	Needles – Butterfly 23G
096	Oxygen T Pieces
097	Oxygen Tubing
098	Pads - Sanitary - Maternity
099	Paper CTG
100	Queen Charlotte Face Masks
101	Razor Medical - Disposable - Single Edge
102	Rubber Bath Mat - Non-Slip
103	S.G. Meter (Urine Meters)
104	Safety Pins Large
105	Safety Pins Medium
106	Sharps Containers (Safety Box/used syringes and needles)
107	Shrouds
108	Soap,toilet,bar,approx.110g,wrapped
109	Spatulas - Tongue
110	Spigots Large
111	Spigots Medium
112	Spigots Small
113	Spray Bottles - Plunger Operated
114	Surgical Spirits
115	Suture absorbable (Chromic) for episiotomy and perinea tears
116	Syringes 10 ml
117	Syringes 2 ml
118	Syringes 20 ml

119	Syringes 5 ml
120	Syringes 50 ml Conical Tip
121	Syringes 50 ml Luer Lock
122	Syringes Insulin
123	Tape - Elastic Adhesive Plaster - White 10 cm
124	Tape - Elastic Adhesive Plaster - White 5 cm
125	Tape Micropore 10 cm
126	Tape Micropore 2.5 cm
127	Tape Micropore 5 cm
128	Tape Surgical Adhesive Hypo-Allergenic
129	Tape, adhesive, Z.O., perforated, 10cmx5m
130	Tape, adhesive, Z.O., 2.5cmx5m
131	Thermometer, clinical, 30-40C
132	Thermometer, clinical, 35-42C
133	Thermometers Fridge
134	Tourniquet, latex rubber, 75cm
135	Tube, Endo-tracheal, disp. + connector, neonate mm, w.o balloon
136	Tube, Endo-tracheal, disp. + connector, 6.5 mm, balloon
137	Tube, Endo-tracheal, disp. + connector, 7 mm, balloon
138	Tube, Endo-tracheal, disp. + connector, 7.5 mm, balloon
139	Tube, Endo-tracheal, disp. + connector, 8 mm, balloon
140	Tube, Suction, CH10, L125cm, ster, disp
141	Tube, Suction, CH12, L125cm, ster, disp
142	Tube, Suction, CH16, L125cm, ster, disp
143	Umbilical clamp (optional)
144	Umbilical cord tape

Capacity, Maternity ward:

With 25 beds, and based on the assumption of 70% occupancy, this will provide for approximately 6,843 patient days per year. Considering an average length of stay of 4 days per admission, this will allow 1,711 admissions per year or \pm 4.6 admissions per day.

Capacity, Delivery:

This area will be able to accommodate four first stage patients and two deliveries simultaneously. In case of 100% occupancy of the delivery rooms, the labour bays should be equipped in such a way that patients can be accommodated there to deliver.

Location, Maternity ward:

The maternity ward should contain the delivery rooms or be close to the delivery rooms for optimal functionality. If caesarean section OT is not within the maternity section, the maternity ward should be easily accessible to the main OT.

Location, Delivery:

This department should be located close to the maternity ward, to make the transfer of obstetric cases to and from the delivery room as uncomplicated as possible.

3.3.1.5 Surgical Suite, 2 theatres

Description/Activities:

An operating theatre is a restricted access environment where surgical and invasive interventions are performed. It must be organized and equipped so that control can be exercised over all persons and materials who enter and exit this area.

The surgery that will be described here is purely curative in nature and excludes all forms of specialty surgery such as vascular, cardiac and renal interventions.

Surgical instrument sets included in the generic specification list cover the surgical procedures that will be done in this level facility and accommodation has been made for more advanced procedure instruments which are included in the document as optional.

The operating theatres deal with scheduled block bookings as well as emergency procedures.

The surgical suite consists of two operating rooms associated with the following supporting facilities as detailed in the succeeding sections:

- 01 Reception / Nurse
- 02 Entrance/patient transfer
- 03 Staff Change, male
- 04 Toilet
- 05 Shower
- 06 Staff Change, female
- 07 Toilet
- 08 Shower
- 09 Head Nurse
- 10 Doctors Office
- 11 Theatre
- 12 Scrub (2)
- 13 Set-up area
- 14 Theatre
- 15 Store, equipment, surgical suite
- 16 Store, sterile supplies
- 17 Clean utility, surgical suite
- 18 3-Bed Recovery
- 19 Staff Lounge
- 20 Soiled Utility
- 21 Cleaners room

01. Reception/Nurse

Activities:

A duty room or duty station within the restricted access areas which is so situated, constructed and equipped that it is possible for the nursing staff to observe patients directly, and where necessary render assistance.

This area need not be a room, but may form an integral part of the main patient corridor, recovery area or bed-receiving area.

Equipment:

Sq	Item description	Q	C	M	E
001	Wall clock (*)	1	C		E
002	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	2			
006	Basket, waste-paper, metal (*)	1			

02. Entrance/Patient transfer

Activities:

This area should be large enough to allow for the transfer of patients from a bed to a trolley. A line should be clearly marked in red on the floor, beyond which no person from outside the operating department should be permitted to set foot without obtaining authority and putting on protective clothing.

Holding bay: space should be located to allow for the supervision of patients waiting to go into theatre.

Equipment:

Sq	Item description	Q	C	M	E
001	Patient transfer, roller system	1			
002	Stretcher patient, epoxy coated, with fixed patient support	2			

03. Staff Change, male

Activities:

Suitable separate changing room facilities must be provided for male and female staff.

The changing room must have one door that opens into the restricted access area, and must have a separate entrance from outside the restricted access area.

An operating theatre changing room should have a floor area that can accommodate many individuals at peak times, e.g. when staff come on duty and when theatre list starts and many staff are present at the same time.

Storage facilities for the personnel's personal clothing and effects.

Storage of clean theatre attire and inside shoes and OT gum boots.

Provision must also be made for soiled theatre apparel.

Wash hand basins, a ratio of at least 1 to 8 people.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	1			
002	Shelf, coated steel, 5 levels, starter, 1.00 m	1			
003	Locker, 1 vertical compartment, metal, 0.30 m	10			
004	Basket, waste-paper, metal	1			

04. Toilet

Activities:

Partitioned-off toilets at a ratio of 1 toilet:12 persons.
Located within the staff changing facility.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

05. Shower

Activities:

A shower facility is a necessity, to be utilized if necessary after attending to certain high risk cases.

Equipment:

Sq	Item description	Q	C	M	E
001	Dispenser, soap, hand operated (optional)	1	C		

06. Staff Change, female

Activities:

Suitable separate changing room facilities must be provided for male and female staff.
The changing room must have one door that opens into the restricted access area, and must have a separate entrance from outside the restricted access area.
An operating theatre changing room should have a floor area that can accommodate many individuals at peak times, e.g. when staff come on duty and when theatre list starts and many staff are present at the same time.
Storage facilities for the personnel's personal clothing and effects.
Storage of clean theatre attire and inside shoes and OT gum boots.
Provision must also be made for soiled theatre apparel.
Wash hand basins, a ratio of at least 1 to 8 people.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	1			
002	Shelf, coated steel, 5 levels, starter, 1.00 m	1			
003	Locker, 1 vertical compartment, metal, 0.30 m	10			
004	Basket, waste-paper, metal	1			

07. Toilet

Activities:

Partitioned-off toilets at a ratio of 1 toilet:12 persons.
Located within the staff changing facility.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white	1			
002	Dispenser, paper towel, metal (optional)	1	C		
003	Dispenser, soap, hand operated (optional)	1	C		

08. Shower

Activities:

A shower facility is a necessity, to be utilized if necessary after attending to certain high risk cases.

Equipment:

Sq	Item description	Q	C	M	E
001	Dispenser, soap, hand operated (optional)	1	C		

09. Head Nurse Office

Activities:

This room is useful, but not essential.

The operating room manager/head nurse uses the office to deal with nursing staff and surgeon interaction.

This room should be situated at the entrance of the operating theatre for easy access by staff and surgeons.

Windows that allow a view over the reception and recovery area to facilitate the head nurse with her functions are a plus.

Equipment:

Sq	Item description	Q	C	M	E
001	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
002	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
003	Chair, desk, height adjustable (*)	1			
004	S5005500 Chair, stackable, without armrests	2			
005	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
006	Basket, waste-paper, metal (*)	1			

10. Doctor's Office

Activities:

This room is useful, but not essential.

This room should be situated preferably at the entrance to the operating theatre.

Equipment:

Sq	Item description	Q	C	M	E
001	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
002	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
003	Chair, desk, height adjustable (*)	1			
004	S5005500 Chair, stackable, without armrests	2			
005	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
006	Basket, waste-paper, metal (*)	1			
007	Viewer, double field, x-ray film	1	C		E

11. Theatre (1)

Activities:

Patient entrance into theatre and exit out of theatre should be through double self-closing doors situated in the centre of the operating room entrance.

The patient is brought into the OT on a surgery patient trolley and transferred to an operating table using a patient roller.

The patient, scrub team and anaesthetist occupy a central area, together with the equipment being used for the operative procedure. The remaining space is used for circulation, to minimise movement within the operating room.

Only essential equipment is to be placed in OT and access equipment stored in store rooms and utilized in theatre when required.

As a fixed wall pendant for anaesthesia gasses is optional, there should be oxygen stand alone cylinders or gas points from the wall and central oxygen bank, depending on the facilities available in the hospital.

If set-up rooms are too small or not available, trolleys can be prepared in the operating room.

General anaesthesia administration could take place in an anaesthetic room and patient then transferred to the operating room. Alternatively, the patient can be induced and anaesthesia will be maintained in the operating room.

Safety box utilization policy to be adhered to. This box requires checking regularly as it could be a source of infection if not utilized according to instructions.

Swab and instrument count to be done according to policies and procedure. Use of swab rack, swab count-board and a kick about for used swabs (with lid) should be placed into a bag for incineration.

The operating room is used as a multi-disciplinary operating room and equipment should be brought from the store room and instruments taken from the sterile store area for use in the operating room.

A work trolley is required for nurses to do administration work and the anaesthetist to do the intra-operative and doctors to complete the OT form post operatively before the patient is discharged to recovery.

Electrical equipment is checked before each list for functionality e.g. coagulation, patient's earth plate, cable and connection to coagulation equipment.

The anaesthetist and anaesthetic nurse are responsible for anaesthetic equipment and patients under anaesthetic.

The scrub nurse is responsible for the instruments, sutures, swabs, etc. counts, and infection control.

The doctor is in overall charge of the case and communication, as well as post-operative administration and management.

If X-ray facility is utilized, use lead aprons from the store area.

It is advisable to have a floor nurse to do all the running for the scrub nurse or in some instances the anaesthetic nurse can also perform the functions of the floor nurse. This depends on the hospital policy and protocol.

Additional facilities, a ceiling mounted light, X-ray viewing screens, a clock with sweep second hand and a swab count record board, are usually arranged on a theatre control panel where they may be easily viewed by staff.

Equipment:

Sq	Item description	Q	C	M	E
001	Pendant, anaesthesia, fixed position (optional)	1	C	M	E
002	Elapsed time clock	1	C		E
003	Trolley, anaesthesia, polymer, with drawers	1			
004	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
005	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	2			
006	S0150000 Stand, infusion, st. st., mobile	2			
007	Bucket, kick, st. st., mobile	1			
008	Rack, swab, st. st., with drip tray	1			
009	Stand, double bowl, single, wheel, w/o bowl	1			
010	S0151001 Stand, single bowl, wheel, w/o bowl (*)	2			
011	S0186502 Table, instr, Mayo type, st.st. mobile (*)	1			

012	Board, white, framed, 1.20 x 0.70 m, with pencil tray	1			
013	Pump, infusion, drop controlled (Optional)	1			E
014	Pump, infusion, volumetric	1			E
015	Pump, suction, electric, surgical, 2 x 3 l	1			E
016	Blanket, warming, children	1			E
017	Blanket, warming, adults	1			
018	Bowl, st. st., diam 10 cm	4			
019	S0385000 Tourniquet, latex rubber, 75cm (*)	1			
020	Bowl, st. st., diam. 30 cm	4			
021	depressor, tongue, st. st., child	1			
022	depressor, tongue, st. st., adult	2			
023	Bowl, st. st., diam 20 cm	2			
024	Coagulation unit, electro, mobile, 200 W	1			E
025	Light, operating, 1 large copula, ceiling mounted	1	C	M	E
026	Table, operating, mob., general, 3 sect., mechanical, stand. access.	1			
027	Bag, pressure IV fluids	1			
028	Anaesthesia machine, ventilator, 2 vaporizers, basic (incl cylinders)	1		M	E
029	S0746705 Laryngoscope, set (Mackintosh)	1			
030	forceps, Magill, adult	1			
031	forceps, Magill, child	1			
032	set, laryngeal mask (4 pcs)	1			
033	Holder, masks	1			
034	Gauge, mouth, set	1			
035	Laryngoscope, paediatric, set	1			
036	Monitor, patient, operating theatre, adult/child	1			E
037	Stethoscope, dual head (*)	1			
038	Viewer, double field, x-ray film	1	C		E

12. Scrub area (2)

Activities:

A scrubbing-up area outside but adjacent to the operating room should be provided.

This area should have direct access to the operating room

A scrubbing-up area or room should be less than 2 meters wide and should be equipped to allow simultaneous scrubbing-up by at least two persons under hot and cold running water from elbow-operating taps or alternative method, over splash-limiting basins or a drainage. Medical staff can gown in the scrubbing room prior to entering the operating room or in the operating room.

Note that if the scrub up area is for more than one operating room, there should be additional scrub basins for at least four persons to scrub up together.

This area should be equipped with soap, sterile scrub-up brushes and towelling facilities.

There should be an automatic door closing system.

Sterile gowns and gloves should be available on a trolley in the scrub area or at the entrance of the operating room.

In the case of a minor theatre, provision need only be made for scrubbing-up for two people, and the scrub-up area may be within the operating theatre.

Equipment:

Sq	Item description	Q	C	M	E
001	Surgical scrub unit, 2 sections	1	C	M	
002	Dispenser, soap, hand operated (optional)	1	C		

13. Set-up area

Activities:

Store area for suture material that could be stored on a trolley that could be wheeled into theatre.

Shelves for the days sets and pack to be stored during theatre list.

Mayo table, dressing trolley, and runners to set up for the next case are kept in this area.

Doors into the operating room should be big enough to wheel through the set trolleys from the set up room into the operating room without contact with doors or non sterile surfaces.

Equipment:

Sq	Item description	Q	C	M	E
001	S0101605 Trolley, dressing, st. st., 2 trays (*)	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	2			
004	S0186502 Table, instr, Mayo type, st.st. mobile (*)	2			
005	Warmer, blood	1			E
006	Warmer, fluids	1			E

14. Theatre (2)

Activities:

Patient entrance into theatre and exit out of theatre should be through double self closing doors situated in the centre of the operating room entrance.

The patient is brought into the OT on a surgery patient trolley and transferred to an operating table using a patient roller and or transfer trolley.

The patient, scrub team and anaesthetist occupy a central area, together with the equipment being used for the operative procedure. The remaining space is used for circulation, to minimise movement within the operating room.

Only essential equipment is to be placed in the OT and access equipment stored in store rooms and utilized in theatre when required.

As a fixed wall pendant for anaesthesia gasses is optional, there should be oxygen stand alone cylinders or gas points from the wall and central oxygen bank, depending on the facilities available in the hospital.

If set-up rooms are too small or not available, trolleys can be prepared in the operating room.

General anaesthesia administration could take place in an anaesthetic room and patient then transferred to the operating room, or alternatively the patient can be induced and anaesthesia will be maintained in the operating room.

Swab and instrument count to be done according to policies and procedure. Use of swab rack, swab count-board and a kick about for used swabs (with lid) should be placed into a bag for incineration.

The operating room is used as a multi-disciplinary operating room and equipment should be brought from the store room and instruments taken from the sterile store area for use in the operating room.

A work trolley is required for nurses to do administration work and the anaesthetist to do the intra-operative and doctors to complete the OT form post operatively before the patient is discharged to recovery.

Very important: Electrical equipment is checked before each procedure.

The anaesthetist and anaesthetic nurse are responsible for anaesthetic equipment and patients under anaesthetic.

Safety box utilization policy to be adhered to. This box requires checking regularly as it could be a source of infection if not utilized according to instructions.

The scrub nurse is responsible for the instruments, sutures, swabs, etc. counts and infection control.

The doctor is in overall charge of the case and communication, as well as post-operative administration and management.

If X-ray facility is utilized, use lead aprons from the store area.

It is advisable to have a floor nurse to do all the running for the scrub nurse. In some instances, the anaesthetic nurse can also perform the functions of the floor nurse. This depends on the hospital policy and protocol.

Additional facilities, such as a ceiling mounted light, X-ray viewing screens, a clock with sweep second hand and a swab count record board, are usually arranged on a theatre control panel where they may be easily viewed by staff.

Equipment:

Sq	Item description	Q	C	M	E
001	Pendant, anaesthesia, fixed position (optional)	1	C	M	E
002	Elapsed time clock	1	C		E
003	Trolley, anaesthesia, polymer, with drawers	1			
004	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
005	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	2			
006	S0150000 Stand, infusion, st. st., mobile	2			
007	Bucket, kick, st. st., mobile	1			
008	Rack , swab, st. st., with drip tray	1			
009	Stand, double bowl, single, wheel, w/o bowl	1			
010	S0151001 Stand, single bowl, wheel, w/o bowl (*)	2			
011	S0186502 Table, instr, Mayo type, st.st. mobile (*)	1			
012	Board, white, framed, 1.20 x 0.70 m, with pencil tray	1			
013	Pump, infusion, drop controlled (Optional)	1			E
014	Pump, infusion, volumetric	1			E
015	Pump, suction, electric, surgical, 2 x 3 l	1			E
016	Blanket, warming, children	1			E
017	Blanket, warming, adults	1			
018	Bowl, st. st., diam 10 cm	4			
019	S0385000 Tourniquet, latex rubber, 75cm (*)	1			
020	Bowl, st. st., diam. 30 cm	4			
021	depressor, tongue, st. st., child	1			
022	depressor, tongue, st. st., adult	2			
023	Bowl, st. st., diam 20 cm	2			
024	Coagulation unit, electro, mobile, 200 W	1			E
025	Light, operating, 1 large copula, ceiling mounted	1	C	M	E
026	Table, operating, mob., general, 3 sect., mechanical, stand. access.	1			
027	Bag, pressure IV fluids	1			
028	Anaesthesia machine, ventilator, 2 vaporizers, basic (incl cylinders)	1		M	E
029	S0746705 Laryngoscope, set (Mackintosh)	1			
030	forceps, Magill, adult	1			
031	forceps, Magill, child	1			
032	set, laryngeal mask (4 pcs)	1			
033	Holder, masks	1			
034	Gauge, mouth, set	1			
035	Laryngoscope, paediatric, set	1			
036	Monitor, patient, operating theatre, adult/child	1			E
037	Stethoscope, dual head (*)	1			
038	Viewer, double field, x-ray film	1	C		E

15. Store, Equipment, Surgical Suite

Activities:

The equipment store area in the operating room should be supplied with a sufficient number of electrical plugs to keep the electrical equipment plugged in, and in case of power failure to work on back up electrical supply / or emergency electrical supply.

The logic behind the equipment store is that only essential equipment for a specific operation should be in operating rooms when the operation is conducted. Once the operation is completed, the specific equipment should be cleaned, disinfected and stored in the equipment room.

A dental cart should only be wheeled in and checked for each dental operation, and then cleaned and stored away for the next dental procedure.

A headlight is only used for specific procedures and is then stored away.

Equipment is always stored at the same space/location so that if needed in an emergency all staff know where the equipment is kept.

Equipment:

Sq	Item description	Q	C	M	E
001	Patient transfer, roller system	1			
002	S0187004 Trolley, general purpose,st.st.,mobile, 2 trays (*)	1			
003	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
004	S0150000 Stand, infusion, st. st., mobile	2			
005	Hygrometer, humidity and temperature	1			
006	Incubator, transport, basic	1			E
007	Table, general care, newborns (*)	1		M	E
008	Treatment unit, dental, complete, mobile, for operating theatre	1	C	M	E
009	Dental instrument cabinet, mobile	1			E
010	Pillow, abduction	1			
011	Vitrectomy, combined with an aspiration/irrigation unit	1		M	E
012	Microscope, operating, basic, on mobile stand	1			E
013	Support, head, operating table	1			
014	Positioner, bag, patient, small	3			
015	Positioner, bag, patient, medium	2			
016	Positioner, bag, patient, large	1			
017	Treatment unit, ENT, complete, mobile, for operating theatre	1	C	M	E
018	Headlight, fiberoptic (optional)	1			E
019	nerve stimulator	1			E
020	Apron, protective, small	1			
021	Apron, protective, medium	2			
022	Apron, protective, large	2			

16. Store, Sterile Supply

Activities:

The transporting system provided for the sterilised items must be designed to preserve pack integrity and product sterility.

Sterile instrument sets from CSSD are stored in this area.

All sterile swabs and sterile renewable/consumables for OT are kept in this area.

Note that this is the store area for all the surgical disciplines.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose,st.st.,mobile, 2 trays (*)	1			
002	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
003	Gen.surg-002 Suture set	1			
004	Gen.surg-003 Abdominal set	1			

005	Gen.surg-004 Vascular clamp set	1			
006	Gen.surg-005 Basic surgery set	1			
007	Gen.surg-006 Abscess/suture set	1			
008	Gen.surg-007 Tracheotomy set	1			
009	Gen.surg-008 Laparotomy set	1			
010	Gen.surg-009 Small dissection set	1			
011	Gen.surg-010 Cut down set, adult/paediatric	1			
012	Gen.surg-011 Intestinal set	1			
013	Gen.surg-012 Minor paediatric set	1			
014	Gen.surg-013 Major paediatric set, extras	1			
015	Gen.surg-014 Minor surgical set	1			
016	Gen.surg-015 Suprapubic puncture set	1			
017	Gen.surg-016 Chest drainage set, underwater-seal	1			
018	Gen.surg-017 Cholecystectomy set, extras	1			
019	Gen.surg-018 Proctoscope set	1			
020	Gen.surg-019 Sigmoidoscope set	1			
021	Gen.surg-020 Laparotomy set, infants	1			
022	Gen.surg-021 Abdominoperineal resection set	1			
023	Gen.surg-022 Pancreatectomy & splenectomy set	1			
024	Gen.surg-023 Blood exchange set	1			
025	Gen.surg-024 Simple mastectomy set	1			
026	Gen.surg-025 Radical mastectomy set	1			
027	Gen.surg-027 Circumcision set, adults	1			
028	Gen.surg-028 Circumcision set, newborns	1			
029	Gen.surg-029 Vasectomy set	1			
030	Gen.surg-030 Rectal and haemorrhoidal set	1			
031	Gen.surg-031 Thyroidectomy set	1			
032	Gen.surg-032 Diaphragmatic hernia repair set	1			
033	Gen.surg-033 Thoracotomy set (optional)	1			
034	Gen.surg-034 Cardiac arrest set (optional)	1			
035	Gen.surg-035 Shunt set, arterio-venous (optional)	1			
036	Plastic.surg-001 Dermatome set	1			
037	Plastic.surg-002 Skin grafting set	1			
038	Plastic.surg-003 Plastic repair set	1			
039	Plastic.surg-004 Plastic suture set, delicate	1			
040	Plastic.surg-005 Plastic reconstruction set	1			
041	Gyn/Obs-004 Craniopclasy/craniotomy set	1			
042	Gyn/Obs-005 Dilation & curettage (D&C) set	1			
043	Gyn/Obs-007 Obstetric forceps	1			
044	Gyn/Obs-008 Caesarean section set	1			
045	Gyn/Obs-009 Abdominal hysterectomy set	1			
046	Gyn/Obs-010 Vaginal hysterectomy set, extras	1			
047	Gyn/Obs-011 Gynaecology examination set (EUA)	1			
048	Gyn/Obs-012 Cervical biopsy set	1			
049	Gyn/Obs-013 Tuboplasty set, micro (optional)	1			
050	Uro-001 Urethral dilatation set	1			
051	Uro-002 Nephrectomy set	1			
052	Uro-003 Prostatectomy supplementary set	1			
053	Orth-001 Amputation set	1			
054	Orth-002 Bone set I, large bones	1			
055	Orth-003 Bone set II, small bones	1			
056	Orth-004 External fixator set, complete, adult	1			

057	Orth-005 External fixator set, complete, pediatric	1			
058	Orth-006 External fixator set, complementary	1			
059	Orth-007 Pin fixation set	1			
060	Orth-008 Plaster removal set	1			
061	Orth-009 Skull traction set	1			
062	Orth-010 Meniscotomy set	1			
063	Orth-011 Arthroscopy set (optional)	1			
064	Orth-012 Video set for arthroscopy (optional)	1			
065	Orth-013 Bone set for hand surgery	1			
066	Orth-014 Tendon supplementary set	1			
067	Orth-015 Laminectomy set	1			
068	Orth-016 Osteosynthese basic instrument set (optional)	1			
069	Orth-017 Osteosynthese screw set (optional)	1			
070	Orth-018 Osteosynthese plate set (optional)	1			
071	Orth-019 Osteosynthese set for small fragments, Instruments, screws and plates (optional)	1			
072	Orth-020 Osteosynthese set for DHS/DCS, instruments and screws (optional)	1			
073	Orth-021 Osteosynthese implant set for DHS/DCS (optional)	1			
074	Neuro-001 Trepanation set	1			
075	Neuro-002 Craniotomy set, basic neuro surgical (optional)	1			
076	Neuro-003 Sympathectomy set (optional)	1			
077	Dental-001 Dental syringe set (*)	1			
078	Dental-002 Dental set	1			
079	ENT-001 Myringotomy set	1			
080	ENT-002 Ear-foreign body removal set	1			
081	ENT-003 Nose-foreign body removal set	1			
082	ENT-004 Tonsillectomy and adenoidectomy set	1			
083	ENT-005 Headlight set	1			
084	ENT-006 Rhinoplasty set (optional)	1			
085	ENT-007 Submucous resection of nasal septum set	1			
086	ENT-008 Mastoidectomy set (optional)	1			
087	ENT-009 Palatoplasty set (cleft Palate)	1			
088	Ophthalm-001 Enucleation set	1			
089	Ophthalm-002 Cataract set	1			
090	Ophthalm-003 Pterygion set	1			
091	Ophthalm-004 Chalazion set	1			
092	Ophthalm-005 Tarsorrhaphy set	1			
093	Ophthalm-006 Entropion (trichiasis) set	1			
094	Ophthalm-007 Eye-foreign body removal set	1			
095	Ophthalm-009 Set, surgical instruments for lachrymal ducts intubation	1			
096	Ophthalm-008 Set, surgical instruments for micro-surgery and vitrectomy	1			
097	Ophthalm-010 Set, surgical instruments for micro-surgery and strabismus	1			

17. Clean Utility, Surgical Suite

Activities:

These are mechanically ventilated separate store rooms, or storage cupboards for the storage of IV Fluid, clean linen, medicines, equipment and necessary sundry items.

Storage space/room must be provided for sterile packs. No wood or porous shelving may be used in this area.

All operating room medication that needs to be stored at a temperature of 4 °C should be stored in the refrigerator.

This room should be so situated that operating room staff have easy access to the clean utility store where drugs and medication are stored.

This area can also be utilized for flash autoclaving of equipment in case of emergencies.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
004	S0002077 Refrigerator, 140 l + 20 l (*)	1			E
005	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	4			
006	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
007	Cabinet, st., double door, with drug compartment, 1.00 m	1			E
008	Sterilizer, steam, bench top, 0.20 x 0.20 x 0.45 m, w generator (*)	1		M	E

18. 3-Bed Recovery

Activities:

The recovery area should be within the restricted area.

A recovery area should have room for two beds (one per operating room) and one over-flow bed space to accommodate patients from the two operating rooms.

Adequate staffing should be available to recover the patients and should be able to use the emergency equipment (e.g. adult and paediatric resuscitators) and to maintain a patient's airway.

A clinical basin should be provided.

One oxygen and one suction for each bed is to be available.

Electrical switch socket outlets for every recovery bed or trolley must be available.

Facilities for screening off to ensure patient privacy: bed screens or curtain track with curtain between the bays.

An emergency call system should be installed and adherence to policy and protocol regarding emergency management followed.

Sufficient lighting to enable adequate observation should be installed.

A work surface to do administrative tasks during recovery of patients, and shelving to store necessary equipment are required.

It is important that patients who need extended care or high dependency care post-surgery should be kept in the recovery room until they are stable.

This area should be used to stabilise the patient post-surgery, and to prepare for transfer if transfer is needed.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	3	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	3		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	3		M	
004	Patient transfer, roller system	1			
005	S0101605 Trolley, dressing, st. st., 2 trays (*)	1			

006	Bed, standard, 2 sections, with mattress (*)	3			
007	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
008	Screen, bed, three section, mobile (*)	2			
009	S0190000 Pedal bin, st. st (*)	1			
010	Trolley, oxygen, complete (*)	1			
011	Ventilator, intensive care, adult / child (basic)	1		M	E
012	S0845001 Resuscitator, hand-oper., adult, set (*)	1			
013	S0119300 Light,examination,mobile,220-12V (*)	1			E
014	Monitor, patient, portable, 3-channel	1			E
015	Stethoscope, dual head (*)	1			
016	Stethoscope, paediatric head (*)	1			

19. Staff lounge

Activities:

Rest rooms or rooms for operating theatre staff must be within the operating theatre, within the restricted area.

If light refreshments are to be served, facilities for storing, preparing and serving such refreshments should be provided.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
002	S0002077 Refrigerator, 140 l + 20 l (*)	1			E
003	S5005500 Chair, stackable, without armrests	8			
004	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	2			
005	Basket, waste-paper, metal (*)	2			

20. Soiled Utility

Activities:

This area should be as close as possible to the back or non-sterile exit.

The flow of the operating rooms should run from clean to dirty, and staff should be trained and adhere to infection control policies and procedures.

This acts as a store area for contaminated materials until they can be disposed of.

Human tissues to be incinerated, accompanied with the documentation for incineration of tissues, should adhere to hospital policy and Human Tissue Act of the country.

Used sharps/safety boxes are to be stored here and not in the operating room, which is a clean area. They should then be sent for incineration.

This area, also known as the sluice room, should be fitted with the following:

A deep bowl sink and/or slop hopper must be provided.

A wash hand basin with hot and cold water must be available.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	3			
002	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
003	Bin, disposal, mobile, with lid (*)	1			
004	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
005	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
006	Tub, wash, oval, galvanized steel, 65 l (*)	1			
007	Towel, hand, white (*)	1			
008	Dispenser, paper towel, metal (optional) (*)	1	C		
009	Dispenser, soap, hand operated (optional) (*)	1	C		

010	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
011	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	2			
012	Trolley, bedpans and urinals, mobile	1			
013	S0222020 Bedpan, st. st. (*)	1			
014	S0210000 Basin, kidney, stainless steel,475ml	5			
015	Urinal, st. st.	1			
016	Glass, urine, plastic, 250ml	1			

21. Cleaner's room

Activities:

A cleaner's room or area for the storage of cleaning equipment and materials must be provided. Sufficient mop handle clamps and shelving for theatre hygiene should be fitted. Adequate shelving and cupboards for storing cleaning materials and equipment must be provided. A rust-proof wash sink with hot and cold water should be available. Adherence to colour coding for dusting is essential. Each operating room should have a dedicated cleaning trolley and mop heads should be cleaned and sterilised according to hospital policy, after utilization.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Trolley, cleaning	1			
003	Rack, mops (*)	1			
004	S2170000 Pail w/bail,handle,polyethylene,10 litre (*)	2			
005	Set, cleaning utensils, broom, mop, etc. (*)	1			
006	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			

Renewable/Consumables:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Airway Guedel, (0 - Paediatric)
002	Airway Guedel, (00 - Neonatal)
003	Airway Guedel, (1 - Child)
004	Airway Guedel, (2 - Adolescent)
005	Airway Guedel, (3 - Adult)
006	Airway Guedel, (4 + 5 – Adult Large)
007	S0305000 Apron, protection, plastic, reusable
008	Bag, Enterostomy, opening, disposable + Clamp
009	Bag, urine, paediatric
010	Bag, urine, with tap and non return valve
011	S0330500 Bag,urine,collecting,2000ml
012	Band, Esmarch, 6 cm x 5 m
013	Bandage, Elastic (crepe), 10 cm x 1 m
014	Bandage, Tricot, Tubular, 10cm x 25 m
015	Bandage, Tricot, Tubular, 10cm x 5 m
016	Bandage, Tricot, Tubular, 5 cm x 5 m
017	S0503025 Bandage,elastic,7.5cmx5m,roll
018	S0512110 Bandage,gauze,5cmx5m,roll
019	S0512111 Bandage,gauze,8cmx4m,roll
020	S0512200 Bandage,tricot,tubular,5cmx25m
021	S0572510 Blanket,survival,220x140cm

022	Blood Sampling Needle 20 G, disposable, sterile
023	Blood Sampling Needle 21 G, disposable, sterile
024	Blood Sampling Scalp vein 23 G, disposable, sterile
025	Blood Sampling Tube, Vacuum 5ml (Vacutainer)
026	Blood Sampling Tube, Vacuum EDTA 5ml (Vacutainer)
027	Blood Sampling Tube, Vacuum Heparinised 5ml (Vacutainer)
028	Blood Sampling Vacutainer Holder
029	Bouffant Nurse Cap
030	Bubble Tubing
031	S0709210 Cannula,IV short,18G,ster,disp
032	S0709220 Cannula,IV short,20G,ster,disp
033	S0709225 Cannula,IV short,22G,ster,disp
034	S0709230 Cannula,IV short,24G,ster,disp
035	Catheter Peritoneal Dialysis, CH 12, ster,disp, complete se
036	Catheter Sup-Pubic, CH 10, 1.65 cm, ster,disp., adult
037	Catheter, ureteral, CH5, ster, disp
038	Catheter, urethral, CH6, ster, disp
039	Catheter, urethral, CH7, ster, disp
040	S0323300 Catheter,Foley,CH10,ster,disp
041	S0323301 Catheter,Foley,CH12,ster,disp
042	S0323302 Catheter,Foley,CH14,ster,disp
043	S0323303 Catheter,Foley,CH18,ster,disp
044	S0322010 Catheter,urethral,CH12,ster,disp
045	S0323010 Catheter,urethral,CH14,ster,disp
046	Compress, Abdominal, 40x40cm
047	Compress, Swab, 20x 20 cm
048	S0523005 Compress,gauze,10x10cm,n/ster/PAC-100
049	S0523055 Compress,gauze,10x10cm,ster/PAC-5
050	S0523050 Compress,paraffin,10x10cm,ster/BOX-10
052	S0324500 Connector, biconical, OD 7-11-7mm
053	Connectors For Plastic Tubing
054	Cotton Tipped Applicator
055	S0519600 Cotton wool,500g,roll,non-ster
056	CVP - Set
057	Diathermy pencil/ball/blade
058	Disposable, dispersive, electrode(Diathermy pad)
059	Drain, corrugated sheet, 3 cm x 25 cm
060	Drain, Thoracic + Trocar, sterile, disp, CH 14
061	Drain, Thoracic + Trocar, sterile, disp, CH 24
062	Drain, tubular, penrose, 1 cm x 22.5 cm
063	Drain, wound, CH 12, ster, disp, 450 ml (Redon + Needle)
064	Drain, wound, CH 16, ster, disp, 450 ml (Redon + Needle)
065	Drain, wound, CH 6, ster,disp, 120 ml (Redon)
066	Drainage, Thoracic, complete set, sterile disposable CH 14
067	Drainage, Thoracic, complete set, sterile disposable CH 24
068	Drainage, Thoracic, Valve No Return
069	S0361020 Drawsheet,plastic,90x180cm
070	Elastoplasts, 10 cm x 3 m
071	Electrode, Chest, Monitor
072	S0521425 Envelope,plastic,10x15cm/PAC-100
073	S0319000 Extractor,mucus,20ml,ster,disp
074	File for ampoules

075	Gauze Ball, Large (sterile)
076	Gauze Ball, Large (un-sterile)
077	Gauze Ball, Peanut (sterile)
078	Gauze Swabs RAYTEX® 10 X 10 cm
079	Gauze Swabs, Un-sterile (Green)
080	S0521900 Gauze,roll,90cmx100m,non-ster
081	S0330012 Gloves,exam,latex,large,disp/BOX-100
082	S0330011 Gloves,exam,latex,medium,disp/BOX-100
083	S0330010 Gloves,exam,latex,small,disp/BOX-100
084	S0330100 Gloves,gynaeco,6.5,ster,disp,pair
085	S0330102 Gloves,gynaeco,7.5,ster,disp,pair
086	S0330104 Gloves,gynaeco,8.5,ster,disp,pair
087	S0328001 Gloves,surg,6.5,ster,disp,pair
088	S0328501 Gloves,surg,7,ster,disp,pair
089	S0329001 Gloves,surg,7.5,ster,disp,pair
090	S0329501 Gloves,surg,8,ster,disp,pair
091	S0329901 Gloves,surg,8.5,ster,disp,pair
092	Gum elastic bougie, CH 15, 60 cm
093	Intubation stylet, adult, 15 Ch
094	Intubation stylet, paediatric, 10 Ch
095	S0531996 Lancet,blood,ster,disp/PAC-200
096	Mask, Clinical, Disposable (non-woven)
097	Mask, Dental, Ear Loop
098	Mask, Protection, High Filtration
099	Needle, dental sterile 25G Long, Orange
100	Needle, dental sterile 27G Short Gray
101	Needle, dental sterile 30G Extra Short, Yellow
102	Needle, dental sterile, 25G Short, Orange
103	Needle, dental sterile, 27G Long, Gray
104	Needle, dental sterile, 30G Short, Yellow
105	S0747420 Needle,disp,19G(1.1x40mm),ster/BOX-100
106	S0747432 Needle,disp,21G(0.8x40mm),ster/BOX-100
107	S0747440 Needle,disp,22G(0.7x30mm),ster/BOX-100
108	S0747452 Needle,disp,23G(0.6x25mm),ster/BOX-100
109	S0747445 Needle,disp,25G(0.5x16mm),ster/BOX-100
110	S0749000 Needle,reuse,18Gx2"/BOX-12
111	S0748850 Needle,reuse,18Gx3"/BOX-12
112	S0752000 Needle,reuse,20Gx1-1/2"/BOX-12
113	S0750500 Needle,reuse,22Gx1-1/4"/BOX-12
114	S0750700 Needle,reuse,23Gx1"/BOX-12
115	S0751000 Needle,reuse,24Gx3/4"/BOX-12
116	S0751502 Needle,reuse,26Gx3/8"/BOX-12
117	S0744400 Needle,scalp vein,21G,ster,disp
118	S0744300 Needle,scalp vein,25G,ster,disp
119	S0748300 Needle,spinal,20G(0.9x90mm),ster,disp
120	S0747995 Needle,spinal,22G(0.7x40mm),ster,disp
121	S0748100 Needle,spinal,22G(0.7x90mm),ster,disp
122	Obstetrical Pads
123	Opsite Flexi-grid (Various Sizes)
124	Oxygen mask, adult
125	Oxygen mask, paediatric size
126	Oxygen, nasal cannula

127	Patient's Identification Bracelets
128	Peritoneal Dialysis Set
129	Plaster of Paris, 15 cm x 3 m
130	S0541055 Plaster of paris,10cmx3m
131	S0541050 Plaster of paris,7.5cmx3m
132	Reusable, Diathermy, Cable
133	S0782208 Safety box for .used syrgs/ndls 5lt/BOX-25
134	Set, Blood giving with air inlet
135	Set, Blood taking, bag (150 ml)
136	Set, Blood taking, bag (250 ml)
137	Set, Infusion "Y", Luer lock, air inlet
138	Set, Infusion, paediatric, precision
139	Set, Infusion, Scalp vein
140	Set, Infusion, Vented
141	S0746010 Scalpel blade,ster,disp,no.10
142	S0746110 Scalpel blade,ster,disp,no.11
143	Scalpel blade,ster,disp,no.15
144	S0746510 Scalpel blade,ster,disp,no.22
145	Scalpel blade,ster,disp,no.23
146	Shoe cover, disposable
147	Silicone Rubber Tubing
148	S0552000 Soap,toilet,bar,approx.110g,wrapped
149	Surgeon's Cap, Easy-Tie
150	Sut, abs, non-absorbable, various
151	S0564010 Sut,abs,DEC1,need 1/2,18mm,round/BOX-36
152	S0564011 Sut,abs,DEC2,need 3/8 18mm,round/BOX-36
153	S0564004 Sut,abs,DEC2,need 3/8,26mm,tri/BOX-36
154	S0564012 Sut,abs,DEC3,need 1/2 30mm,round/BOX-36
155	S0564013 Sut,abs,DEC3,need 3/8 50mm,round/BOX-36
156	S0564030 Sut,abs,DEC3,spool/BOX-36
157	S0564020 Sut,abs,DEC4,need 3/8 36mm,tri/BOX-36
158	S0565010 Sut,nonabs,DEC2,need 3/8 13mm,tri/BOX-36
159	S0565011 Sut,nonabs,DEC3,need 3/8 30mm,tri/BOX-36
160	Swab, Christmas tree, Eye
161	S0782112 Syringe,10ml,w/needle,21Gx1.5"/BOX-100
162	S0782110 Syringe,2ml,w/needle,21Gx1.5"/BOX-100
163	S0782111 Syringe,5ml,w/needle,21Gx1.5"/BOX-100
164	S0782209 Syringe,A-D,BCG,0.1ml,w/ndl,ster/BOX-100
165	S0782207 Syringe,A-D,Prog,0.5ml,loose pkd/BOX-100
166	S0782413 Syringe,dispos,10ml,ster/BOX-100
167	S0782205 Syringe,dispos,2ml,ster/BOX-100
168	S0782405 Syringe,dispos,5ml,ster/BOX-100
169	S0366010 Syringe,feeding,50ml,conical tip,ster
170	S0366020 Syringe,feeding,50ml,luer tip,ster
171	S0782215 Syringe,reuse,BCG,0.05ml/BOX-10
172	S0782220 Syringe,reuse,EPI,0.5ml/BOX-10
173	S0785674 Syringe,reuse,plastic,10ml
174	S0785670 Syringe,reuse,plastic,2ml
175	S0781905 Syringe,reuse,plastic,5ml
176	S0566005 Tape umbilical,3mmx50m,non-ster
177	S0504000 Tape,adhesive,Z.O.,perforated,10cmx5m
178	S0503010 Tape,adhesive,Z.O.,2.5cmx5m

179	Telfa, dressing (Various Sizes)
180	S0385000 Tourniquet,latex rubber,75cm
181	Tube, Endo-tracheal, disp. + connector, 3 mm, w/o balloon
182	Tube, Endo-tracheal, disp. + connector, 3.5 mm, w/o balloon
183	Tube, Endo-tracheal, disp. + connector, 4 mm, w/o balloon
184	Tube, Endo-tracheal, disp. + connector, 4.5 mm, w/o balloon
185	Tube, Endo-tracheal, disp. + connector, 5 mm, balloon
186	Tube, Endo-tracheal, disp. + connector, 5.5 mm, balloon
187	Tube, Endo-tracheal, disp. + connector, 6 mm, balloon
188	Tube, Endo-tracheal, disp. + connector, 6.5 mm, balloon
189	Tube, Endo-tracheal, disp. + connector, 7 mm, balloon
190	Tube, Endo-tracheal, disp. + connector, 7.5 mm, balloon
191	Tube, Endo-tracheal, disp. + connector, 8 mm, balloon
192	Tube, Endo-tracheal, reusable, 3 mm, w/o balloon
193	Tube, Endo-tracheal, reusable, 3.5 mm, w/o balloon
194	Tube, Endo-tracheal, reusable, 4 mm, w/o balloon
195	Tube, Endo-tracheal, reusable, 4.5 mm, w/o balloon
196	Tube, Endo-tracheal, reusable, 5 mm, balloon
197	Tube, Endo-tracheal, reusable, 5.5 mm, balloon
198	Tube, Endo-tracheal, reusable, 6 mm, balloon
199	Tube, Endo-tracheal, reusable, 6.5 mm, balloon
200	Tube, Endo-tracheal, reusable, 7 mm, balloon
201	Tube, Endo-tracheal, reusable, 7.5 mm, balloon
202	Tube, Endo-tracheal, reusable, 8 mm, balloon
203	Tube, Trachea, balloon, int.can, ster, size 6
204	Tube, Trachea, balloon, int.can, ster, size 8
205	S0372000 Tube,asp/feed,CH06,L125cm,ster,disp
206	S0372010 Tube,asp/feed,CH08,L125cm,ster,disp
207	S0372020 Tube,asp/feed,CH12,L125cm,ster,disp
208	S0370500 Tube,asp/feed,CH16,L125cm,ster,disp
209	S0373500 Tube,feeding,CH05,L40cm,ster,disp
210	S0373000 Tube,feeding,CH08,L40cm,ster,disp
211	S0378010 Tube,rectal,CH20,L30cm,ster,disp
212	S0379010 Tube,rectal,CH24,L30cm,ster,disp
213	S0382000 Tube, rubber, ID 7mm,L1.5m
214	S0374010 Tube,suction,CH08,L50cm,ster,disp
215	S0374015 Tube,suction,CH10,L50cm,ster,disp
216	S0374025 Tube,suction,CH14,L50cm,ster,disp
217	S0374030 Tube,suction,CH16,L50cm,ster,disp
218	Umbilical Cord Clamp
219	Dental renewable/consumables are allocated in OPD
220	Phaco-Emulsification renewable/consumable according to equipment brand

Operating Room Linen:

Sq	Item description
001	Apron Surgical, rubber
002	Trousers, Surgical, woven, Large
003	Trousers, Surgical, woven, Medium
004	Trousers, Surgical, woven, Small
005	Top, Surgical, woven, Large
006	Top, Surgical, woven, Medium
007	Top, Surgical, woven, Small

008	Gown, Surgical, woven(Orthopaedic gown)
009	Gown, Surgical, woven(Plain)
010	Cap, Surgical, woven
011	Drape, Surgical, woven(1 X 1 m)
012	Drape, Surgical, woven(1 X 1,5 m)
013	Drape, Surgical, woven(1.5 x 1,5 m)(fenestrated)
014	Drape, Surgical, woven(45 cm X 70 cm)(fenestrated)
015	Pillow case
016	Pillows
017	Sheet, Bed
018	Sheet, draw, white
019	Cellular Blanket (Recovery and outside blankets)
020	Mayo cover
021	Towel Bath
022	Towel Hand

Capacity, Surgical suite:

The capacity of the surgical theatre is determined by the two interchangeable OTs. Estimated capacity:
 An average of 5 procedures per day, per theatre.
 300 operational days per year.
 Approximately 3,000 procedures per year, exclusive of after-hours work and emergencies.

Location, Surgical suite:

The preferred location is on the same floor as the surgical wards, which may be the ground floor. It should be connected to the surgical ward by the simplest possible route. It should also:
 Adjoin the central sterile supply department.
 Be easily accessible from the accident and emergency department.
 If intensive care is available, the ICU should be adjacent to the OT.
 Be located in a cul-de-sac, so that entry and exit can be controlled and there should be no through traffic.

3.3.1.6 Accident and Emergency (A&E)

Description/Activities:

The majority of patients attending the A&E will have soft tissue injuries, suspected fractures and a wide range of other minor conditions.

A moderate or severe illness or emergency. This group attends as an alternative to seeing their general medical practitioner (GP).

An injury for which they would not normally attend their GP, for example a fractured limb.

A serious medical emergency, such as asthma.

A serious surgical emergency or multiple injury.

The result of alcohol and/or drug abuse.

Children and young people: while patients of all ages attend A&E departments, special consideration should be given to the needs of children and young people. Every effort should be made to ensure that children can come to no physical harm and are not upset by sights and sounds in the A&E department, and that adult patients are not upset by the presence of children. This can be facilitated by an appropriate planning solution.

The most common functional, or organizational, issues that must be addressed in planning an Accident and Emergency unit include:

- 01 Waiting
- 02 Toilet
- 03 Reception/Nurse
- 04 Staff Toilet
- 05 Resuscitation (1)
- 06 Cubicles (2)
- 07 Treatment
- 08 Plaster Room
- 09 Clean Utility
- 10 Soiled Utility
- 11 Cleaners room

01. Waiting

Activities:

People in the waiting area, both patients and their friends and family, are anxious and afraid of the unknown. There are a variety of reasons why patients may have to wait. Other patients may be treated first due to the severity of their conditions; specialized treatment rooms may not be immediately available, or patients may need a test or procedure that takes time. Anxiety can be reduced by the careful and sensitive design of the waiting and associated areas.

Patients and relatives should be fully and continuously informed of reasons for any delay. The waiting area should be designed so that it is not in the visual line of the emergency area and entrance.

Equipment:

Sq	Item description	Q	C	M	E
001	Stretcher patient, epoxy coated, with fixed patient support (*)	1			
002	Seating, 4 seats on frame, with table, 2.50 m (*)	5			
003	Basket, waste-paper, metal (*)	1			

02. Toilet

Activities:

The patient toilet should be designed to accommodate a wheel chair. It must be close to patient cubicles so that nursing staff can assist patients if needed. A bell or call system should be in place to alert staff if needed.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white (*)	1			
002	Dispenser, paper towel, metal (optional) (*)	1	C		
003	Dispenser, soap, hand operated (optional) (*)	1	C		

03. Reception/Nurse

Activities:

Upon arrival, patients are seen by a triage nurse who determines the order in which they need attention. He/she takes down brief information about the patient's illness or injury. In emergency situations, patients are not seen on a "first come first served" basis. Rather, they are seen in order of the seriousness of their problems. For example, heart attack patients and accident victims are usually seen before patients with cuts or broken bones. They are not more important, but their needs are simply more urgent.

It is most important that patients are assessed upon arrival at the reception to ensure that they receive appropriate attention, in a suitable location with a requisite degree of urgency. Triage is accepted practice in many hospitals.

Patients are seen broadly in order of clinical priority, enabling the best potential results.

The reception area should be situated in such a position that staff can observe incoming individuals from the hospital main entrance as well as the emergency entrance. This area will function as a nurse station and the HFD (habit forming drug cupboard) will be placed here.

The triage area, if planned, should be close to the reception area for functionality.

Opening times: Monday to Sunday 24-hour service for injury, or other conditions needing immediate surgical or medical attention.

It should be accessible to wheelchair.

Administrative procedures:

Check-in:

After seeing the triage nurse, the patient will need to speak with staff at the registration desk, give their name, address and payment information.

Check-out:

Checking out of the emergency centre takes a few minutes. First, the physician or nurse will tell the patient how to care for themselves and recognize problems or symptoms. Patients should feel free to ask any questions.

Follow-up:

A patient's doctor may want to refer them to one of the consultant clinics for follow-up medical care. It is very important that a patient continues her/his treatment. The records of visits to the emergency centre are made available to the out-patient clinic consultant. Telephone numbers of the appropriate clinic will be given to patients before they leave the emergency centre.

TTO (To Take Out medicines) cupboards:

These cupboards should contain medication for patients to take home if the hospital pharmacy is closed.

Ambulance:

An ambulance service is of vital importance, as the level of hospital described can only deal with limited emergencies and patients should then be referred to higher level provider as soon as possible. The reception area of accident and emergency should have direct contact with this service.

Equipment:

Sq	Item description	Q	C	M	E
001	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
002	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
003	Locker, 1 vertical compartment, metal, 0.30 m	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	2			
006	Basket, waste-paper, metal (*)	1			
007	Viewer, double field, x-ray film	1	C		E

04. Staff Toilet

Activities:

It should be separated from patient facilities and include space for lockers for staff personal articles.

Equipment:

Sq	Item description	Q	C	M	E
001	Hand dryer, electric (optional)	1	C		E
002	Towel, hand, white	1			
003	Dispenser, paper towel, metal (optional)	1	C		
004	Dispenser, soap, hand operated (optional)	1	C		

05. Resuscitation

Activities:

The resuscitation room must be immediately adjacent to the ambulance entrance and is intended only for the treatment of patients experiencing immediate life-threatening injuries or episodes of acute illness.

The room should be large enough for a team response to attend to a cardiac arrest or to a patient with multiple injuries.

Should a cardiac arrest occur, or appear imminent, it is important that staff are knowledgeable or skilled staff are on hand to assist the patient.

The primary resuscitation team is directed by a physician who prescribes medication that is administered by one of the nurses, while a second nurse records all aspects of the episode.

An inventory of emergency medicines is fully stocked in preparation for the next case which could occur only minutes later.

The intensity of activity and the number of people and items of equipment in the room suggest that such rooms should only contain a single patient, except in unusual situations, such as a multi-vehicle accident or explosion when the hospital's disaster plan has been initiated.

Traffic circulation: it should be possible to transfer a critically ill patient directly to a higher level facility or surgical suite without having to go through public areas or other areas of the A&E, if needed.

A similarly discreet route should be available for transporting deceased patients to the morgue.

Security precautions in the A&E should not compromise the daily need for uninterrupted traffic flow and accessibility to emergency care.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	1	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	1		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	1		M	
004	Wall clock (*)	1	C		E
005	Patient transfer, roller system	1			
006	S0101605 Trolley, dressing, st. st., 2 trays (*)	1			
007	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
008	Stretcher patient, emergency, epoxy coated, height adjustable	1			
009	S0180000 Stretcher, emergency patient transport,2 piece detachable	1			
010	S0630000 Flashlight, pre-focused, angled	1			
011	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
012	Cabinet, instrument, double door, 0.90 m	1			
013	S0150000 Stand, infusion, st. st., mobile	1			
014	S0190000 Pedal bin, st. st (*)	1			
015	Cart, crash, with defibrillator, with oxygen, adult and child	1			E
016	S0760605 Pump,suction,portable,220V,w/access	1			E
017	Sphygmomanometer, aneroid, child cuff, rail mount	1		M	
018	Sphygmomanometer, aneroid, adult, rail mount	1		M	
019	Set, diagnostic, oto / ophthalmic	1			
020	Rail, medical, universal, set of 2 rails of 1.50 m, complete	1	C		
021	Shelf, monitor, rail mount	1		M	
022	S0845001 Resuscitator, hand-oper., adult, set (*)	1			
023	S0845000 Resuscitator, hand-oper., infant/child (*)	1			
024	S0746705 Laryngoscope, set (MacIntosh)	1			
025	S0002062 Recorder, ECG, 3/6-channel, trolley	1			E
026	S0640000 Hammer, reflex (*)	1			
027	Light, examination, halogen, for medical rail system	1	C		E
028	Monitor, patient, portable, 3-channel	1			E
029	Stethoscope, dual head (*)	1			
030	Stethoscope, paediatric head (*)	1			
031	S0481052 Thermometer, clinical, glass (*)	1			

06. Cubicles (2)

Activities:

The core clinical area contains multi-purpose cubicles, which are equipped to handle everything from minor cuts, sore throats, pregnancies, to monitoring a patient with intermittent chest pain. These are within the direct visual control of the nursing station.

The cubicles should be so equipped to manage minor and if necessary more acute cases, in the event of a disaster.

Stretchers are preferable in this area. The patient can then be wheeled out easily and another stretcher can be moved in for the next patient.

Basic care can be rendered in this area.

Equipment:

Sq	Item description	Q	C	M	E
001	Bed head unit, for patient bed rooms, 1-bed model, wall mount (optional)	2	C	M	E
002	Vacuum aspirator, 0 - 250 mm/Hg, w bottle and tubing, gas outlet (optional)	2		M	
003	Flow meter, 0 - 15 l/min, oxygen with humidifier, wall outlet connection type (optional)	2		M	
004	Wall clock (*)	1	C		E
005	S0101605 Trolley, dressing, st. st., 2 trays (*)	2			
006	Trolley, soiled linen, 2 rings.	1			
007	Stretcher patient, emergency, epoxy coated, height adjustable	2			
008	Worktable, laminated top, with cabinets under the table top, 2.00 m	2	C		
009	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
010	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	2			
011	S0150000 Stand, infusion, st. st., mobile	2			
012	Screen, bed, three section, mobile (*)	1			
013	S0190000 Pedal bin, st. st (*)	2			
014	Sphygmomanometer, aneroid, child cuff, rail mount	1		M	
015	Sphygmomanometer, aneroid, adult, rail mount	1		M	
016	Set, diagnostic, oto / ophthalmic	1			
017	S0640000 Hammer, reflex (*)	1			
018	S0119300 Light,examination,mobile,220-12V (*)	2			E
019	Stethoscope, dual head (*)	2			
020	Stethoscope, paediatric head (*)	1			
021	S0481052 Thermometer, clinical, glass (*)	2			

07. Treatment

Activities:

Minor procedures (inclusive of suturing) which do not require the full facility of the operating department, should be performed in this area.

A scrub area or clinical basin should be situated between the resuscitation area, the treatment room and multipurpose cubicles for optimal efficiency.

Instrument sets allocated in clean utility will be used here, thus the treatment room should be situated close to the clean utility.

There should be oxygen and suction equipment located in this area to assist in basic emergency treatment, if needed.

A clinical wash hand basin is needed for aseptic technique maintenance.

Equipment:

Sq	Item description	Q	C	M	E
001	S0101605 Trolley, dressing, st. st., 2 trays (*)	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	2	C	M	
004	Refrigerator, under counter model, 110 l	1			E

005	Cabinet, instrument, double door, 0.90 m	1			
006	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
007	S0184500 Couch, examination, enamelled st. frame, adjustable head (*)	1			
008	Footstool, one step, epoxy coated steel (*)	1			
009	S0150000 Stand, infusion, st. st., mobile	1			
010	S0190000 Pedal bin, st. st (*)	1			
011	S0119300 Light,examination,mobile,220-12V (*)	1			E

08. Plaster Room

Activities:

This should be located close to the treatment room and should be able to manage closed reduction of fractures, and the application of splints and casts.

The A&E should accommodate the out-patients department, emergency cases as well as ward patients who need Plaster of Paris (POP).

This room will be equipped with a basin with a drain, adequate to deal with POP residue. Removal of POP undertaken.

Equipment:

Sq	Item description	Q	C	M	E
001	S0101605 Trolley, dressing, st. st., 2 trays (*)	1			
002	Plaster trolley, with drawers and plaster bowl	1			
003	Stretcher patient, epoxy coated, with fixed patient support (*)	1			
004	Worktable, with plaster sink, st. st. top, cabinets under the table top, 2.00 m	1	C	M	
005	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			
006	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
007	S0190000 Pedal bin, st. st (*)	1			
008	Ort 008 Plaster Removal Set	1			E
009	S0119300 Light,examination,mobile,220-12V (*)	1			E
010	Viewer, double field, x-ray film	1	C		E

09. Clean Utility

Activities:

This room will contain all the sterile instrument sets.

Renewable/consumables could also be stored in this area, making clinical procedures more efficient.

The set-up of dressing and procedure trolleys should be done in this room.

Refrigerated medication and injections will be kept here, thus the preparation of IV Fluids, injections, etc. should be managed in the clean utility.

A clinical basin with hand washing soap and drying facilities is a necessity.

Pre-prepared emergency trolleys should be available in case there are multiple emergencies at once.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
002	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
003	S0002077 Refrigerator, 140 l + 20 l (*)	1			E
004	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	2			
005	S0150000 Stand, infusion, st. st., mobile	2			
006	Pump, infusion, drop controlled (Optional)	1			E
007	Wheelchair, non-foldable, universal (*)	1			
008	Gen.surg-001 Dressing set	1			

009	Gen.surg-002 Suture set	1			
010	Gen.surg-007 Tracheotomy set	1			
011	Gen.surg-010 Cut down set, adult/paediatric	1			
012	Gen.surg-015 Suprapubic puncture set	1			
013	Gen.surg-016 Chest drainage set, underwater-seal	1			
014	Gen.surg-018 Proctoscope set	1			
015	Gen.surg-034 Cardiac arrest set (optional)	1			
016	Plastic.surg-003 Plastic repair set	1			
017	Dental-001 Dental syringe set	1			
018	ENT-002 Ear-foreign body removal set	1			
019	ENT-003 Nose-foreign body removal set	1			
020	ENT-005 Headlight set	1			

10. Soiled Utility

Activities:

Urine testing and specimen collection preparation to be done here.

Sluice sink and slop hopper or combination sluice unit is included.

Wash hand basin available.

If this room is also used for the collection and temporary storage of soiled linen and waste, dirty linen containers must be provided.

It can also be used as a store area for medical waste until proper disposal e.g. the incineration of waste can be done.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	3			
002	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
003	Bin, disposal, mobile, with lid (*)	1			
004	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
005	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
006	Tub, wash, oval, galvanized steel, 65 l (*)	1			
007	Towel, hand, white (*)	1			
008	Dispenser, paper towel, metal (optional) (*)	1	C		
009	Dispenser, soap, hand operated (optional) (*)	1	C		
010	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
011	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	2			
012	Trolley, bedpans and urinals, mobile	1			
013	S0222020 Bedpan, st. st. (*)	10			
014	S0210000 Basin, kidney, stainless steel,475ml	5			
015	Urinal, st. st.	10			
016	Bedpan, orthopaedic, st. st.	5			
017	Glass, urine, plastic, 250ml	5			

11. Cleaner's Room

Activities:

This should include shelves for cleaner's materials, a low sink with a suitable tap height for bucket filling, and hooks for mops.

In smaller facilities the cleaner's room is incorporated into the dirty utility. In this case, there should be enough space to accommodate both services.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Trolley, cleaning	1			
003	Rack, mops (*)	1			
004	S2170000 Pail w/bail,handle,polyethylene,10 litre (*)	2			
005	Set, cleaning utensils, broom, mop, etc. (*)	1			
006	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			

Renewable/Consumables:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	Airways – Guedel 0
002	Airways – Guedel 00
003	Airways – Guedel 1
004	Airways – Guedel 2
005	Airways – Guedel 3
006	Airways – Guedel 4
007	Airways – Guedel 5
008	Applicator - Wooden (Orange Stick)
009	Aprons – Disposable
010	Aprons – Surgeon
011	Aqua-packs Oxygen Humidifier
012	Baby Urine Collectors
013	Bags - Refuse - All Colours and Sizes
014	Bags - Urine
015	Bandage - Crepe
016	Bandage - Elastic Adhesive Plaster - Flesh/White
017	Bandage - Esmarch
018	Bandage - Orthopaedic
019	Bandage - W.O.W.
020	Bandage- Conforming
021	Batteries - Medical & General
022	Bedpan Covers
023	Biopsy Needles
024	Blade Surgical/Scalpel,ster,disp,no.15
025	Blades - Surgical/Scalpel 10
026	Blood Sampling Needle 20 G, disposable, sterile
027	Blood Sampling Needle 21 G, disposable, sterile
028	Blood Sampling Scalp vein 23 G, disposable, sterile
029	Blood Sampling Tube, Vacuum 5ml (Vacutainer)
030	Blood Sampling Tube, Vacuum EDTA 5ml (Vacutainer)
031	Blood Sampling Tube, Vacuum Heparinised 5ml (Vacutainer)
032	Blood Sampling Vacutainer Holder
033	Brush - Nail Autoclavable/Instrument
034	Bubble tubing box
035	Cannula - Nasal-Oxygen
036	Cannula, IV short,18G,ster,disp
037	Cannula, IV short,20G,ster,disp
038	Cannula, IV short,22G,ster,disp
039	Cannula, IV short,24G,ster,disp
040	Catheter - Foley - Latex/Silicone Coated/100% Silicone

041	Catheter - Jacques
042	Catheter - Suprapubic
043	Catheter Suction – Plain different sizes /
044	Catheters Foley – Latex/Silicone Size 12
045	Catheters Foley – Latex/Silicone Size 14
046	Chemical Cleaning Products
047	Chest Drainage Kit
048	Collar & Cuff
049	Colostomy Bags
050	Combur Tests
051	Connector, Biconical Autoclavable
052	Connector, T/Y
053	Connectors - Plastic – Tapered
054	Container, Sample, urine, plastic, non-sterile, 60 ml
055	Cotton Buds
056	Disposable Caps - Bonnet Type
057	Drain, Thoracic + Trocar, sterile, disp, CH 14
058	Drain, Thoracic + Trocar, sterile, disp, CH 24
059	Drainage, Thoracic, complete set, sterile disposable CH 14
060	Drainage, Thoracic, complete set, sterile disposable CH 24
061	Drainage, Thoracic, Valve No Return
062	Electrode, Chest, Monitoring
063	Fluid Shield Surgical Masks
064	Foley – Latex/Silicone Size 10
065	Fridge Thermometers
066	Gauze Absorbent Ribbon
067	Gauze Rolls/Swabs - Sterile/Non-Sterile
068	Gloves – Household Large
069	Gloves – Household Medium
070	Gloves – Surgical Size 6
071	Gloves – Surgical Size 7
072	Gloves – Surgical Size 7 ½
073	Gloves – Surgical Size 8
074	Gloves, exam, latex, large, disp
075	Gloves, exam, latex, medium, disp
076	Gloves, exam, latex, small, disp
077	Hand wash Antiseptic Liquid (Hibiscrub)
078	I.D Band Baby
079	I.D Bands - Patient Yellow
080	I.D. Bands - Patient Pink
081	I.D. Bands - Patient White
082	I.V. Administration Sets - 15 Drop
083	I.V. Administration Sets - 60 Drop
084	I.V. Blood Administration Sets
085	I.V. Buretrol for Paediatric infusion
086	I.V. Extension set
087	Incontinence Sheets
088	Intubation stylet, adult, 15 Ch
089	Intubation stylet, Paediatric, 11 Ch
090	K.Y. Jelly
091	Kimberly Clark Paper Products for paper dispensers
092	Linen Savers

093	Litmus Paper - Red/Blue
094	Masks - Nebuliser/Oxygen//Ward
095	Masks Face Queen Charlotte (optional)
096	Micropore Tape
097	N.G Tubes 12
098	N.G Tubes 14
099	N.G. Tubes 16
100	Nasal Feeding Tubes
101	Nasal Oxygen Cannula
102	Needle, dental sterile 25G Long, Orange
103	Needle, dental sterile 27G Short Gray
104	Needle, dental sterile 30G Extra Short, Yellow
105	Needle, dental sterile, 25G Short, Orange
106	Needle, dental sterile, 27G Long, Gray
107	Needle, dental sterile, 30G Short, Yellow
108	Needle, spinal disp,20G(0.9x90mm),sterile
109	Needle, spinal disp,22G(0.7x40mm),sterile
110	Needle, spinal disp. 22G(0.7x90mm),sterile
111	Needle,disp,15G
112	Needle,disp,18G
113	Needle,disp,21G
114	Needle,disp,22G
115	Needle,disp,23G
116	Needle,disp,25G
117	Needles - Butterfly 23G
118	P.O.P. Bandages/Slabs
119	Pads - Sanitary - Regular
120	Paraffin Gauze
121	Razor Medical - Disposable - Double/Single Edge
122	Ribbon Gauze
123	Safety Pins small, medium, large
124	Scalpel blade,ster,disp,no.11
125	Sharps Containers (Safety box)
126	Spatulas - Tongue
127	Spigots
128	Spray Bottles - Thumb/Trigger/Plunger Operated
129	Sputum Mugs/Bags
130	Stockinet
131	Scalpel blade,ster,disp,no.10
132	Scalpel blade,ster,disp,no.11
133	Scalpel blade,ster,disp,no.15
134	Scalpel blade,ster,disp,no.22
135	Scalpel blade,ster,disp,no.23
136	Surgical Spirits
137	Sutures – Appendix 5 suture catalogue
138	Swabs - Alcohol
139	Swabs - Gauze - Sterile
140	Swabs - Tonsil
141	Swabs Cotton Wool Balls - Sterile/Non-Sterile
142	Swabs Cotton Wool Rolls
143	Tape Surgical Adhesive Hypo-Allergenic/Micro-porous
144	Tube, Endo-tracheal, disp. + connector, 3 mm, w/o balloon

145	Tube, Endo-tracheal, disp. + connector, 3.5 mm, w/o balloon
146	Tube, Endo-tracheal, disp. + connector, 4 mm, w/o balloon
147	Tube, Endo-tracheal, disp. + connector, 4.5 mm, w/o balloon
148	Tube, Endo-tracheal, disp. + connector, 5 mm, balloon
149	Tube, Endo-tracheal, disp. + connector, 5.5 mm, balloon
150	Tube, Endo-tracheal, disp. + connector, 6 mm, balloon
151	Tube, Endo-tracheal, disp. + connector, 6.5 mm, balloon
152	Tube, Endo-tracheal, disp. + connector, 7 mm, balloon
153	Tube, Endo-tracheal, disp. + connector, 7.5 mm, balloon
154	Tube, Endo-tracheal, disp. + connector, 8 mm, balloon
155	Tube, Endo-tracheal, reusable, 3 mm, connector
156	Tube, Endo-tracheal, reusable, 3 mm, w/o balloon
157	Tube, Endo-tracheal, reusable, 3.5 mm, connector
158	Tube, Endo-tracheal, reusable, 3.5 mm, w/o balloon
159	Tube, Endo-tracheal, reusable, 4 mm, connector
160	Tube, Endo-tracheal, reusable, 4 mm, w/o balloon
161	Tube, Endo-tracheal, reusable, 4.5 mm, connector
162	Tube, Endo-tracheal, reusable, 4.5 mm, w/o balloon
163	Tube, Endo-tracheal, reusable, 5 mm, balloon
164	Tube, Endo-tracheal, reusable, 5 mm, connector
165	Tube, Endo-tracheal, reusable, 5.5 mm, balloon
166	Tube, Endo-tracheal, reusable, 5.5 mm, connector
167	Tube, Endo-tracheal, reusable, 6 mm, balloon
168	Tube, Endo-tracheal, reusable, 6 mm, connector
169	Tube, Endo-tracheal, reusable, 6.5 mm, balloon
170	Tube, Endo-tracheal, reusable, 6.5 mm, connector
171	Tube, Endo-tracheal, reusable, 7 mm, balloon
172	Tube, Endo-tracheal, reusable, 7 mm, connector
173	Tube, Endo-tracheal, reusable, 7.5 mm, balloon
174	Tube, Endo-tracheal, reusable, 7.5 mm, connector
175	Tube, Endo-tracheal, reusable, 8 mm, balloon
176	Tube, Endo-tracheal, reusable, 8 mm, connector
177	Tube, Trachea, balloon, int.can, ster, size 6
178	Tube, Trachea, balloon, int.can, ster, size 8
179	Tubes Suction Yankauer - Plain/Control
180	Tubigrip
181	Tubing Bubble box
182	Tubing Latex box
183	Urine Bags/Collectors
184	Urine Meters
185	Vaginal Plugging
186	Walking Heels - Rubber
187	Zimmer Splints Finger
188	Zinc Oxide Plaster different sizes

Capacity, A&E department:

At least seven patients can be attended to simultaneously, and if a disaster occurs, a triage area could be set up in the reception area.

These activities should be described in the policies and procedures of the internal and external disaster management protocol.

Location, A&E department:

It should be easily accessible from the main hospital entrance

It should have its own external entrance.

It should be located at ground level on a single floor.

The unit must have a weather-protected external entrance, with easy ambulance access.

A ramp must be provided if the level of the ground outside is not the same as inside the building.

If the unit is not on the same level as the hospital, an elevator must be provided that will be suitable for convenient access by patients to the operating suite, wards, dispensary or radiological units if necessary.

3.3.1.7 General Out-patient Department (OPD)

Description/Activities:

This department is also called ambulatory services. Its functions include:

Specialist consultation and examination.

The treatment of patients who do not require the facilities of an emergency ward.

Screening for the identification of day-patients and in-patients.

Following up and monitoring the condition of out-patients and day patients.

Discharging patients from the care of the hospital, with referral if necessary to other health services.

The needs for a first referral level out-patient service should be assessed as part of the strategic planning process. The design of this screening department should take into account the number of referrals from general practitioners and peripheral health units, and the propensity of people in the area to go to the hospital.

The outpatient clinic could consist of:

- 01 Waiting
- 02 Toilet
- 03 Reception/Nurse
- 04 Clean Utility
- 05 Staff Toilet
- 06 Consultation/Examination
- 07 Consultation/Examination
- 08 Eye
- 09 ENT
- 10 Dental
- 11 Paediatrics
- 12 Gynaecology
- 13 Obstetrics (incl. Ultrasonography - USG)
- 14 Treatment/Dressing/Injection
- 15 Soiled Utility
- 16 Cleaners room

01. Waiting

Activities:

The clinic waiting area should be close to the clinic reception desk and within easy reach of the consulting and examination rooms.

Sufficient seating space and access to public toilets, public telephones and to drinking water should be provided.

A specific waiting area for children should be equipped with toys.

Equipment

Sq	Item description	Q	C	M	E
001	Seating, 4 seats on frame, with table, 2.50 m (*)	7			
002	Basket, waste-paper, metal (*)	1			

02. Toilet

Activities:

There must be sufficient toilet facilities to accommodate the patient load, at least 1 toilet to every 8 patients.

Hand washing facilities must be provided.

These facilities must be wheel chair accessible.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white (*)	1			
002	Dispenser, paper towel, metal (optional) (*)	1	C		
003	Dispenser, soap, hand operated (optional) (*)	1	C		

03. Reception/Nurse

Activities:

This is preferably situated at the entrance to the OPD.

It must be convenient for wheelchair or patients with disabilities.

It should be equipped as a reception and information counter or desk.

Simple directions and a floor plan must be prominently displayed.

An effective appointment, follow-up and referral system is essential for the operation of an efficient OPD.

A well-managed system will facilitate the functions of the different departments and will be an important factor in determining the number of patients for whom waiting space is provided.

Laboratory specimens (e.g. blood samples, urine and stool samples) are to be kept here for collection by the laboratory courier.

The reception area staff keep patients fully informed and reduce patient and family anxiety.

Ambulance transport arrangements should be co-ordinated with the appointments system to ensure a smooth flow of patients to and from the clinic and to avoid overcrowding.

Equipment:

Sq	Item description	Q	C	M	E
001	Wall clock (*)	1	C		E
002	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	2			
006	Basket, waste-paper, metal (*)	1			

04. Clean Utility

Activities:

A clean utility room should be located adjacent to the treatment preparation area and have direct access to it.

Provision is required for the preparation and storage of all drugs, medicines and lotions. It functions as a store area for a working supply of clean and sterile supplies, and the preparation of trolleys for the different clinics.

The controlled drug cupboard may be located here.

This room should be fitted with adequate shelving, a work table and a wash-hand basin.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
004	S0002077 Refrigerator, 140 l + 20 l (*)	1			E
005	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	6			
006	S0150000 Stand, infusion, st. st., mobile	1			
007	Wheelchair, non-foldable, universal (*)	1			

05. Staff Toilet

Activities:

The staff toilet is separate from the patient toilet facility.

Space for staff to store their personal belongings should be available.

Equipment:

Sq	Item description	Q	C	M	E
001	Hand dryer, electric (optional)	1	C		E
002	Towel, hand, white (*)	1			
003	Dispenser, paper towel, metal (optional) (*)	1	C		
004	Dispenser, soap, hand operated (optional) (*)	1	C		

06. Consultation/Examination

Activities:

These consulting rooms are used as interchangeable consulting/examination rooms.

Each consulting room should be equipped for the department it serves, and consideration given to the specialised equipment required.

A standard consulting and examination room should be large enough to accommodate a doctor, a nurse, a patient (who may be in a wheelchair), and a patient's escort.

The room is used for consultations, examinations, the taking and recording of blood pressure, and for minor diagnostic treatment procedures.

Space is needed for a desk and chairs, and an examination couch behind curtains.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	2			
006	S0184500 Couch, examination, enamelled st. frame, adjustable head (*)	1			
007	Footstool, one step, epoxy coated steel (*)	1			

008	Basket, waste-paper, metal (*)	1			
009	Set, diagnostic, oto / ophthalmic	1			
010	S0683200 Sphygmomanometer,(adult),aneroid	1			
011	S0640000 Hammer, reflex (*)	1			
012	S0119300 Light,examination,mobile,220-12V (*)	1			E
013	Stethoscope, dual head (*)	1			
014	Viewer, double field, x-ray film	1	C		E

07. Consultation/Examination

Activities:

These consulting rooms are used as interchangeable consulting/examination rooms. Each consulting room should be equipped for the department it serves, and consideration given to the specialized equipment required. A standard consulting and examination room should be large enough to accommodate a doctor, a nurse, a patient (who may be in a wheelchair), and a patient's escort. The room is used for consultations, examinations, the taking and recording of blood pressure, and for minor diagnostic treatment procedures. Space is needed for a desk and chairs, and an examination couch behind curtains.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	2			
006	S0184500 Couch, examination, enamelled st. frame, adjustable head (*)	1			
007	Footstool, one step, epoxy coated steel (*)	1			
008	Basket, waste-paper, metal (*)	1			
009	Set, diagnostic, oto / ophthalmic	1			
010	S0683200 Sphygmomanometer,(adult),aneroid	1			
011	S0640000 Hammer, reflex (*)	1			
012	S0119300 Light,examination,mobile,220-12V (*)	1			E
013	Stethoscope, dual head (*)	1			
014	Viewer, double field, x-ray film	1	C		E

08. Eye

Activities:

In contrast to other out-patient departments, ophthalmic patients do not have to undress for an examination. The provision of a couch with curtain screening is therefore unnecessary in all spaces, although access to at least one room containing a couch is required. Indirect ophthalmoscope examinations, especially in retinal clinics, require the patient to be in a supine position. In addition, patients need to be examined from both sides of the head and also from above. The patient should therefore be seated in a reclining treatment chair. While in the chair the doctor will be able to: take the patient's history, undertake refractions using the reverse Snellen's test apparatus with a mirror, examine the eye using a hand-held ophthalmoscope, carry out indirect ophthalmoscope examinations with the patient in a supine position, and examine the eye by means of a slit lamp. This room is a necessity and will house all the specialized equipment as per the generic equipment list and description of equipment.

Eye-care facilities at this first referral level should provide for the definitive management of common blinding conditions such as cataract, trichiasis and entropion (inturned eyelids), ocular trauma, primary angle-closure glaucoma and corneal and infra-ocular infections[5].

Equipment:

Sq	Item description	Q	C	M	E
001	S0101605 Trolley, dressing, st. st., 2 trays (*)	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
004	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
005	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
006	Cabinet, instrument, double door, 0.90 m	1			
007	Chair, desk, height adjustable (*)	1			
008	S5005500 Chair, stackable, without armrests	2			
009	S0169005 Stool, height adjustable with gasspring, mobile, st. st.	1			
010	S0190000 Pedal bin, st. st (*)	1			
011	Set, diagnostic, oto / ophthalmo	1			
012	Chair, examination, ophthalmology	1			E
013	Set, trial lenses with frame, in case	1			
014	Meter, lens	1			E
015	Ophthalmic, examination unit	1			E
016	Ophthalmometer, Javal (keratometer)	1			E
017	Ophthalmoscope, indirect	1			E
018	Distometer	1			
019	Streak-retinoscope	1			E
020	Lamp, slit	1			E
021	Tonometer, Schötz	1			E
022	S0610000 Chart,vision-testing,Snellen type	1			
023	S0119300 Light,examination,mobile,220-12V (*)	1			E

09. Ear, Nose and Throat (ENT)

Activities:

ENT out-patient examinations do not usually require a couch with a curtained off area.

An appropriate chair for the patients should therefore suffice.

On the infrequent occasions that a patient needs to lie horizontally, use may be made of a treatment room, where multi-purpose chair/couches are provided.

A multi-purpose chair/couch may be considered useful in the ENT diagnostic and treatment room.

The clinician requires a trolley for presenting instruments and equipment.

Smaller procedures can be done in the ENT consulting room e.g. removal of foreign bodies from the nose or ear.

Bigger procedures should be performed in the operating room.

Equipment:

Sq	Item description	Q	C	M	E
001	S0101605 Trolley, dressing, st. st., 2 trays (*)	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
004	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
005	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
006	Chair, desk, height adjustable (*)	1			
007	S5005500 Chair, stackable, without armrests	2			
008	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			

009	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
010	Chair, treatment, ENT, basic	1			E
011	S0190000 Pedal bin, st. st (*)	1			
012	Set, diagnostic, oto / ophthalmic	1			
013	Treatment unit, ENT, complete, mobile, for operating theatre	1	C	M	E
014	S0677500 Speculum,ear,Gruber/SET-4	1			
015	S0681005 Speculum, nasal, infant/child, Martin	1			

10. Dental

Activities:

The quality of the dental chair in the treatment room is critical. It should be located so that access to the chair is both easy and obvious to patients. The position of the dental chair will affect the position of the dental cabinetry, incorporating clinical wash-hand basins. The dental unit-powered instruments and accessories are usually combined together in a dental unit. The dental examination/operating lamp may be mobile or an integral part of the dental chair, or fixed to the wall or ceiling. Service outlets: medical oxygen and a medical vacuum are needed, and the units requires compressed air, water, drainage and an electrical supply. Other dental instruments are used from the trolley. The renewable/consumables for dentistry are described at the end of the OPD section. Procedure should be in place to avoid cross-contamination.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	1			
006	S0190000 Pedal bin, st. st (*)	1			
007	Treatment unit, dental, complete, basic	1	C	M	E
008	Amalgamator, dental	1			E
009	Light, operating, dental, chair mounted	1			E
010	Stool, dentist and assistant	2			
011	Suction, for 2 dental units, in cabinet	1		M	E
012	Compressor, for 2 dental units, in cabinet	1		M	E
013	Cabinet, dental, length 3.00 m	1		M	E
014	Sterilizer, dental, bench top	1			E
015	Viewer, x-ray, dental film	1			E
016	Dental-001 Dental syringe set (*)	1			
017	Dental-002 Dental set	1			
018	Plaster Knife	1			
019	Instrument Trays Aluminum	1			
020	Plaster Spatula	1			
021	Wax Carver Roach	1			
022	Retraction cord 180 cm, with epinephrine	1			
023	Dental-010, Dental, endo set	1			
024	Dental-011, Dental, rubber dam	1			
025	Sealant Light Curing 4gm	1			
026	Hand Mirror	1			
027	Dental, ultrasonic unit	1			E

028	Ultrasonic inserts universal	1			
029	Hand piece Turbine	1			
030	Spare Turbine	1			
031	Contra Angle slow speed	1			
032	Contra angle high speed	1			
033	Hand piece 1:1	1			
034	Air Motor 5000 rpm	1			E
035	Air Motor 20,000 rpm	1			E
036	Heads for Contra Angles	1			
037	X-ray, dental, mobile	1			E
038	Developer, x-ray film, dental, automatic	1		M	E

11. Paediatrics

Activities:

A basic equipped consulting room should have educational posters about baby, infant and child care.

Children should feel secure in their environment and this room should be child-friendly.

There shall be sufficient space in the room for the mother or chaperone to stay with the child during the consultation.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
002	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
003	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
004	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
005	Chair, desk, height adjustable (*)	1			
006	S5005500 Chair, stackable, without armrests	2			
007	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
008	S0184500 Couch, examination, enamelled st. frame, adjustable head (*)	1			
009	Footstool, one step, epoxy coated steel (*)	1			
010	S0190000 Pedal bin, st. st (*)	1			
011	S114600 Measuring mat, length, child, 0-3 years (*)	1			
012	Set, diagnostic, oto / ophthalmic	1			
013	S0683300 Sphygmomanometer,(child),aneroid	1			
014	S0119300 Light,examination,mobile,220-12V (*)	1			E
015	S0145520 Scale, infant, clinic, metric, 16 kg x 10g (*)	1			
016	Stethoscope, paediatric head (*)	1			

12. Gynaecology

Activities:

It is equipped with basic office furniture, and can be used for family planning education.

Wherever practicable, a general purpose consulting and examination room should be used.

The combined consulting and examination room should be large enough to accommodate electronic monitoring and diagnostic equipment.

The examination couch should be protected by a curtain to allow privacy.

A wash-hand basin is essential, as is an adjustable lamp serving the couch along with tables and chairs for consulting.

A small cupboard, with a worktop/writing surface, for the storage of items of equipment and sterile packs is desirable.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
002	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
003	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	2			
006	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
007	S0185000 Table, gynaeco, dismant, w/access	1			
008	Footstool, one step, epoxy coated steel (*)	1			
009	S0190000 Pedal bin, st. st (*)	1			
010	S1712000 Anatomy-chart pregnancy set, set of 8 (*)	1			
011	S0777000 Speculum vaginal, grave medium, st.st. (*)	1			
012	S0777500 Speculum, grave, small (*)	1			
013	S0778000 Speculum, grave, large (*)	1			
014	S0683200 Sphygmomanometer,(adult),aneroid	1			
015	S0686500 Stethoscope, foetal, plastic or aluminium (*)	1			
016	S0667000 Pelvimeter, Collyer type, external (*)	1			
017	S0119300 Light,examination,mobile,220-12V (*)	1			E
018	S0140500 Scale, physician, adult, metric, 6- 160 kg (*)	1			
019	Stethoscope, dual head (*)	1			

13. Obstetrics (incl. USG)

Activities:

Ultrasound examinations have become an essential element of antenatal screening and monitoring.

Some women will require ultrasound examinations to assist in the diagnosis and management of complications in pregnancy, whereas others may require procedures under ultrasound guidance – for example amniocentesis.

Ultrasound examinations have also become increasingly important in the management of neonates. When planning ultrasound facilities, this need should be considered.

Portable ultrasound equipment may be used as an alternative in small units, by appropriately skilled staff.

A dedicated ultrasound room should be close to the antenatal clinic.

It may be located within the main X-ray department as long as that is also close to the antenatal clinic.

There should be easy access from in-patient beds and day assessment areas.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
003	S5005500 Chair, stackable, without armrests	2			
004	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
005	S0184500 Couch, examination, enamelled st. frame, adjustable head (*)	1			
006	Footstool, one step, epoxy coated steel (*)	1			
007	S0190000 Pedal bin, st. st (*)	1			
008	S0002061 Doppler, fetal (*)	1			
009	Ultrasound, obstetric and gynaecology (2 probes)	1			E

14. Treatment/Dressing/Injection

Activities:

Depending upon the design, a small waiting area may be required in the vicinity of the treatment facility.

Investigations and treatments that are not appropriate in the consultation and examination rooms, and which do not require use of the acute day patient accommodation, will be carried out in the treatment room of this facility.

This facility will be used during clinics as required and the level of provision will depend upon the size of the department and the local practice for conducting clinical investigations and treatments.

These procedures will be carried out in the rooms with the patient lying on an examination couch or trolley, or sitting in a chair.

The treatment facility should be positioned between the clean and dirty utility rooms with direct access for staff to each from the preparation areas.

This area will complement the consultation rooms. Minor procedures can be done here.

Orthopaedic OPD cast procedures should be referred to the A&E department that is equipped for POP application and removal.

Equipment:

Sq	Item description	Q	C	M	E
001	S0101605 Trolley, dressing, st. st., 2 trays (*)	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	2	C	M	
004	Refrigerator, under counter model, 110 l	1			E
005	Cabinet, instrument, double door, 0.90 m	1			
006	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
007	S0184500 Couch, examination, enamelled st. frame, adjustable head (*)	1			
008	Footstool, one step, epoxy coated steel (*)	1			
009	S0150000 Stand, infusion, st. st., mobile	1			
010	S0190000 Pedal bin, st. st (*)	1			
011	Dental-002 Dental set	1			
012	ENT-005 Headlight set	1			
013	S0119300 Light,examination,mobile,220-12V (*)	1			E

15. Soiled Utility

Activities:

A soiled utility room should include facilities for the cleaning of dressing trolleys and other items or equipment.

Testing and recording of urine specimens.

Disposal of liquid waste.

Temporary storage of items requiring reprocessing or disposal.

A combined disposal unit, with worktop is needed.

A clinical hand-wash facility is required.

Mechanical or natural ventilation should be provided.

The soiled utility should be located adjacent to the treatment room. If possible, it should also be adjacent to the specimen WC and include a hatch through which specimens can be passed.

This area is used as sluice and dirty linen should be stored here to be collected by laundry staff.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	1			
002	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
003	Bin, disposal, mobile, with lid (*)	1			
004	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
005	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
006	Tub, wash, oval, galvanized steel, 65 l (*)	1			
007	Towel, hand, white (*)	1			
008	Dispenser, paper towel, metal (optional) (*)	1	C		
009	Dispenser, soap, hand operated (optional) (*)	1	C		
010	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
011	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	2			
012	Trolley, bedpans and urinals, mobile	1			
013	S0222020 Bedpan, st. st. (*)	1			
014	S0210000 Basin, kidney, stainless steel,475ml	5			
015	Urinal, st. st.	1			
016	Bedpan, orthopaedic, st. st.	1			
017	Glass, urine, plastic, 250ml	5			

16. Cleaner's room

Activities:

The space and facilities provided should be sufficient for parking and manoeuvring cleaning machines and a cleaner's trolley
Sufficient space should be available for the cleansing of cleaning equipment and disposal of fluids and used materials.
Hand washing facilities are also required.
Shelving and vertical storage should not encroach on the working space or restrict access to the cleaner's sink.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Trolley, cleaning	1			
003	Rack, mops (*)	1			
004	S2170000 Pail w/bail,handle,polyethylene,10 litre (*)	2			
005	Set, cleaning utensils, broom, mop, etc. (*)	1			
006	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			

Renewable/Consumables:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	S0305000 Apron, protection, plastic, reusable
002	S0330500 Bag,urine,collecting,2000ml
003	Bandage, Elastic (crepe), 10 cm x 1 m
004	S0503025 Bandage,elastic,7.5cmx5m,roll
005	Blood Sampling Needle 20 G, disposable, sterile
006	Blood Sampling Needle 21 G, disposable, sterile
007	Blood Sampling Scalp vein 23 G, disposable, sterile
008	Blood Sampling Tube, Vacuum 5ml (Vacutainer)
009	Blood Sampling Vacutainer Holder
010	S0709210 Cannula, IV short,18G,ster,disp

011	S0709220 Cannula, IV short,20G,ster,disp
012	S0709225 Cannula, IV short,22G,ster,disp
013	S0709230 Cannula, IV short,24G,ster,disp
014	S0323300 Catheter,Foley,CH10,ster,disp
015	S0323301 Catheter,Foley,CH12,ster,disp
016	S0323302 Catheter,Foley,CH14,ster,disp
017	S0523055 Compress,gauze,10x10cm,ster/PAC-5
018	S0523050 Compress,paraffin,10x10cm,ster/BOX-10
019	Elastoplasts, 10 cm x 3 m
020	S0330012 Gloves,exam,latex,large,disp/BOX-100
021	S0330011 Gloves,exam,latex,medium,disp/BOX-100
022	S0330010 Gloves,exam,latex,small,disp/BOX-100
023	S0328001 Gloves,surg,6.5,ster,disp,pair
024	S0328501 Gloves,surg,7,ster,disp,pair
025	S0329001 Gloves,surg,7.5,ster,disp,pair
026	S0329501 Gloves,surg,8,ster,disp,pair
027	S0329901 Gloves,surg,8.5,ster,disp,pair
028	Mask, Clinical, Disposable (non-woven)
029	Mask, Dental, Ear Loop
030	Needle, dental sterile 25G Long, Orange
031	Needle, dental sterile 27G Short Gray
032	Needle, dental sterile 30G Extra Short, Yellow
033	Needle, dental sterile, 25G Short, Orange
034	Needle, dental sterile, 27G Long, Gray
035	Needle, dental sterile, 30G Short, Yellow
036	S0747420 Needle,disp,19G(1.1x40mm),ster/BOX-100
037	S0747432 Needle,disp,21G(0.8x40mm),ster/BOX-100
038	S0747440 Needle,disp,22G(0.7x30mm),ster/BOX-100
039	S0747452 Needle,disp,23G(0.6x25mm),ster/BOX-100
040	S0747445 Needle,disp,25G(0.5x16mm),ster/BOX-100
041	S0744400 Needle, scalp vein,21G,ster,disp
042	S0744300 Needle, scalp vein,25G,ster,disp
043	Obstetrical Pads
044	Oxygen mask, adult
045	Oxygen mask, paediatric size
046	S0782208 Safety box for used syrgs/ndls 5lt/BOX-25
047	Set, Infusion "Y", Luer lock, air inlet
048	Set, Infusion, Vented
049	S0552000 Soap,toilet,bar,approx.110g,wrapped
050	S0782413 Syringe,dispos,10ml,ster/BOX-100
051	S0782205 Syringe,dispos,2ml,ster/BOX-100
052	S0782405 Syringe,dispos,5ml,ster/BOX-100
053	S0503010 Tape,adhesive,Z.O.,2.5cmx5m
054	S0480900 Thermometer,clinical,30-40C
055	S0481052 Thermometer,clinical,35-42C
056	S0621000 Tongue depressor,wooden,dispos./BOX-500
057	S0385000 Tourniquet, latex rubber,75cm

Renewable/Consumables, Dental:

Sq	Item description
	Anesthetics:
001	Lidocaine 2% 50 Cartridges
002	Articaine 4 % 50 Cartridges
003	Needles 27GA Long Box of 100
004	Needles 30 GA Short box of 100
005	Aspirating Syringe
006	Sharps Container
	Articulation Paper and Accessories:
001	Articulation Paper 300 Strips Box
002	Articulating Paper Forceps
	Burs:
001	FG Carbide Round no 6, 10 pack
002	FG Carbide Pear 330, 10 pack
003	FG Carbide round-end cylinder 557, 10 pack
004	Steel round CA no. 3, 12 pack
005	Steel round CA no. 5, 12 pack
006	Diamond round No. 010, each
007	Diamond round No. 014 each
008	Diamond cylinder No. 009 each
009	Diamond cylinder No. 014 each
010	Diamond Beveled cylinder No. 878/012 each
011	Diamond Beveled cylinder No. 878/014 each
012	Diamond Flame No. 863/012 each
013	Diamond Wheel 909/035 each
014	Hand piece Cross Cut 79-50 each
015	Bur holder for FG Diamond
016	Bur holder for FG Carbide
017	Bur holder for CA steel
018	Bur sterilization Tray
019	Bur Brush
	Cements:
001	Temporary filling cement, 30 G.
002	Cavity liner, 24 G.
003	Carboxylate Cement 60G Powder + Liquid
004	Temporary Cement Zinc Oxide Eugenol Paste/Paste
005	Glass Ionomer Cement for cementation
006	Glass Ionomer Cement for base
007	Cement Spatula no 24
008	Cement mixing Pad
	Filling Materials:
001	Light Curing Composite, 4.5 G , U
002	Light Curing Composite, 4.5 G , Y
003	Light Curing Composite, 4.5 G , G
004	Glass Ionomer Intro kit 50 caps
005	Etching Gel 12G
006	Bonding 10 ML

007	Application Brushes, 100
008	Capsule Mixer
009	Light Curing Unit
010	Mixing Pad 8 x 8 cm
	Amalgam:
001	Caps 400mg , 50
002	Caps 600mg , 50
003	Amalgam Well
004	Amalgam Gun Plastic
005	Amalgam Gun Tips
006	Amalgam pluggers Hollenback 1
007	Amalgam pluggers Hollenback 2
008	Amalgam pluggers Hollenback 3
009	Burnisher 28/29
010	Burnisher 26/27
011	Carver Cleoid Discoid 3/6
	Matrix Materials:
001	Tofflemire Universal
002	Tofflemire Matrix Bands No.3, 144 per Pkg
003	Tofflemire Matrix Bands No.14, 144 per Pkg
004	Matrix Strips Clear, 500 per Pkg
005	Wedges 400 Assorted
	Finishing Polishing:
001	Finishing Strips 150
002	Polishing points for Amalgam, 10
003	Polishing Points For Composite 10
004	Polishing Point for Acrylics 6
005	Finishing Burs 12 blade Flame 7404, each
	Impression Materials:
001	Mixing Tips, 48
002	Intra-oral Tips 100
	Plastic Filling:
001	Woodson no 1
002	Woodson no 2
003	Woodson no 3
004	Cement applicator Calcium Hydroxide
	Sutures:
001	Suture Silk + Needle 12/box
	Disposables and Infection control:
001	Tray Paper 250 sheets
002	Cotton rolls box of 2000
003	Cotton Gauze 5 x 5 cm 200 per pack
004	Paper Towels pack of 500
005	Saliva Ejectors 100 per bag
006	Evacuation tips 50 per bag

007	Surgical evacuation 10 tips per pkg.
008	Latex gloves Box of 100, Different sizes: S/M/L
009	Face masks 50 per box
010	Safety Glasses each
011	Cleaning, "Quick Wipes" 150 per container
012	Disinfecting/sterilization Solution 3.8L 3.4% Glutaraldehyde
013	Cleaning and evacuation system solution 3.8 L
014	Sterilization pouches 7 x 23 cm, 200
015	
016	Acrylics:
017	Reline Material for full denture
018	Repair Acrylic for full denture
019	Tissue Conditioner
020	Crown and Bridge Acrylic Cartridge
	Waxes:
001	Box of 500 gr.pink medium hard
	X-Ray:
001	Standard intra oral film box of 150
	Endo:
001	Chlorine Hexidine
	Preventives
001	Polishing Paste cups, 200 per box
002	Dental Floss 25 yards, 24 per box
003	Tooth brushes child 72 brushes
004	Tooth brushes adult 72 brushes
005	Tooth picks, 144 packs of 25 picks
006	Fluoride Gel 16oz
	Pins and Posts Pivots / Tenons:
001	Dentin pins 20 pins
002	Root canal posts intro kit
	Crowns:
001	Polycarbonate Crowns Set of 180
002	Ion Crowns Bicuspids set of 64
003	Ion Crowns Molar set of 64

3.3.2 Essential Clinical Support Services

- 3.3.2.1 Imaging Centre
- 3.3.2.2 Clinical Laboratory
- 3.3.2.3 Central Sterile Support
- 3.3.2.5 Physiotherapy and Rehabilitation
- 3.3.2.6 Pharmacy

3.3.2.1 Imaging Centre

Description/Activities:

The imaging centre, also known as the Radiology Department, refers to the department in which diagnostic imaging is provided.

It is distinct from those in which radiotherapy and radiation oncology is carried out. The latter service is not provided in first referral level hospitals of 50-100 beds, as the radiation treatment of malignant disease requires highly trained physicists and physicians who are specialized in radiotherapy and very complex, costly equipment. This service should be available only in tertiary hospitals, also called regional hospitals.

The majority of patients will be ambulatory out-patients, but some will arrive on trolleys or in wheelchairs from the wards or the A&E department.

Most commonly the following functional areas are present in an imaging centre:

- 01 Waiting
- 02 Toilet
- 03 Reception
- 04 Radiologist/Viewing
- 05 Staff Toilet
- 06 Sub-Waiting
- 07 Bucky Room
- 08 Ultrasound Room
- 09 Cubicle/change (5)
- 10 Fluoroscopy (optional)
- 11 Toilet
- 12 Dark Room
- 13 Store, chemicals, x-ray
- 14 Store, film, x-ray
- 15 Soiled Utility
- 16 Cleaner's room

01. Waiting

Activities:

Waiting, In-patients:

The waiting area for in-patients should be accessible by wheelchair, trolley and staff accompanying in-patients. These patients should be scheduled, to prevent long waiting times and anxiety.

Waiting Out-patients:

Sufficient space is required as it is not always possible to estimate the occupancy per day. When possible, appointments should be made to avoid overloading this area.

Equipment:

Sq	Item description	Q	C	M	E
001	Seating, 4 seats on frame, with table, 2.50 m (*)	5			
002	Basket, waste-paper, metal (*)	1			

02. Toilet

Activities:

For patient use.

Should be accessible by wheelchair.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white (*)	1			
002	Dispenser, paper towel, metal (optional) (*)	1	C		
003	Dispenser, soap, hand operated (optional) (*)	1	C		

03. Reception

Activities:

The reception desk should be located adjacent to the waiting area and reasonably close to the X-ray rooms.

The receptionist should be able to observe these rooms and also waiting patients.

The office for secretarial staff may be combined with reception desk.

Patients are received and registered here.

Appointments for advanced procedures and instructions for preparing patients (e.g. barium meal) are made here.

It should liaise with the rest of the hospital regarding use of the X-ray department and prepping of patients.

Equipment:

Sq	Item description	Q	C	M	E
001	Wall clock (*)	1	C		E
002	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	2			
006	Basket, waste-paper, metal (*)	1			

04. Radiologist / Viewing

Activities:

This room should be close to the film developing area and enable the radiologist to report on X-rays.

It is equipped with an X-ray viewer, and a desk and chair as the minimum requirement.

Equipment:

Sq	Item description	Q	C	M	E
001	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
002	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
003	Chair, desk, height adjustable (*)	1			
004	S5005500 Chair, stackable, without armrests	2			
005	Basket, waste-paper, metal (*)	1			
006	Viewer, double field, x-ray film	2	C		E

05. Staff Toilet

Activities:

It is essential that a staff toilet and lockers are available within the X-ray department.

Equipment:

Sq	Item description	Q	C	M	E
001	Hand dryer, electric (optional)	1	C		E
002	Towel, hand, white (*)	1			
003	Dispenser, paper towel, metal (optional) (*)	1	C		
004	Dispenser, soap, hand operated (optional) (*)	1	C		

06. Sub-Waiting

Activities:

This area is equipped with seating space.

Equipment:

Sq	Item description	Q	C	M	E
001	Seating, 4 seats on frame, with table, 2.50 m (*)	1			
002	Basket, waste-paper, metal (*)	1			

07. Bucky Room

Activities:

X-rays use ionizing radiation, which poses a potential risk to personnel and patients.

The images (radiographs) are recorded on X-ray film, and most examinations can be done by a non-physician technician, at a doctor's request.

X-rays can image the lungs, skeleton, kidneys, gall-bladder and bowel. It should be the first choice of imaging equipment.

The X-ray room should be large enough to accommodate the equipment, as specified in the room by room list and will include the following:

1. A rack for apron and gloves.
2. A set of large/medium/small lead aprons.
3. A mobile protective screen.
4. A viewer, double field, X-ray film.
5. A bucky with a vertical wall bucky stand.
6. For the walls, flooring and doors refer to the fluoroscopy room description.

Equipment:

Sq	Item description	Q	C	M	E
001	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			
002	S5005500 Chair, stackable, without armrests	2			
003	Footstool, one step, epoxy coated steel (*)	1			
004	S0190000 Pedal bin, st. st (*)	1			
005	X-Ray, bucky, with vertical wall bucky stand	1	C		E
006	Viewer, double field, x-ray film	1	C		E
007	Screen, protective, mobile	1			
008	Gloves, x-ray protection, pair, small	1			
009	Gloves, x-ray protection, pair, medium	1			
010	Gloves, x-ray protection, pair, large	1			
011	Rack, aprons and glove	1			
012	Apron, protective, small	1			
013	Apron, protective, medium	1			
014	Apron, protective, large	1			
015	Set, aprons, protective gonad	1			
016	Set, position aids, x-ray	1			

08. Ultrasound Room

Activities:

According to current knowledge, ultrasound carries no risk to patients or personnel, but most ultrasound examinations (scans) require the participation of a physician and may take 15 – 20 minutes. Ultrasound images are not easy to record, so accurate patients' records must be kept. Training a technician to undertake ultrasound scanning requires 8 – 12 months experience in a busy ultrasound department. Less training can result in serious errors.

Ultrasound cannot image the lungs or skeleton. It is of greatest importance in obstetrics and for imaging the liver, kidneys, pancreas, gall-bladder and pelvic contents.

Ultrasound does not require any special building construction. The room should contain a patient couch, firm but comfortable, a chair and at least 1m² for the equipment. Lighting must be dim, as bright light makes it difficult to examine a patient properly, but the room should not be too dark. Hand washing facilities should be located either in the room or close by. There must be a toilet close to the ultrasound room.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	S5005500 Chair, stackable, without armrests	2			
003	S0169005 Stool, height adjustable with gasspring, mobile, st. st.	1			
004	S0184500 Couch, examination, enamelled st. frame, adjustable head (*)	1			
005	Footstool, one step, epoxy coated steel (*)	1			
006	S0190000 Pedal bin, st. st (*)	1			
007	S0119300 Light,examination,mobile,220-12V (*)	1			E
008	Ultrasound, universal, basic	1			E

09. Cubicle/change (5)

Activities:

Patients preparing for X-ray need this facility to change from their outside clothing into a patient gown.

Ensure that patient gowns are clean and readily available in the cubicle.

Equipment:

Sq	Item description	Q	C	M	E
001	Gown, ward-type, adult, white (*)	1			
002	S5005500 Chair, stackable, without armrests	1			

10. Fluoroscopy (optional)

Activities:

Barium preparation:

A small area where barium should be stored and a work table should be provided to prepare barium for a barium meal and/or a barium enema.

Fluoroscopy:

The fluoroscopy room walls should be of brick, concrete or gypsum plate. The walls should have lead protection and the protection capability should adhere to the minimum standards required and calculated according to room size, distance to the nearest wall from vertical central beam, the ceiling height and estimated maximum number of examinations per year. The floor should be completely level, waterproof, washable, and free of dust. Doors should be wide enough for a bed ± 120 cm wide.

The room should be capable of housing the following equipment, and have sufficient space to attend to patients around the X-ray equipment:

7. Rack for apron and gloves.
8. Set of large/medium/small lead aprons.
9. A mobile protective screen.
10. A viewer, double field, X-ray film.
11. X-ray, radiology and fluoroscopy, basic.

Equipment:

Sq	Item description	Q	C	M	E
001	Work table, laminated top, with cabinets under the table top, 2.00 m	1	C		
002	Work table, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
003	Mixer, Barium, 2 l	1			E
004	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
005	S5005500 Chair, stackable, without armrests	1			
006	Footstool, one step, epoxy coated steel (*)	1			
007	S0190000 Pedal bin, st. st (*)	2			
008	X-ray, radiology and fluoroscopy, basic	1	C		E
009	Viewer, double field, x-ray film	1	C		E
010	Screen, protective, mobile	1			
011	Gloves, x-ray protection, pair, small	1			
012	Gloves, x-ray protection, pair, medium	1			
013	Gloves, x-ray protection, pair, large	1			
014	Rack, aprons and glove	1			
015	Apron, protective, small	1			
016	Apron, protective, medium	1			
017	Apron, protective, large	1			
018	Set, aprons, protective gonad	1			
019	Set, position aids, x-ray	1			

11. Toilet

Activities:

A separate toilet facility for patients is required.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white (*)	1			
002	Dispenser, paper towel, metal (optional) (*)	1	C		
003	Dispenser, soap, hand operated (optional) (*)	1	C		

12. Dark Room

Activities:

The dark room should be adjoining the X-ray room.

This should be a separate room, and no other work should be carried out here. It is vital that the darkroom is not too close to the radiation source.

The size of the darkroom is determined by the size of processing equipment and the need to work in almost total darkness with only safe-light illumination.

There must be a separation between the wet area and the dry area. The entrance to the darkroom should be close to the X-ray generator control, but it need not lead directly from the X-ray room.

The floor should be waterproof, level, washable and a floor drain is useful.

Door should be light-tight

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
002	S0190000 Pedal bin, st. st (*)	1			
003	Guillotine/trimmer	1			
004	Bin, film storage	1			
005	Developer, automatic	1		M	E
006	Light, safe, darkroom	1			E

13. Store, chemicals, X-ray

Activities:

These should be stored in containers and controlled.

The room should be close to where the chemicals are used.

Equipment:

Sq	Item description	Q	C	M	E
001	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			

14. Store, film, X-ray

Activities:

Unused X-ray film must be stored placed in the original light-tight boxes, away from heat, humidity and radiation.

Equipment:

Sq	Item description	Q	C	M	E
001	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			

15. Soiled Utility

Activities:

A soiled utility room should include facilities for the cleaning of dressing trolleys. Other equipment should be included to test specimens of urine and record the results. It is used for the disposal of liquid waste, and to temporarily store items requiring reprocessing or disposal. It is a combined disposal unit, with worktop, and a clinical hand-wash facility is required. Mechanical and natural ventilation should be provided. The soiled utility should be adjacent to the X-ray room. If possible, it should also be adjacent to the specimen toilet and include a hatch through which specimens can be passed. This area is used as sluice, and dirty linen should be stored here to be collected by the laundry.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
002	Bin, disposal, mobile, with lid (*)	1			
003	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
004	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
005	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
006	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	2			

16. Cleaner's room

Activities:

The space and facilities provided should be sufficient for parking and moving cleaning machines and a cleaner's trolley. Cleansing of cleaning equipment and the disposal of fluids and used materials. Hand-washing facilities are also required. Shelving and vertical storage should not encroach on the working space or restrict access to the cleaner's sink.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Trolley, cleaning	1			
003	Rack, mops (*)	1			
004	S2170000 Pail w/bail,handle,polyethylene,10 litre (*)	2			
005	Set, cleaning utensils, broom, mop, etc. (*)	1			
006	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			

Renewable/Consumables:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	X-ray film non-interleaved 18x 24cm
002	X-ray film non-interleaved 35 x35cm
003	X-ray film non-interleaved 35 x43cm
004	X-ray film non-interleaved 24 x 30 cm
005	X-ray cassettes with screens 18 x 24 cm
006	X-ray cassettes with screens 24 x 30 cm
007	X-ray cassettes with screens 35 x 35 cm
008	X-ray cassettes with screens 30 x 40 cm
009	X-ray cassettes with screens 35 x 43 cm
010	Chemical processing tank

011	Lead rubber aprons
012	Gonad shield adult
013	Gonad shield child
014	X-ray developers concentrate 2 x 20l
015	X-ray liquid fixer 2 x 5L

Capacity:

One X-ray room and one dark room can handle up to 40 – 50 patients per day. Because of the high cost of the equipment, it is better to increase the number of staff and to lengthen the working day rather than add additional rooms and more equipment.

Ultrasound takes $\pm 15 - 20$ minutes per investigation. With the assumption that 2 patients can use the ultrasound per hour, for 8 hours per day and 300 working days a year, that will represent a capacity of $\pm 4,800$ patients.

Location:

The diagnostic imaging area should be on the ground floor of the hospital, with easy, covered access for wheelchairs, patients trolleys and beds. Its location close to the emergency section of the outpatient department is helpful, but easy access for all patients should be the first consideration. A separate building is not necessary.

3.3.2.2 Clinical Laboratory

Modern medicine is increasingly dependent on laboratory services for the prevention, diagnosis and control of diseases. Pathology laboratories play a central role in the hospital and in community health services and the first referral level hospital should have an adequate laboratory service under the direction of a medically qualified pathologist.

Description/Activities:

The specific functional requirements of the clinical laboratory, as well as their interaction, are laid out in the Figure 1 further down this section. The shared facilities between the departments are grouped and described under the following headings:

- Patient areas
- Specimen reception area/ "out-of-hours" facility
- Working areas
- Staff facilities

The clinical laboratory providing services for a first referral hospital should preferably consist of the following areas:

- 01 Waiting
- 02 Reception/Specimen Collection
- 03 Blood Sampling
- 04 Toilet
- 05 Blood Donation
- 06 Haematology and blood bank work area
- 07 Chief Laboratory
- 08 Staff Toilet
- 09 Chemistry work area
- 10 Bacteriology work area
- 11 Pathology work area
- 12 Glass Wash
- 13 Sterilisation, laboratory
- 14 Store laboratory
- 15 Store, chemicals, laboratory
- 16 Soiled Utility
- 17 Cleaner's room

01. Waiting

Activities:

The patient areas must be separate from all laboratory working areas.
They should be adjacent to the haematology and clinical pathology departments and readily accessible from the microbiology department.
The location and layout of the patient areas must preclude unauthorised access to other areas of the laboratory complex.

Equipment:

Sq	Item description	Q	C	M	E
001	Seating, 4 seats on frame, with table, 2.50 m (*)	5			
002	Basket, waste-paper, metal (*)	1			

02. Reception/Specimen Collection

Activities:

Main entrance, patient reception and waiting

The main entrance for patients visiting the pathology department will be combined with the patient reception and waiting areas. After reporting to the reception, patients wait until called to the adjacent consulting/examination/venepuncture rooms.

Waiting space should be sufficient to accommodate all visitors to the departments within the laboratory.

The reception point should provide space for at least two staff members at peak periods. A counter and hatch are required and should overlook the waiting area.

Specimen reception area/ "out-of-hours" facility

Normally the bulk of specimens for inside and outside the hospital are received at a main specimen reception point serving the pathology department. From there they should be distributed to the appropriate departmental reception areas.

The reception point for specimens must be separate from the patient reception point and should not be part of a clerical office or in a public corridor.

Specimens should be delivered across a fixed counter (with a hatch) having smooth impervious surfaces, resistant to the damaging effects of disinfectants.

The area should have a washable floor and hand washing facilities.

Provision for an out of hours facility is required for access to cross-matched blood and for storing specimens and blood cultures taken outside normal working hours at 4°C, and approximately 37°C. This area should be accessible without the need for entry into the laboratory areas.

Equipment:

Sq	Item description	Q	C	M	E
001	Wall clock (*)	1	C		E
002	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
003	Cabinet, filing, 4 drawers, 0.50 m	2			
004	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	3			
005	Chair, desk, height adjustable (*)	1			
006	S5005500 Chair, stackable, without armrests	2			
007	Basket, waste-paper, metal (*)	5			

03. Blood Sampling

Activities:

Venepuncture rooms

The size and allocation of rooms for this purpose are described in the room-by-room list. A proportion of patients attending as out-patients will require rapid results on laboratory investigations for diagnosis or treatment, and others will merely require blood specimens to be taken for subsequent testing.

Patients may also be referred to the hospital by general practitioners for samples of their blood and other specimens to be obtained for investigation.

The room should be adjacent to the waiting area.

Facilities are required for venepuncture and other procedures for obtaining specimens from patients.

There should be space for the patient to dress and undress, with assistance if necessary, and privacy. Space should be sufficient for use by wheelchair patients, or mothers with prams.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, blood collection	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
004	Stool, height adjustable with gas spring, mobile, with back support	1			
005	Chair, blood collection	1			
006	S0184500 Couch, examination, enamelled st. frame, adjustable head (*)	1			
007	S0190000 Pedal bin, st. st (*)	1			
008	S0385000 Tourniquet, latex rubber, 75cm (*)	5			

04. Toilet

Activities:

A toilet for patients, including one for disabled persons and also with facilities for specimen collection, is required, adjacent to the waiting area.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white (*)	1			
002	Dispenser, paper towel, metal (optional) (*)	1	C		
003	Dispenser, soap, hand operated (optional) (*)	1	C		

05. Blood Donation

Activities:

This area is where the patient is made comfortable before donating blood.

It should be big enough to house the consumables that are used during the blood donation process.

The design of this room should incorporate sufficient space to accommodate the patient as well as the lab technician.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, blood collection	1			
002	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
003	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
004	Chair, blood collection	1			
005	S0190000 Pedal bin, st. st (*)	1			
006	S0385000 Tourniquet, latex rubber, 75cm (*)	1			

06. Haematology and blood bank work area

Activities:

Haematology is the study of the blood, its functions and disorders.

General haematology:

Specimens of blood are subject to haemoglobin and platelet estimation and cell counting, using mechanised equipment. The red cell sedimentation rate is assessed. Numbers of blood specimens are spread on slides, stained and examined microscopically. Bone marrow preparations are also examined microscopically.

Special Haematology:

This section of the department examines the various factors which affect the clotting of blood. Samples of blood are assayed individually for their ability to clot as compared to normal blood. Specialized work on the study of enzymes, histo-chemical and serological studies, bone marrow processing, and the diagnosis of blood-borne parasite infection is frequently undertaken. Some of these tests are often batched and performed on two or three days each week.

General haematology area:

In this area bench space is provided for receiving specimens from the main specimen reception, for labelling specimens and recording specimens.

Space is needed for automated cell counter facilities to undertake routine haemoglobin and particle estimations. These are located on adjacent worktops.

Cell-counting, film preparation, staining (and the preparation of stains), and sedimentation tests are also undertaken in this area.

A quiet and undisturbed area is required for the microscopic examination of stained slides.

Special haematology laboratory area:

In this area special haematological procedures are carried out, for example, to check for blood coagulation disorder and abnormal haemoglobins.

Blood reception laboratory area:

This comprises a reception area adjoining both a blood grouping and a cross-matching (compatibility testing) laboratory.

The reception area should be easily accessible for deliveries of blood from the Regional Blood Transfusion Centre. Space is required for the storage of numerous blood transport boxes, and for recording and labelling of stock blood and specimens of patients blood received for grouping and cross-matching.

Un-cross-matched blood must be stored in blood bank refrigerators.

The blood reception laboratory area should be partitioned off from the main laboratory area in order to avoid disturbance to the work and the consequent risk of errors. The former must be located near the entrance to the haematology department.

Blood grouping area:

Blood is treated by manual and mechanised methods to establish the blood group. The work requires the use of centrifuges, incubator, water bath, cell washers and mechanised grouping apparatus. Test materials need to be kept refrigerated, or frozen.

Cross-matching area:

Patients' blood (of known group) is tested for compatibility with donors' blood. Blood which has been cross-matched is placed in a blood bank refrigerator reserved for this purpose. Authorised personnel from the hospital require access to the Blood Bank at any time.

Blood grouping and cross-matching:

Blood for transfusions is tested in the hospital laboratory for compatibility with the blood of the patient who is to be transfused and whose blood group will also need to be determined. This work needs to be undertaken in an undisturbed environment in order to minimise the risk of error. Mechanised equipment may sometimes be used. Exceptionally, blood may be collected from donors in the vena-puncture room, under stringent conditions.

Provision should be made for the following:

Reception of specimens.

Blood transfusion activities, including blood grouping and cross-matching, are performed. A blood bank for the storage of blood received from Regional Blood Transfusion Service, and for holding cross-matched blood is required.

A cold room for storage.

Equipment:

Sq	Item description	Q	C	M	E
001	Refrigerator, 300 l + 85 l	1			E
002	Refrigerator, blood storage, 50 bags, 170 l	1			E
003	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
004	Table, laboratory, complete with all services, per meter, Trespa	2	C	M	E
005	S0190000 Pedal bin, st. st (*)	1			
006	S0948200 Counting Chamber, for hemacytometer (*)	3			
007	Ren/Lab 060 ESR Glass tubes	1			
008	Ren/Lab 058 Test tube rack, metal to hold 20 tubes/ dia.15mm	1			
009	Pipette, WBC Diluting with white bead (*)	1			
010	Pipette, RBC Diluting with white bead (*)	1			
011	Drying rack for glass slides	1			
012	S0957105 Microscope, binocular, 3 objectives (*)	1			E
013	Centrifuge, micro haematocrit, 12000 rpm (*)	1			E
014	Filtration system (*)	1			
015	Counter, blood cell, differential	1			E
016	Coagulation measuring system, ball-method, automatic	1			E
017	S0000536 Hemoglobin meter (*)	1			E
018	Counter, haematology, automatic, 8 parameters	1			E
019	S0983400 Timer, 60 min (*)	1			E
020	Ren/Lab 060 Blood sedimentation unit, ESR-Westergren	1			
021	Rotator, blood specimen	1			E
022	Set, blood group typing	1			
023	Rhesus typing, box	1			
024	Set, staining, manual	1			

07. Chief Laboratory

Activities:

Office space allocated for administration and staff matters

Equipment:

Sq	Item description	Q	C	M	E
001	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
002	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
003	Chair, desk, height adjustable (*)	1			
004	S5005500 Chair, stackable, without armrests	2			
005	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
006	Basket, waste-paper, metal (*)	1			

08. Staff Toilet

Activities:

Separate staff changing areas is required for male and female staff. Lockers for holding outdoor clothing and personal valuables under secure storage should be provided. Hand washing and showering facilities are also required.

Clean protective clothing/white coats are issued from a clean linen store sited adjacent to the changing facilities. Coat hooks and hand washing facilities are located at the exit of each laboratory. Dirty protective clothing will be placed into linen bags (appropriately colour-coded) and laundry treated according to the policy for the laundering of contaminated linen.

A staff toilet with hand washing facilities should be provided adjacent to the changing rooms.

Equipment:

Sq	Item description	Q	C	M	E
001	Hand dryer, electric (optional)	1	C		E
002	Towel, hand, white (*)	1			
003	Dispenser, paper towel, metal (optional) (*)	1	C		
004	Dispenser, soap, hand operated (optional) (*)	1	C		

09. Chemistry work area

Activities:

Test of blood and other samples by mechanised or manual processes for routine or emergency work is undertaken here. Bench space is required for this work and the accompanying paperwork.

Cupboard space and shelves are required for storing "in-use" reagents, solutions in small and large volumes, disposables and miscellaneous small items of laboratory equipment.

All laboratory activity areas require hand washing facilities, strategically positioned, and arrangements for hanging up laboratory clothing.

Equipment:

Sq	Item description	Q	C	M	E
001	Distilling apparatus, 8 l/h	1		M	E
002	S0002077 Refrigerator, 140 l + 20 l (*)	1			E
003	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
004	Table, laboratory, complete with all services, per meter, Trespa	2	C	M	E
005	Cabinet, fume, complete with all services, 1.20 m, with fan	2	C	M	E
006	S0190000 Pedal bin, st. st (*)	1			
007	Ren/Lab 058 Test tube rack, metal to hold 20 tubes/ dia.15mm	1			
008	Ren/Lab 025 pH Paper, Range 1-12	1			
009	S0957105 Microscope, binocular, 3 objectives (*)	1			E
010	Centrifuge, general, 6 x 15 ml (*)	1			E
011	Shaker, VDRL, and general purpose	1			E
012	Balance, precision, 2200 g, <> 10 mg (*)	1			E
013	Balance, analytical, 300 g, <> 1 mg	1			E
014	Bath, water, precision, 15 l (*)	1			E
015	Bath, water, serology, precision, 7 l	1			E
016	Stirrer, hotplate, electric (*)	1			E
017	Analyzer, ELISA, automatic, single channel	1			E
018	Photometer, work station, complete	1			E
019	Meter, pH, bench top, digital	1			E
020	S0983400 Timer, 60 min (*)	1			E
021	Burner, Bunsen (*)	1		M	

10. Bacteriology work area

Activities:

Bacteriology section:

Most of the work involves the examination of specimens to aid in the diagnosis of infection by bacteria, parasites and fungi and, where necessary, test the sensitivity of organisms to the antibiotics used to treat patients.

Serological tests are performed to demonstrate the presence of antigens and the presence of a concentration of antibodies (e.g. in case of HIV/AIDS).

Provision should be made for the following:

The reception of specimens and carrying out of general bacteriological investigations, culture identification and sensitivity testing of organisms derived from urine, wound, genital, faecal and other miscellaneous specimens. Tests include inoculation of appropriate liquid, semi-solid and solid culture media for the isolation and identification of micro-organisms and antibiotic susceptibility testing. Slides are also prepared and stained and then examined microscopically. Centrifugation of samples is done when necessary and preparation of inoculated media for anaerobic investigations when appropriate.

Investigation of hazard group 3 pathogens and materials which may contain them, and general bacteriological investigations on sputum specimens.

Examination of blood specimens submitted in blood culture bottles containing a liquid that sustains growth of organisms that may be present in the blood.

Sterilising, central wash-up, media preparation and plate pouring activities.

Department store.

Cold room/refrigeration facilities.

Staff offices and laboratory facilities.

General microbiology area:

Space is required for the reception of specimens from the main specimen reception, sorting, checking, batching and labelling/numbering specimens and forms before dispatch to the appropriate workstation in the laboratory.

General bacteriological investigations comprising direct microscopy, culture identification and sensitivity testing of organisms which may be present in specimens sent to the laboratory are normally undertaken at various workstations allotted for work on particular types of specimens, e.g. urines, wound and other swabs.

Space is required for bench and free standing equipment and for bench activities. This includes the plating and inoculation of appropriate culture media for isolation and identification of micro-organisms and antibiotic sensitivity testing.

A centrifuge is required and these create noise and vibration problems and may interfere with other operations, for example the use of microscopes. Their location must therefore be carefully considered.

Facilities will be required for staining slides and for their microscopic examination, including fluorescence microscopy.

Inoculated media must be incubated under highly controlled temperature and atmospheric conditions (e.g. aerobically, anaerobically or in carbon dioxide atmospheres), to obtain growth of organisms. A hot room maintained at 37°C and the use of separate incubators will therefore be necessary.

Adequate storage of "in-use" reagents, laboratory media and miscellaneous laboratory disposables and equipment is required. Adequate refrigerator storage is also required.

Provision for hand washing and hanging of protective clothing near the entrance/exit to the laboratory are particularly important.

Sterilising, wash-up, media preparation and plate pouring area:

These activities are inter-related. They are best planned as a unit combining the sterilising and wash-up facilities with direct access to the media preparation room, which in turn has direct access to the media dispensing/plate pouring room.

Facilities are needed for:

Disinfection of contaminated material before disposal, and of glass and plastic ware prior to cleaning or disposal.

Disposing of solid and liquid waste.

Washing-up glassware by automatic machines or manually, including specialized glassware.
Capping cleansed tubes and containers and subsequent sterilisation.
Storing sterilised items and materials.
Preparing solid and liquid media in bulk.
Sterilising bulk media in laboratory autoclaves.
Storing bulk materials, such as dried media preparations on open shelves and under refrigerated conditions.
Filling of sterilised containers with prepared liquid media.
Storing of miscellaneous laboratory containers, tubes and caps, consumables and disposable items, labels and sundry items of minor equipment.
Drying glassware in drying cabinets and sterilising by dry heat.
Labelling prepared media, tubes and bottles.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
002	S0002077 Refrigerator, 140 l + 20 l (*)	1			E
003	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
004	Table, laboratory, complete with all services, per meter, Trespa	2	C	M	E
005	S0190000 Pedal bin, st. st (*)	1			
006	Ren/Lab 058 Test tube rack, metal to hold 20 tubes/ dia.15mm	1			
007	Drying rack for glass slides	1			
008	S0957105 Microscope, binocular, 3 objectives (*)	1			E
009	Centrifuge, bacteriological, 7 x 6 ml	1			E
010	Rotator (*)	1			E
011	Balance, precision, 2200 g, <> 10 mg (*)	1			E
012	Bath, water, precision, shaking, 14 l	1			E
013	Incubator, 50 l, up to 70 °C	1			E
014	S0952415 Oven, drying cabinet, 53 l, up to 300 °C (*)	1			E
015	Hotplate	1			E
016	Filtration system (*)	1			
017	Jar, anaerobic, valve manometer	2			
018	S0983400 Timer, 60 min (*)	1			E
019	Applicator, sensitivity disc	1			E
020	Burner, Bunsen (*)	1		M	

11. Pathology work area

Activities:

Clinical pathology:

Clinical pathology is the study of the changes that occur in the chemical constitution and biochemical mechanisms of the body in disease.

Manual testing:

This includes the entire non-mechanised test conducted both frequently and infrequently. Part of this work may be designated as “emergency” and may be performed in a separate room.

Provision should be made for the following:

Specimen reception/preparation/preliminary processing area and recording.
Testing of blood, urine, faecal and other specimens by mechanised or manual processes for routine or emergency (Stat test) work. These tests include the measurement of electrolytes, enzymes, liver and renal function tests.
Storage/weighing/reagent-solution preparation and glass wash.
A cold room.

Specimen reception/preparation/preliminary processing area and recording area:

Specimens are received from the main specimen reception, sorted, batched, labelled and numbered, and work sheets prepared.

Where appropriate, specimens are centrifuged and separated into suitable containers.

Subsequent handling should be within a microbiological safety cabinet if necessary.

Space is required for centrifuges, a laboratory sink, a microbiological safety cabinet, a refrigerator/freezer, and a cold plate. Bench working space is needed to carry out a variety of paper work as well as serum/plasma separation, and for packing samples prior to dispatch to other laboratories for certain analyses.

A fume cupboard for preliminary processing of faeces and a sluice for disposal of urine and faecal residues is necessary.

Equipment:

Sq	Item description	Q	C	M	E
001	Refrigerator, 300 l + 85 l	1			E
002	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	2			
003	Table, laboratory, complete with all services, per meter, Trespa	6	C	M	E
004	Cabinet, fume, complete with all services, 1.20 m, with fan	1	C	M	E
005	S0190000 Pedal bin, st. st (*)	2			
006	Ren/Lab 058 Test tube rack, metal to hold 20 tubes/ dia.15mm	1			
007	Drying rack for glass slides	1			
008	S0745500 Scalpel handle, stainless steel, for No.22 blades (*)	1			
009	S0957105 Microscope, binocular, 3 objectives (*)	1			E
010	Centrifuge, cytology, 8 x 15 ml, 12000 rpm	1			E
011	Balance, precision, 2200 g, <> 10 mg (*)	1			E
012	Bath, water, tissue	1			E
013	S0952415 Oven, drying cabinet, 53 l, up to 300 °C (*)	1			E
014	Oven, drying cabinet, 50 l	1			E
015	Microtome, rotating, paraffin and CO2 freezing	1			E
016	Maintenance kit, microtome knife	1			
017	Embedding equipment, tissue, manual	1			
018	Dispenser, wax, tissue embedding, 1.5 l	1			E
019	Plate, cooling, paraffin	1			E
020	Cabinet, storage, slides and wax block cassettes, 6000	1			
021	Table, slide warming	1			E
022	S0983400 Timer, 60 min (*)	1			E
023	Set, staining, manual	1			
024	Burner, Bunsen (*)	1		M	

12. Glass Wash

Activities:

A glass wash facility should be associated with the chemical storage and preparation area.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	2			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
004	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	2			
005	Washer/disinfector, glassware, laboratory, small	1	C	M	E
006	Water-jet pump to clean pipettes (*)	1			
007	Ren/Lab 055 Test tube brush	3			

008	Ren/Lab 054 Brush for bottle and flasks	3			
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13. Sterilisation, laboratory

Activities:

This area is used by all the different working areas and should be equipped to accommodate all the different activities that take place in the laboratory in the first referral hospital.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Sterilizer, steam, bench top, 0.25 x 0.45 m, w generator, w drying cycle	1		M	E
004	Basket, instruments, 0.12 x 0.25 x 0.06 m (*)	3			

14. Store laboratory

Activities:

The laboratory store should be of adequate size to accommodate the bulk of the renewable/consumable items that are used in the laboratory.

It is important to separate the bulk store items and the chemical store items.

Equipment:

Sq	Item description	Q	C	M	E
001	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	4			
002	Bottle, suction, central vacuum, rail connection, 1.5 l	1		M	
003	Bottle, suction, central vacuum, rail connection, 3 l	1		M	
004	Clamp, test tube, spring wire, 125mm	1			
005	S0415000 Bottle,dropping,amber,glass,10ml	1			
006	Ren/Lab 048 Pipetting aid rubber ball	1			
007	Beaker, glass, 100 ml	3			
008	Ren/Lab 061 Beaker, glass, 250 ml	1			
009	Beaker, glass, 1000 ml	1			
010	Erlenmeyer flask, narrow mouth, heat-resistant glass, 100 ml (*)	1			
011	Erlenmeyer flask, narrow mouth, heat-resistant glass, 250 ml (*)	1			
012	Erlenmeyer flask, narrow mouth, heat-resistant glass, 500 ml (*)	1			
013	Erlenmeyer flask, narrow mouth, heat-resistant glass, 1000 ml (*)	1			
014	Measuring cylinder, graduated, glass, 50 ml	1			
015	Measuring cylinder, graduated, glass, 250 ml	1			
016	Measuring cylinder, graduated, glass, 500 ml	1			
017	Measuring cylinder, graduated, glass, 1000 ml	1			
018	Volumetric flask, with stopper, 100 ml (*)	1			
019	Volumetric flask, with stopper, 250 ml (*)	1			
020	Volumetric flask, with stopper, 500 ml (*)	1			
021	Volumetric flask, with stopper, 1000 ml (*)	1			
022	Ren/Lab 051 Centrifuge tube, un-graduated, 5 ml conical, thick glass	1			
023	Test tube, glass, heat resistant, 75 x 11 mm (*)	1			
024	Test tube, glass, heat resistant, 100 x 13 mm (*)	1			
025	Test tube, glass, heat resistant, 150 x 15 mm (*)	1			
026	Pipette, 2 ml (*)	1			
027	Pipette, WBC Diluting with white bead (*)	1			
028	Pipette, RBC Diluting with white bead (*)	1			

029	Pipette, volumetric, bulb, 1 ml (*)	1			
030	Pipette, volumetric, bulb, 5 ml (*)	1			
031	Pipette, graduated, 1 ml (*)	1			
032	Pipette, graduated, 5 ml (*)	1			
033	Pipette, graduated, 10 ml (*)	1			
034	Glass rods, 150 x 4 mm	1			
035	Funnel, glass, 60 mm diametre (*)	1			
036	Funnel, glass, 100 mm diametre (*)	1			
037	Funnel, glass, 120 mm diametre (*)	1			
038	Dropping Bottles with Lugs and Ground Glass Stoppers, 30 ml (*)	1			
039	Ren/Lab 001 Dropping Bottles with Lugs and Ground Glass Stoppers, 60 ml	1			
040	Dropping Bottles with Ground Glass Stopper/Pipette, 30 ml (*)	1			
041	Dropping Bottles with Ground Glass Stopper/Pipette, 50 ml (*)	1			
042	Amber Glass Reagent Bottles, narrow mouth, 250 ml (*)	1			
043	Amber Glass Reagent Bottles, narrow mouth, 500 ml (*)	1			
044	Amber Glass Reagent Bottles, narrow mouth, 1000 ml (*)	1			
045	Petri dish with lid, glass, 90 mm diametre (*)	1			
046	Broad tipped forceps, Steel about 115mm long (*)	1			
047	S2270500 Scissors all purpose, 180 mm (*)	1			
048	Ren/Lab 023 Funnel, polyethylene, 60 mm diametre	1			
049	Funnel, polyethylene, 150 mm diametre (*)	1			
050	Funnel, polyethylene, 100 mm diametre (*)	1			
051	Ren/Lab 046 Spatula for weighing chemicals	1			
052	Ren/Lab 002 Wash bottle, polyethylene, 250 ml	1			
053	Ren/Lab 038 Eppendorf Standard Pipettors, multipipette	1			
054	Ren/Lab 032 Yellow pipetter tips, pack of 500	1			
055	S0919020 Bottle,dropping,pipette,polyethyl.,50ml	1			
056	Bottle, narrow mouth, screw cap, amber, polyethylene 250ml	1			
057	Bottle, narrow mouth, screw cap, amber, polyethylene 500ml	1			
058	Bottle, narrow mouth, screw cap, amber, polyethylene 1000ml	1			
059	Bottle, specimen container, 10ml	1			
060	Bottle, universal container, glass wide neck with aluminium scew cap, 25ml	1			
061	Container, sputum specimen	1			
062	Container, stool specimen	1			
063	Jar, Coplin	1			
064	Diluter / dispenser, manual (*)	1			
065	Pipette, piston, set 7 sizes (*)	1			
066	S0922100 Box,empty,for 100 microscope slides (*)	1			
067	Capillary tubes, haematocrit, heparinized, pack 100	1			
068	S0425200 Pipette,glass dropping,ungraduated	1			
069	S0934001 Cover glass,microscope slides/BOX-100 (*)	1			
070	Clamp, with holder for burette, adjustable	1			
071	S0969000 Slide,microscope,plain,76x26mm/BOX-100 (*)	1			
072	Stopper, different sizes, rubber or cork, set 200	1			

15. Store, chemicals, laboratory

Activities:

Chemical storage/weighing/reagent-solution preparation and glass wash.

Storage is required for reagents and solutions, flammable and toxic chemical and strong acids and bases.

It is important that the various classes of chemicals, for example flammables, oxidising agents, acids and bases should be stored in separate areas within this room.

A flammable liquids cabinet and poisons cabinet should be provided.

This room is also used for weighing and preparing reagents for use in the laboratory areas.

Provision should be made for storing glassware and other equipment used in this area, with adequate benching for both working and holding balances, mixers, stirrers, a hot plate and hot air oven.

A sink and refrigerator are required.

Provision for hand washing and hanging protective clothing should also be made.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose, st.st., mobile, 2 trays (*)	1			
002	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			

16. Soiled Utility

Activities:

Facilities for the temporary holding of securely packed refuse and linen bags (appropriately colour-coded), should be provided.

The disposal of laboratory waste materials will depend on hospital policy and undertaken in accordance with the Health and Safety for the safe disposal of medial waste.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose, st.st., mobile, 2 trays (*)	1			
002	Bin, disposal, mobile, with lid (*)	1			
003	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
004	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C		
005	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
006	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	2			

17. Cleaner's room

Activities:

The cleaner's room is the base from which domestic services staff provides a cleaning service to the pathology department.

There should be easy access to cleaning equipment and materials, the emptying and filling of buckets, and the routine servicing and cleaning of equipment.

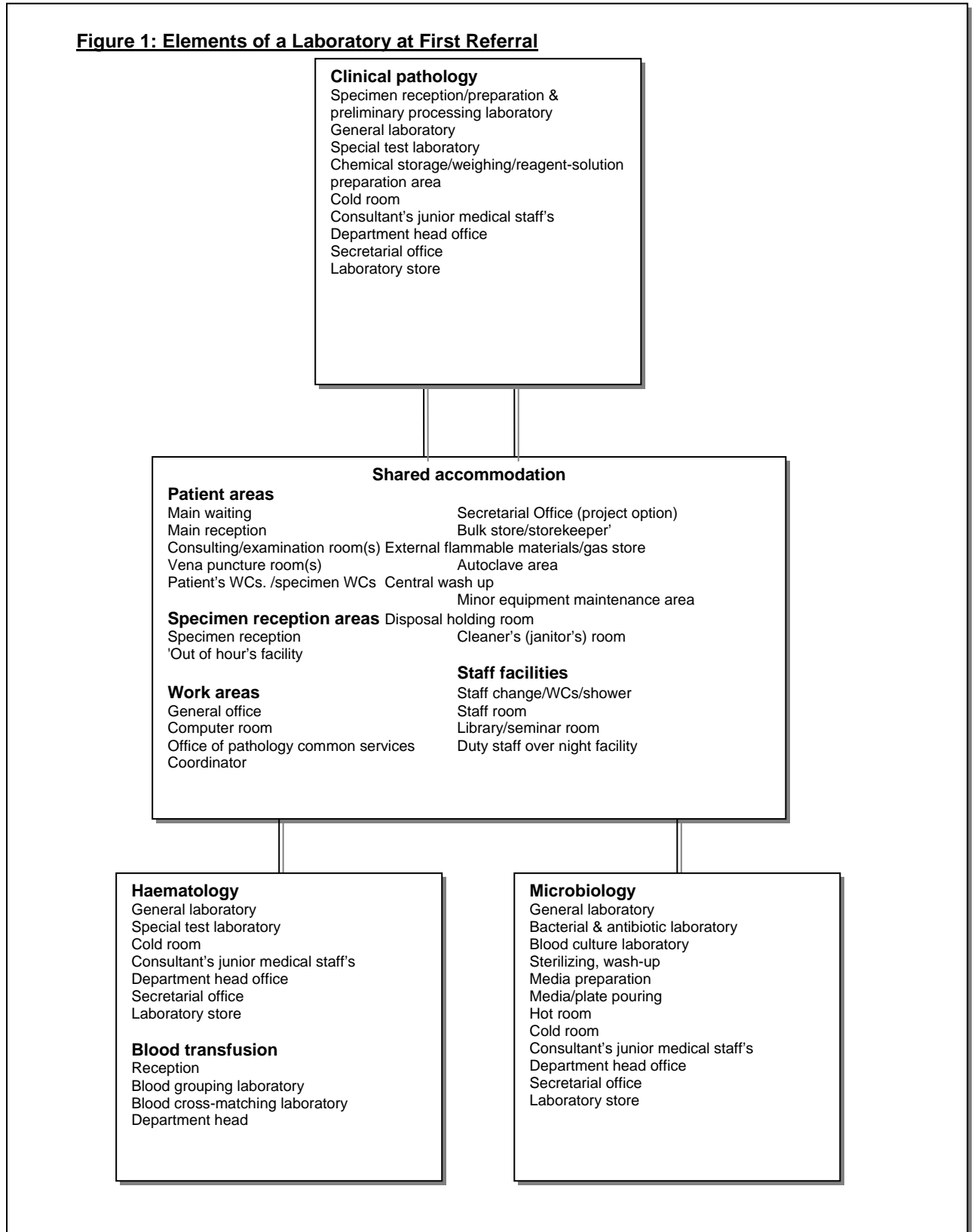
There should be unrestricted access to the sink, which should have hot and cold water.

The room should be well ventilated so that equipment can dry quickly and odours can be avoided or ventilated.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Trolley, cleaning	1			
003	Rack, mops (*)	1			
004	S2170000 Pail w/bail,handle,polyethylene,10 litre (*)	2			
005	Set, cleaning utensils, broom, mop, etc. (*)	1			
006	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			

Figure 1: Elements of a Laboratory at First Referral



Renewable/Consumables:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication). Also note that there might be duplication of items allocated under renewable/consumable and equipment.

Sq	Item description
001	Ren/Lab-001 Bottel,Drop,plastic,60ml
002	Ren/Lab-002 Bottle, swan neck jet, plastic, 250ml
003	Ren/Lab-003 Tube, Capillary, Heparinised, 75mm
004	Ren/Lab-004 Container, Protection (blood sampling system)
005	Ren/Lab-005 Blood Sampling Vacutainer Holder
006	Ren/Lab-006 Blood Sampling Needle 20 G, disposable, sterile
007	Ren/Lab-007 Blood Sampling Needle 21 G, disposable, sterile
008	Ren/Lab-008 Blood Sampling Scalp vein 23 G, disposable, sterile
009	Ren/Lab-009 Blood Sampling Tube, Vacuum 5ml (Vacutainer)
010	Ren/Lab-010 Blood Sampling Tube, Vacuum Heparinised 5ml (Vacutainer)
011	Ren/Lab-011 Blood Sampling Tube, Vacuum EDTA 5ml (Vacutainer)
012	Ren/Lab-012 Counting Chamber, Fusch-Rosenthal, simple grid
013	Ren/Lab-013 Counting Chamber, Kovaslide, Plastic, Disposable
014	Ren/Lab-014 Counting Chamber, Neubauer, Double Grid
015	Ren/Lab-015 Container, Sample, sputum, plastic, non-sterile
016	Ren/Lab-016 Container, Sample, urine, plastic, non-sterile, 60 ml
017	Ren/Lab-017 Cover Glass, 22 x 22 mm
018	Ren/Lab-018 Cover Glass, Planed, for counting chamber, 20 x 26 mm
019	Ren/Lab-019 Measuring, plastic, graduated, cylindrical, spout, 100 ml
020	Ren/Lab-020 Measuring, plastic, graduated, cylindrical, spout, 250 ml
021	Ren/Lab-021 Measuring, plastic, graduated, cylindrical, spout, 1 liter
022	Ren/Lab-022 Film Sealing, plastic, (Parafilm), roll, 10 cm x 38 m
023	Ren/Lab-023 Funnel, plastic, 60 mm diam., short end
024	Ren/Lab-024 Lancet, disposable, sterile, standard type
025	Ren/Lab-025 Paper, pH Indicator, strip
026	Ren/Lab-026 Paper, Whatmann, n 3, disc
027	Ren/Lab-027 Paper, Whatmann, n 4, disc
028	Ren/Lab-028 Paper, Whatmann, n 4 sheet
029	Ren/Lab-029 Pencil, grease, red, glass writing
030	Ren/Lab-030 Pipette, Automatic, adjustable volume, 10 - 100 µl
031	Ren/Lab-031 Tip Blue, Pipette, Automatic, 100 - 1000 µl,
032	Ren/Lab-032 Tip Yellow, Pipette, Automatic, 5 to 100 µl
033	Ren/Lab-033 (DAT test) Autom. Pipette, multichannel, 8 chann., 10-100 µl
034	Ren/Lab-034 Pipette Filler, With Thumb-Wheel Lever, 10ml
035	Ren/Lab-035 Pipette Filler, With Thumb-Wheel Lever, 2ml
036	Ren/Lab-036 Pipette, Pasteur, glass, sterile, with cotton plug, 230mm
037	Ren/Lab-037 PEN, diamond, glass writing
038	Ren/Lab-038 (DAT test) COMBITIP (Eppendorf), for multipipette, 2.5 ml
039	Ren/Lab-039 PIPETTE, plastic, graduated (=>1 ml, 1/100)
040	Ren/Lab-040 PIPETTE, plastic, graduated (=>10 ml, 1/10)
041	Ren/Lab-041 UNOPETTE, white blood cells
042	Ren/Lab-042 PLATE, MICROTITRATION, 96 wells, U-shaped bottom
043	Ren/Lab-043 (DAT test) Plate, Micro-titration, 96 wells, V-shaped bottom
044	Ren/Lab-044 Rod, glass, 250 mm, diam. 6-7 mm
045	Misc/inj/s-007 Set, Blood taking, bag (150 ml)
046	Misc/inj/s-008 Set, Blood taking, bag (250 ml)
047	Ren/Lab-045 SLIDE, 76 x 26 mm, 1-1.2 mm thickness

048	Slides (special) for VDRL
049	Ren/Lab-046 Spatula, double, for analysis, stainless steel
050	Ren/Lab-047 (Spectrophotometer) MICROCUVETTE, plastic, disposable
051	Ren/Lab-048 TEAT, latex, for pipette, 1 ml
052	Ren/Lab-049 Transport Medium, For Aerobic Germs, swab + medium
053	Ren/Lab-050 Tube, SAMPLE, 001
054	Ren/Lab-051 Tube, centrifuge, 15 ml, conical bottom, glass
055	Ren/Lab-052 Tube, centrifuge, 15 ml, conical bottom, plastic
056	Ren/Lab-053 Tube, centrifuge, 15 ml, conical bottom, Sterile plastic
057	Ren/Lab-054 (Tube, centrifuge) BRUSH
058	Ren/Lab-055 (Tube, haemolysis) BRUSH
059	Ren/Lab-056 Tube, Haemolysis, 12 mm, plastic, sterile, 5 ml, + Plug
060	Ren/Lab-057 (Tube, centrifuge) Holder, wood
061	Ren/Lab-058 Tube, centrifuge) Stand
062	Ren/Lab-059 (Tube, haemolysis) Stand
063	Ren/Lab-060 Westergren Apparatus, complete, pipettes 300 mm
064	Ren/Lab-061 Beaker, Plastic, 250 ml, graduated
065	Ren/Lab-062 Lamp, spirit, 65-100 ml, complete, wick 7 mm diam
066	Ren/Lab-063 Microloop, Pasteur, handle + loop, nickel chromium
067	Ren/Lab-064 Mortar, porcelain 150 ml + Pestle
068	Ren/Lab-065 Paper, Lens Cleaning, sheet

3.3.2.3 Central Sterile Supply Department

Description/Activities:

The central sterile supply department (CSSD) is a centralised area for processing all soiled, contaminated items from the hospital such as basins, bottles and containers, reusable medical devices, surgical instruments, textiles, treatment trays, tubing etc.

The primary activities performed within the central sterile supply department are:

- Receiving
- Cleaning
- Disinfecting
- Inspecting and maintenance
- Packing
- Sterilising
- Process control, verification and documentation
- Storing
- Dispatching and distributing

A designated person(s) should be responsible for process control, verification, auditing and documentation.

Staff handling soiled, contaminated items must be fully conversant with hospital or recognised guidelines regarding potential infection risks, safe handling precautions, incident and treatment reporting procedures.

A designated person(s) should be responsible for documenting (hardcopy and/or electronically) the entire sterilisation process such as - but not limited to:

- Inventory control of soiled, contaminated items received.
- Instrument maintenance and defect reporting.
- Sterilisation process record-keeping.
- Process verification, documentation and reporting.
- Inventory control of sterile items issued.

Ideally the CSSD should be situated adjacent or close to the primary source of soiled, contaminated items, in order to minimise movements and sources of potential contamination. Similarly, the CSSD should be adjacent or close to the hospital laundry to minimise movements of items.

The functional layout of the CSSD should incorporate physical barriers that separate “clean” areas from “soiled” areas to prevent cross-contamination.

The CSSD encompasses the following:

- 01 Receiving/Washing, CSSD
02. Non-Sterile Supply
- 03 Packing/sterile area
- 04 Autoclave (2)
- 05 Sterile store/issuing
- 06 Staff Change
- 07 Toilet

01. Receiving/Washing, CSSD

Activities:

Act as an initial receiving area for soiled items.
Area for inspection and sorting prior to cleaning, disinfection and/or soaking.
Soiled items may either be cleaned manually (instrument cleaning sink) or mechanically (ultrasonic instrument cleaner).
Chemical agents may be used to assist the cleaning process, e.g. detergents (to remove hardened deposits, proteins) or disinfectants (to kill bacteria, fungi, spores and viruses).
Rinsing, drying, final inspection and maintenance (instrument lubrication) are done prior to transfer to the packing area.
The receiving/washing area should be physically separated from other areas of the central sterile supply, to prevent cross-contamination.
The flooring must be hard wearing, impervious, joint-less and slip resistant, with good drainage suitable for daily cleaning with detergent and hot water or chemical disinfectant.

Equipment:

Sq	Item description	Q	C	M	E
001	Pistol, spray cleaning	1		M	
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	2	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	2	C	M	
004	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	2			
005	Cleaner, ultrasonic, 1 tank of 6 l, bench top	1			

02. Non-Sterile Supply

Activities:

Storage area for non-sterile items such as packing and wrapping material, sutures, swabs, textiles and items for inclusion in instruments packs/sets prior to sterilisation.
The store should be equipped with shelving of a suitable size and dimensions to segregate and store non-sterile items.
There should be clear, unrestricted access to the non-sterile supply, suitable for manoeuvring trolleys in and out.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	2			
002	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	5			

03. Packing/sterile area

Activities:

Cleaned and decontaminated items are sorted and either individually packed or placed into instrument packs/sets.
Items to be sterilised are either wrapped, placed in paper bags, heat-sealable pouches, open wire baskets or closed containers, as appropriate.
Appropriate process control indicators must be incorporated during the packing procedure to verify and audit the sterilisation process.
Consumable materials such as swabs, sutures etc. are added to instrument packs/sets as required.

Equipment:

Sq	Item description	Q	C	M	E
001	Work table, laminated top, with cabinets under the table top, 2.00 m	2	C		
002	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
003	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	3			
004	S0190000 Pedal bin, st. st (*)	1			
005	Dispenser, indicator tape, sterilizer, 2 rolls	1			
006	Sealer, heat, manual, bags and pouches, bench top	1			E

04. Autoclave (2)

Activities:

- Pre-operational functional check of the autoclaves.
- Routine functional checks of the autoclaves, such as (but not limited to) water supply, indicators, safety interlocks, door seals, temperature/pressure, chamber pre-heating, and Vacuum & Bowie Dick test.
- Loading of autoclave.
- Selection of appropriate sterilisation process, e.g. flash programme, plastics and rubber, prions, textiles, unwrapped or wrapped instruments, etc.
- Unloading and transportation to the sterile store/issuing.

Equipment:

Sq	Item description	Q	C	M	E
001	Water, filter	1		M	
002	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
003	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	4			
004	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
005	Sterilizer, steam, 1 door, 0.40 x 0.40 x 0.60 m, w generator	2	C	M	E
006	Basket, instruments, 0.24 x 0.25 x 0.06 m (*)	2			
007	Basket, instruments, 0.12 x 0.25 x 0.06 m (*)	3			
008	Box, with basket for instruments, 0.30 x 0.29 x 0.11 m	2			
009	Drum, sterilizing, st. st., 15 x 15 cm	3			
010	Drum, sterilizing, st. st., 20 x 15 cm (*)	1			
011	Box, with basket for instruments, 0.30 x 0.29 x 0.14 m	2			
012	Box, with basket for instruments, 0.30 x 0.29 x 0.21 m	1			

05. Sterile store/issuing

Activities:

- This is a storage area for processed, sterile items and a store for brought-in sterile products. The store must be equipped with shelving of a suitable size and dimensions to enable the segregation and storing of sterile goods.
- There should be clear, unrestricted access to the sterile store/issuing room suitable for manoeuvring distribution trolleys in and out.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
002	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	5			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Trolley, cssd packs transport, st. st.	1			

06. Staff Change

Activities:

- This is a staff changing facility with lockers for the safe storage of personal items.
- The room must have storage facilities for protective clothing (e.g. boots/clogs, caps/hairnets, gloves, overcoats etc).
- The room must be supplied with a trolley for the collection and disposal of used protective clothing.
- The flooring must be hard wearing, impervious, joint-less and slip resistant, with good drainage suitable for daily cleaning with detergent and hot water or chemical disinfectant.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	1			
002	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			
003	Locker, 1 vertical compartment, metal, 0.30 m	10			
004	Basket, waste-paper, metal (*)	1			

07. Toilet

Activities:

This is a staff toilet fitted with a wash-hand basin with hot and cold water.

It is for staff use, before entering the central sterile department.

Staff must be fully conversant with hospital or recognised guidelines governing cross-contamination, with respect to personal hand-washing hygiene.

It should be situated outside of the department so that it can be entered via the staff changing room directly, in order to maintain hygienic integrity.

The flooring should be hard wearing, impervious, joint-less and slip resistant, with good drainage suitable for daily cleaning with detergent and hot water or chemical disinfectant.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white (*)	1			
002	Dispenser, paper towel, metal (optional) (*)	1	C		
003	Dispenser, soap, hand operated (optional) (*)	1	C		

Renewable/Consumables:

Sq	Item description
001	Biological indicators for process verification, single use, for steam sterilization.
002	Bowie-Dick test pack (Applicable standards EN 867-3, BS 7720) for process verification, single use, for steam sterilization.
003	Crepe paper (Applicable standards EN 868-2, DIN 58953 Part 5, BS 6254) & Non-woven wrapping sheets (Applicable standards EN 868-2, DIN 58953 Part 15 Draft) to pack instrument and laundry sets or other larger items.
004	Heat protective gloves.
005	Heat-sealable paper bags for steam sterilization (Applicable standards EN 868-4, DIN 58953 Part 3, BS 6257).
006	Heat-sealable, see-through pouches & rolls (Applicable standards EN 868-5, DIN 58953 Part 4, BS 6871) for packing individual instruments, smaller sets and other items.
007	Instrument lubricant spray, physiological inert, water soluble for instrument lubrication & maintenance.
008	Process indicator tape, single use, for steam sterilization.
009	Protective clothing such as boots/clogs, caps/hairnets, gloves, overcoats etc.
010	TST (Time Steam Temperature) process indicator strips, single use, for steam sterilization.

3.3.2.4 Physiotherapy and Rehabilitation (optional)

Description/Activities:

For the purpose of this document, physiotherapy and rehabilitation are grouped together and the combined department is marked as optional.

Basic physiotherapy:

The majority of the activities will take place at the patient's bedside. These activities are post-operative respiratory physiotherapy, passive and active exercises for orthopaedic patients, etc.

Basic rehabilitation:

The objective is to return a patient to the comfort of home with the highest level of achievable independence. After a stroke, injury or disease, patients may have weakness on one side or in specific parts of the body. They may have problems with their vision, reading, speech, memory, balance, posture and mobility.

The WHO programme on disability and rehabilitation provides support to Member States for policy development with special focus on chronic condition and support for integrating rehabilitation into Primary Health Care through Community-Based Rehabilitation (CBR) strategy, with special attention to chronic conditions.

This department is a small physiotherapy and rehabilitation unit. It consists of:

- 01 Waiting
- 02 Toilet
- 03 Reception/Nurse
- 04 Staff Change
- 05 Staff Toilet
- 06 Clean Utility
- 07 Patient Change
- 08 Shower
- 09 Gymnasium
- 10 Toilet (wheelchair access)
- 11 Soiled Utility
- 12 Cleaner's room

01. Waiting

Activities:

Sufficient seating should be available, close to the reception area.

Equipment:

Sq	Item description	Q	C	M	E
001	Seating, 4 seats on frame, with table, 2.50 m (*)	5			
002	Basket, waste-paper, metal (*)	1			

02. Toilet

Activities:

This facility should be separated for male and female patients and should accommodate disabled patients.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white (*)	1			
002	Dispenser, paper towel, metal (optional) (*)	1	C		
003	Dispenser, soap, hand operated (optional) (*)	1	C		

03. Reception

Activities:

Patients should be welcomed and seated according to the appointment system.
The unit should be run according to scheduled appointments so that the waiting area is not over-crowded.
Sufficient space for wheelchairs and a seating area should be available.
It is vital that the area is easily accessible and visible.

Equipment:

Sq	Item description	Q	C	M	E
001	Wall clock (*)	1	C		E
002	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	2			
006	Basket, waste-paper, metal (*)	1			

04. Staff Change

Activities:

There should be sufficient lockers for staff personal belongings and adequate hanging space for clothing, etc. A separate toilet facility should be allocated for staff.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	1			
002	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			
003	Locker, 1 vertical compartment, metal, 0.30 m	10			
004	Basket, waste-paper, metal (*)	1			

05. Staff Toilet

Activities:

Separate staff toilet.

Equipment:

Sq	Item description	Q	C	M	E
001	Hand dryer, electric (optional)	1	C		E
002	Towel, hand, white (*)	1			
003	Dispenser, paper towel, metal (optional) (*)	1	C		
004	Dispenser, soap, hand operated (optional) (*)	1	C		

06. Clean Utility

Activities:

A clean utility area with a wash hand basin.

Used for the management of linen and must contain sufficient work and storage space for linen.

Renewable/consumables could also be stored here.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, clean linen distribution	1			
002	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
003	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	2			

07. Patient Change

Activities:

If a patient needs to undress, they can use this area.

A sufficient number of clean patient gowns must be kept for patient use.

Equipment:

Sq	Item description	Q	C	M	E
001	Locker, 1 vertical compartment, metal, 0.30 m	3			
002	Basket, waste-paper, metal (*)	1			

08. Shower

Activities:

A shower facility is useful, but not essential.

Equipment:

Sq	Item description	Q	C	M	E
001	Dispenser, soap, hand operated (optional) (*)	1	C		

09. Gymnasium

Activities:

This area could be used by several patients.

The gymnasium should be used for muscle exercise, cardio vascular improvement, space orientation, assisted walking, and passive movement exercise, etc.

These treatment areas are equipped with a couch and allow one-to-one treatment of patients.

Equipment could be taken out of the gymnasium area and additional equipment could be purchased if needed.

Equipment:

Sq	Item description	Q	C	M	E
001	S5005500 Chair, stackable, without armrests	4			
002	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	2			
003	S0184500 Couch, examination, enamelled st. frame, adjustable head (*)	1			
004	Couch, massage, chromium frame, physiotherapy, multi pos, manual	1			
005	Parallel bars, 4.00 m	1			
006	Stairs, exercise, right angle version	1			
007	Stairs, exercise, straight version	2			
008	Bicycle, exercise	2			
009	Table, traction, complete with accessories	1			
010	Wheel, shoulder	1			
011	Roller, wrist	2			
012	Bench, Swedish	2			
013	Mirror, correcting, 3 sections, mobile	1			
014	Bars, wall	2			
015	Mat, exercise, gymnasium	4			
016	Dumb bells, set, iron, 1 to 5 kg	1			
017	Pulley exercise station, wall mount	1			
018	Rack, storage	1			
019	Ball, exercise, physio	3			
020	Exerciser, grip	2			
021	Peddler	1			
022	Treadmill, rehabilitation	1			
023	Walker, adult	1			
024	Walker, child	1			
025	Wheelchair, non-foldable, universal (*)	1			

10. Toilet wheelchair access

Activities:

It is vital to have wheelchair access to toilets because the majority of patients will need this facility.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white (*)	1			
002	Dispenser, paper towel, metal (optional) (*)	1	C		
003	Dispenser, soap, hand operated (optional) (*)	1	C		

11. Soiled Utility

Activities:

Soiled utility room functions are unpleasant, so they should be accommodated separately from the disposal room, if possible.

It is used as a disposal area if a disposal room is not allocated, a temporary storage point for all items of supplies and equipment or destruction (e.g. linen and sterile service department items).

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	3			
002	S0187004 Trolley, general purpose ,st.st., mobile, 2 trays (*)	1			
003	Bin, disposal, mobile, with lid (*)	1			

004	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
005	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
006	Towel, hand, white (*)	1			
007	Dispenser, paper towel, metal (optional) (*)	1	C		
008	Dispenser, soap, hand operated (optional) (*)	1	C		
009	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
010	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	2			

12. Cleaner's room

Activities:

The janitor/cleaner's room is the base from which domestic services staff provide a cleaning service to the department.

There should be easy access to cleaning equipment and materials, emptying and filling of buckets, and routine servicing and cleaning of equipment.

There should be unrestricted access to the sink, which should have hot and cold water.

The room should be well ventilated so that equipment can dry quickly and an extractor fan to rid the room of odours.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Trolley, cleaning	1			
003	Rack, mops (*)	1			
004	S2170000 Pail w/bail,handle,polyethylene,10 litre (*)	2			
005	Set, cleaning utensils, broom, mop, etc. (*)	1			
006	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			

Renewable/Consumables:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. vaccines, IV fluids, injections or medication).

Sq	Item description
001	S0305000 Apron, protection, plastic, reusable
002	Gel, massage
003	S0330011 Gloves, exam, latex, medium, disp
004	Oxygen, nasal cannula
005	Pillow case
006	Pillows
007	Sheet, draw, white
008	S0552000 Soap,toilet,bar,approx.110g, wrapped
009	S0551004 Soap-box,plastic,2-piece
010	Towel Bath
011	Towel Hand

Capacity:

Depending on the floor space, scheduled used of equipment and staff availability, this department should be able to accommodate ± 10 patients at any given time during operational hours.

Location:

The physiotherapy and rehabilitation department should preferably be situated on the ground floor. The unit can be used by out-patients as well as in-patients. It should be accessible to people with disabilities and provide for wheelchair and trolley access.

3.3.2.5 Pharmacy

Description/Activities:

A hospital pharmacy department essentially provides a dispensing service to in-patient wards, departments and the out-patient department. The pharmacist is responsible for the purchase, storage and dispensing of all drugs and of bulk pharmaceutical preparations, disinfectants and sterile solutions.

The pharmacy services the pharmaceutical requirements of the hospital. It contains the following areas:

- 01 Outpatient issues/hatch
- 02 Receiving, pharmacy
- 03 Office
- 04 Bulk Store, pharmacy
- 05 Dispensing
- 06 Counter ward issue
- 08 Toilet
- 09 Cleaner's room

01. Out-patient issues/hatch

Activities:

Depending on the out-patient clinic's attendance and scheduling, TTO medicines are issued via a counter with a serving hatch.

A system should be in place to prevent congestion at the counter and allow patients to collect their medicines.

The policy should be strict and staff should be alert to prevent any misuse and abuse of medicines.

The protocol should be adhered to, and only prescription medicines allowed to be dispensed here.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, laminated top, with cabinets under the table top, 2.00 m	2	C		
002	S0002077 Refrigerator, 140 l + 20 l (*)	1			
003	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
004	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
005	S0190000 Pedal bin, st. st (*)	2			

02. Receiving, pharmacy

Activities:

Ensure that two people receive and check supplies.

Check delivery note, packing list and contents against copy of order.

Check contents and number of boxes against the packing list.

Check the outer and inner packaging to make sure it is intact, and for signs of damage, breakage, leaks, etc.

Check that labels are legible and include complete information.

Check the temperature monitor.

Check the expiry date.

File the delivery documents, according to policy, when unpacking the received pharmaceutical items.

Special care and provision for the security of dangerous drugs must be ensured.

The entrance to the receiving and delivery area should be locked and only opened under supervision.

The corridors must allow for easy turning of wheeled vehicles.

Equipment:

Sq	Item description	Q	C	M	E
001	S0005007 Truck,trolley,platform,manual,1000kg	1			
002	S0187004 Trolley, general purpose ,st. st., mobile, 2 trays (*)	2			
003	Cabinet, filing, 4 drawers, 0.50 m	1			
004	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
005	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			

03. Office

Activities:

The pharmacist has overall responsibility and control of the pharmacy.

Administrative tasks as well as desk work takes place in this area.

Orders are generated for the items required and audited by a competent person.

Control of stock levels and of unfulfilled orders takes place here.

Filing cabinets are provided for record keeping.

A lockable door provides security.

Secretarial functions include filing, report writing, correlation of delivery notes and record keeping.

Staff records such as leave and sick leave administration are catered for in this area.

A work desk and filing cabinet are provided for record keeping.

A telephone link may be provided to this controlled area.

This area is also secured by a locked door.

Equipment:

Sq	Item description	Q	C	M	E
001	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
002	Cabinet, filing, 4 drawers, 0.50 m	1			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	2			
006	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			

04. Bulk Store, pharmacy

Activities:

Pharmaceuticals are taken to the bulk store where they are repacked onto shelving or pallets. Responsibility for stock control and the store room should be assigned and written procedures should be developed.

The store should always be kept clean and organized to protect sterile items.

Maintain 'First In First Out' policy.

Store drugs and medical disposables separately.

Temperature control for items should be adhered to and the cold-chain maintained.

Keep comprehensive updated records of stock.

Stock records of activities should be kept up-to-date regarding (ordering, receiving and issuing stock).

Any stock discrepancy should be reported to the pharmacist.

Random checks should be carried out to maintain control.

Sufficient storage and floor space is provided for the needs of a ± 100-bed hospital.

Access to this area should be secure.

Dangerous drugs must be secured.

Fire proofing must be provided, as many inflammable substances are stored here. Bulk quantities of dangerous goods should not be held in the pharmacy but should be drawn from a remotely located store.

Finishes must be impervious to acid and alkali and easy to clean.

The pharmacy keeps controlled drugs, poisons and other drugs liable to misuse. These are subject to statutory regulations.

Provision should be made for an alarm system to guard against intrusion and theft.

Traffic within the department must be economical and flexible.

The size of the store is determined by its organization and operation policies.

Store records are maintained according to policy, but every health facility needs a system for recording stock movement. This is important because errors caused by poor recording will affect service delivery.

Notes:

Ensure that each item and each item unit pack, size, strength, etc. has its own stock card (e.g. disposable needles stored according to size), as follows:

Item: name of the product.

Code no: as per policy if used.

Strength/size of the item (e.g. 24 G needles)

Unit/pack size: no of units in each pack (e.g. 100 needles/box).

Lead time, order quantity, minimum level, maximum level, reserve stock level.

The quantities used or received should be recorded each time there is a transaction.

Calculate and record the new stock balance.

Record important information in the remarks column, e.g. expiry date, special conditions for storage, price, supplier, stock take count, unexplained gains and losses.

All transactions should be initialled.

Flammables:

Storage of flammable materials such as volatile materials and alcohol are stored in an area that is constructed according to fire safety regulations.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose, st. st., mobile, 2 trays (*)	3			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	2	C		
003	Refrigerator, 650 l	2			E
004	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	10			
005	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	3			

05. Dispensing

Activities:

Dispensing should be done by a qualified registered individual.

The pharmacist is still ultimately responsible for the management of the pharmacy.

Dispensed items should be initialled and noted according to hospital policy.

Equipment:

Sq	Item description	Q	C	M	E
001	Distilling apparatus, 8 l/h	1		M	E
002	S0187004 Trolley, general purpose, st. st., mobile, 2 trays (*)	2			
003	Worktable, laminated top, with cabinets under the table top, 2.00 m	3	C		
004	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
005	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	5			
006	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	2			
007	S0190000 Pedal bin, st. st (*)	1			
008	Balance, analytical, 200 g, <> 0.1 mg	1			E
009	Powder and tablet packing machine	1			E
010	Counter, tablets, manual	1			
011	Mortar and pestle, set	2			

06. Counter-ward

Activities:

The issuing of pharmaceuticals to the hospital takes place in this area. Validated orders are submitted to the issuing area. Work tables are provided for manual dispensing activities. Shelving provides storage. A trolley is provided for restocking pharmacy carts for ward areas and theatres. This area should be secured to prevent the access of unauthorised persons. According to the hospital policy, medication prescribed to in-patients will be dispatched to specific departments. Policy and procedure to be followed when habit forming drugs are dispensed to the ward.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purposes, st. st., mobile, 2 trays (*)	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			
004	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	2			

08. Toilet

Activities:

Toilet facilities are provided for staff, with hand washing facilities.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white (*)	1			
002	Dispenser, paper towel, metal (optional) (*)	1	C		
003	Dispenser, soap, hand operated (optional) (*)	1	C		

09. Cleaner's room

Activities:

The cleaner's room is the base from which domestic services staff provide a cleaning service to the pharmacy. There should be easy access to cleaning equipment and materials, emptying and filling of buckets, and routine servicing and cleaning of equipment. There should be unrestricted access to the sink, which should have hot and cold water. The room should be well ventilated so that equipment can dry quickly and an extractor fan installed to rid the room of odours.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Trolley, cleaning	1			
003	Rack, mops (*)	1			
004	S2170000 Pail w/bail,handle,polyethylene,10 litre (*)	2			
005	Set, cleaning utensils, broom, mop, etc. (*)	1			
006	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			

Renewable/Consumables:

Please note that these items are the essentials and are not limited to utilization in this area. Furthermore, no pharmaceuticals have been planned (e.g. drugs, vaccines, IV fluids, injections or medication).

Sq	Item description
001	Absorbent material, Chemical sorbent roll, Absorbency approx. ~ 25litres/roll.
002	Chemical disinfectant(s).
003	Cleaning material(s).
004	Colour coded, heavy duty waste disposal bags with secure closure ties
005	House keeping gloves.

Capacity:

The number of in-patients and out-patients that the facility pharmacy should cater for is influenced by the following factors:

occupancy levels.

the numbers of outpatients.

the materials management policy of the facility (e.g. frequency of supply).

Location:

The pharmacy must be located so that it is:

Accessible to the out-patient department.

Convenient for dispensing.

Accessible to the central delivery yard.

3.3.3 Essential Non-Clinical Support Services

- 3.3.3.1 Laundry and Linen
- 3.3.3.2 Kitchen
- 3.3.3.3 Central Store
- 3.3.3.4 Housekeeping (Domestic Hygiene)
- 3.3.3.5 Waste Management
- 3.3.3.6 Engineering and Maintenance
- 3.3.3.7 Transport
- 3.3.3.8 Mortuary

3.3.3.1 Laundry and Linen

Description/Activities:

On-the-premises laundering should provide cost savings, convenience and flexibility. It eliminates pick-up, delivery times and lengthy turn-around time. Consequently, laundry is cleaned on site, at the facility's discretion and as required. Emergencies can be handled quickly and efficiently. The best on-premises laundry is one that is tailored to the needs of the health care facility it serves. The present description provides a guideline and checklist for an in-depth analysis of the facility needs and requirements.

The basic laundry facility provides and takes responsibility for collection of soiled linen, receiving, transport to the laundry room, sorting, treatment (including disinfection of infected linen), washing/extraction drying and finishing, folding but also repair and distribution of all hospital linen, including staff uniforms, to the various users through the hospital, with the inclusion of the surgical and delivery suites.

Although soiled linen has been identified as a source of large numbers of pathogenic micro-organisms, the risk of actual disease transmission appears negligible. Rather than rigid rules and regulation, hygienic and common-sense storage and processing of clean and soiled linen are recommended.

Other important planning considerations may include the selection of manufacturers, the type and amount of equipment. Quality laundry systems make a facility virtually maintenance free.

The laundry and linen department consists of the following rooms as a minimum:

01. Soiled Linen, Sorting
02. Infected Linen Pre-wash
03. Store, chemicals, laundry
04. Washing/Drying
05. Processing, clean work area
06. Store, clean linen and issuing
07. Sewing and repairs
08. Cleaner's room
09. Staff Change (10)
10. Toilet
11. Office

01. Soiled Linen, Sorting

Activities:

Soiled linen should be handled as little as possible and with minimum movement to prevent gross microbial contamination of the air and of persons handling the linen. All soiled linen should be bagged or put into carts at the location where it was used. It should not be sorted or pre-rinsed in patient-care areas. Linen soiled with blood or body fluids should be deposited and transported in bags that prevent leakage. Recommendations and precautions for handling soiled linen from patients on isolation have been published.

If laundry chutes are used, linen should be bagged, and chutes should be properly designed. Control Measures: soiled linen should be transported in the hospital by cart or chute. It may or may not be sorted in the laundry before being loaded into washer/extractor units. Sorting before washing protects both machinery and linen from the effects of objects in the linen and reduces the potential for the recontamination of clean linen that sorting after washing requires. Sorting after washing minimizes the direct exposure of laundry personnel to infective material in the soiled linen and reduces airborne microbial contamination in the laundry.

Equipment is arranged to provide an orderly workflow and to minimise cross traffic between clean and soiled linen operations.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, with tub, laundry	6			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	2	C		
003	Marker, laundry	1			E
004	Scale, platform, 200 kg, <> 1 kg	1			

02. Infected Linen Pre-wash

Activities:

Linen labelled as infectious is handled in a dedicated washer to prevent cross contamination. Protective apparel and appropriate ventilation can minimize these exposures.

The microbicidal action of the normal laundering process is affected by several physical and chemical factors: dilution removes significant amounts of microbial organisms, maintenance of a temperature of 71 C for a minimum of 25 minutes and the use of chlorine bleach are among these factors.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, box wet-laundry, polymer	3			
002	Washer/extractor, 16 kg, electrical heated	1	C	M	E
003	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			

03. Store, chemicals, laundry

Activities:

Should provide storage for bulk supplies of detergents and bleach. Sufficient shelving should be provided. The bleach containers should be stored upright. The store should be accessible for deliveries.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purposes, st. st., mobile, 2 trays (*)	2			
002	Soap container, mobile	1			
003	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	2			

04. Washing/Drying

Activities:

The washing/drying area, as the name implies, handles the washing, hydro extraction of laundry and the drying thereof. The location of the equipment is designed to facilitate the smooth flow of laundry through washing to drying. Dedicated laundry trolleys wheel quantities of laundry to the washing machines from the sorting and weighing areas. After washing, the laundry can be transferred into a hydro extractor to reduce the amount of water prior to drying by tumble dryer.

The laundry may be required to process bed linen, items of clothing such as staff uniforms, patient gowns, sterile drapes and coverings from theatre. The capacity of the laundry should match the total load of laundry anticipated.

Soaps or detergents loosen soil and also have some micro-biocidal properties. Hot water provides an effective means of destroying micro-organisms, and a temperature of at least 71 °C (160 F) for a minimum of 25 minutes is commonly recommended for hot-water washing. Chlorine bleach provides an extra margin of safety.

The last action performed during the washing process is the addition of a mild acid to neutralize any alkalinity in the water supply, soap, or detergent. The rapid shift in Ph from approximately 12 to 5 may also inactivate some micro-organisms.

Low-temperature laundry cycles rely heavily on the presence of bleach to reduce levels of microbial contamination.

A satisfactory reduction of microbial contamination can be achieved at lower water temperatures of 22-50 °C when the running of the machine, the wash formula, and the amount of chlorine bleach are carefully monitored and controlled.

Equipment:

Sq	Item description	Q	C	M	E
001	Dryer/Tumbler, 24 kg, electrical heated, single door	3	C	M	E
002	Trolley, box wet-laundry, polymer	2			
003	Hydro-extractor, spin dryer, 18 kg	1	C	M	E
004	Washer/extractor, 16 kg, electrical heated	3	C	M	E

05. Processing, clean work area

Activities:

The processing area is the area where the ironing of clean laundry takes place. Industrial flat bed ironing machines press linen before it is folded at a worktable. Storage is provided on shelves. Smaller items are ironed on ironing boards. Again the capacity of the processing area must take account of the weight of laundry required in total.

Regardless of whether hot or cold water is used for washing, the temperatures reached in drying and especially during ironing provide additional significant microbicidal action.

Equipment:

Sq	Item description	Q	C	M	E
001	Flat work ironer, 2.50 m, electrically heated	1			E
002	Worktable, sorting/folding, laundry, 2.00 x 1.00 m	2			
003	Iron, electric	2			E
004	Ironing board	2			E
005	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			

06. Store, clean linen and issuing

Activities:

The clean linen store is kept locked for control purposes – policy regarding linen control should be adhered to (pilfering of linen is common).

Sufficient shelving should be provided in a well ventilated room.

Only surplus linen is stored in the linen room.

An inventory is kept of linen movement within the laundry and to the rest of the hospital.

A hatch or counter is provided to issue linen from linen room.

Activities: should be documented according to hospital linen management policy.

Transportation of clean linen should be in appropriated trolleys.

Clean linen should be transported and stored peripherally in a way that will ensure its cleanliness.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, clean linen distribution	6			
002	Blanket, adult, cellular, ward-type, white	150			
003	Blanket, adult, ward-type, blue (*)	100			
004	Blanket, baby wrapping, flannel, ward-type, white (*)	50			
005	Blanket, child, ward-type, bleu	50			
006	Case, pillow, ward-type, white	600			
007	Cover, mattress, ward-type, white	100			
008	Cover, Mayo, 0.50 x 1.40 m, theatre-type, green	150			
009	Mask, face, cotton, theatre-type, green (*)	300			
010	Cover, pillow, waterproof, ward-type, clear	300			
011	Gown, ward-type, 1 to 2 y, white	50			
012	Gown, ward-type, 2 to 4 y, white	50			
013	Gown, ward-type, 7 to 12 y, white	50			
014	Gown, ward-type, adult, white (*)	100			
015	Gown, ward-type, baby, white	50			
016	Gown, ward-type, 5 to 6 y, white	50			
017	Pajama, adult, male, ward-type	50			
018	Pajama, boy, 2 to 4 y, ward-type	20			
019	Overshoes, cotton, theatre-type, green	300			
020	Pajama, boy, 5 to 6 y, ward-type	20			
021	Pajama, boy, 7 to 12 y, ward-type	20			
022	Pillow, ward-type, white (*)	200			
023	Sheet, abdominal, slit, theatre-type, green	50			
024	Gown, surgeon, theatre-type, green	300			
025	Gown, surgeons, orthopedic, theatre-type, green	100			
026	Suit, theatre-type, green, V-neck, large	50			
027	Suit, theatre-type, green, V-neck, medium	50			
028	Suit, theatre-type, green, V-neck, small	50			
029	Suit, theatre-type, green, V-neck, x-large	100			
030	Suit, theatre-type, green, V-neck, xx-large	100			
031	Sheet, waterproof, Macintosh, ward-type (*)	100			
032	Sheet, bed, ward-type, white (*)	600			
033	Sheet, cot, ward-type, white	50			
034	Sheet, draw, ward-type, white (*)	400			
035	Towel, adult, ward-type, white (*)	150			
036	Towel, child, ward-type, white	50			
037	Towel, instrument, 1.00 x 1.00 m, theatre-type, green	50			
038	Towel, instrument, 1.40 x 1.60 m, theatre-type, green (*)	100			
039	Towel, instrument, 1.80 x 2.85 m, theatre-type, green (*)	100			
040	Towel, slit, ear, 0.80 x 1.00 m, theatre-type, green	50			
041	Wrap over, large, theatre-type, green	50			
042	Wrap over, medium, theatre-type, green	50			
043	Wrap over, small, theatre-type, green	50			
044	Wrap over, x-large, theatre-type, green	100			
045	Wrap over, xx-large, theatre-type, green	100			

046	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	5			
047	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			

07. Sewing and repairs

Activities:

Repairs are to be done as soon as possible so that linen can go back in circulation.
Sufficient space should be provided for at least two people to maintain the linen.
Control and adequate documentation of the linen that is in the sewing area is required.

Equipment:

Sq	Item description	Q	C	M	E
001	Sewing machine, small	1			E
002	Sewing machine, large	1			E
003	Iron, electric	1			E
004	Ironing board	1			E
005	Rack, garment	2			
006	S5005500 Chair, stackable, without armrests	2			
007	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	2			
008	Basket, waste-paper, metal (*)	1			

08. Cleaner's room

Activities:

The space and facilities provided should be sufficient for parking and manoeuvring cleaning machines and a cleaner's trolley, and also for the cleansing of cleaning equipment and the disposal of fluid and used cleaning materials. Hand-washing facilities are also required. Shelving and vertical storage should not encroach on the working space or restrict access to the cleaner's sink.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Trolley, cleaning	1			
003	Rack, mops (*)	1			
004	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			

09. Staff Change (10)

Activities:

The facilities provided allow staff (about ten people) to change into protective working clothes and for the storage of clothing and personal possessions in lockers. Soiled linen trolleys collect working clothes for washing after an appropriate usage interval.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	2			
002	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	2			
003	Locker, 1 vertical compartment, metal, 0.30 m	10			
004	S5005500 Chair, stackable, without armrests	2			
005	Basket, waste-paper, metal (*)	1			

10. Toilet

Activities:

The toilet area provides sanitation and hand washing facilities. The number of toilets and wash-hand basins is subject to the specific planning of the facility, in accordance with the number of employees active in the area.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white (*)	1			
002	Dispenser, paper towel, metal (optional) (*)	1	C		
003	Dispenser, soap, hand operated (optional) (*)	1	C		

11. Office

Activities:

Administration of the laundry and ordering of materials can be conducted in the office of the person supervising the laundry. Filing cabinets are provided for the storage of paper records. A work desk is provided, as well as filing facilities.

Equipment:

Sq	Item description	Q	C	M	E
001	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
002	Cabinet, filing, 4 drawers, 0.50 m	1			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	2			
006	Basket, waste-paper, metal (*)	1			

Renewable/Consumables:

Please note that these items are the essentials but not limited for use in this area.

Sq	Item description
001	Disinfectant/decontaminant washing powder
002	Washing powder
003	Water softener, liquid

Capacity:

A guide figure of 4 kg linen per bed per day can be used for calculations, resulting in 4,000 kg of linen per 7-day week. Based on this figure, a 50 kg washer/extractor capacity is required at least, for a 100 bed facility. The closest economic capacity provided is three times 16 kg, resulting in a total of 48 kg for the main laundry area. The washer/extractors are preferably provided as three units, so that process can continue in the event of maintenance of one of the units. A separate (pre) washer/dryer is provided to deal with infectious linen, this unit could have a capacity of 16 kg. The total washer/extractor capacity is supplemented with an additional water extractor of 18 kg for removing excess moisture prior to drying. The latter capacity serves as a guide figure. About 1.5 times the washing capacity is required for the dryers, thus dryers are planned with a total capacity of 72 kg. Drying capacity in this equipment plan is for 48 kg, which is the nearest match. A flat bed ironer (width 2.5m) is provided for the hospital, based on the load of laundry expected, in this case a capacity of 60 – 70 kg/ hour is planned. Trolleys for the movement of clean laundry are required. Sufficient trolleys should be provided to handle the machine loads, 9 trolleys have been planned for this purpose.

It is advisable to recalculate the capacity of the laundry department to meet the particular requirements of each hospital.

Location:

The location of the laundry should facilitate the movement of clean and soiled laundry to and from the hospital. The location of the laundry should be chosen so that noise and traffic disturbance to patients is minimised. The laundry location should accommodate the mechanical and electrical equipment as well as air extraction. In addition the location of the laundry should satisfy the requirements for staff working conditions, such as lighting levels (natural or illuminated), noise, humidity and temperature.

3.3.3.2 Kitchen

Description/Activities:

Catering services are responsible for the ordering, storage, preparation and distribution of food and dietary prescriptions to patients and staff. The dispatching of food should be in bulk to both the in- and outpatient care units and the self-service counter for staff. All functional units of the hospital have a pantry to which food storage carts are dispatched and from which food and beverages are distributed. Soiled dishes, pots and pans are cleaned centrally including those from the staff dining room.

The planning of the catering services in the present document takes no account of cultural and local gastronomic customs. However dietary needs for specific patient groups can be catered for.

Other important planning considerations may include the selection of manufacturers and the type and amount of equipment. Well selected quality catering systems makes a facility virtually maintenance free.

Kitchen/catering department consists of the following rooms as a minimum:

- 01 Receiving, food supplies
- 02 Dry Store
- 03 Cold Store
- 04 Staff Change (10)
- 05 Toilet
- 06 Staff Dining
- 07 Staff Lounge
- 08 Office
- 09 Vegetable preparation
- 10 Fish/Meat preparation
- 11 Cooking
- 12 Bakery
- 13 Store, crockery
- 14 Food Trolley Bay (8)
- 15 Cart Wash
- 16 Dish Wash
- 17 Pot Wash
- 18 Trash, refuse collection
- 19 Cleaner's room

01. Receiving, food supplies

Activities:

Fresh, dry or refrigerated supplies are received and transferred in bulk in the area. The receiving area is preferably located near the loading and unloading dock for quick, hygienic handling of supplies.

Equipment:

Sq	Item description	Q	C	M	E
001	S0005007 Truck,trolley,platform,manual,1000kg	1			
002	Scale, platform, 200 kg, <> 1 kg	1			
003	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	4			
004	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
005	S0190000 Pedal bin, st. st (*)	1			

02. Dry Store

Activities:

Storage of bulk food supplies that do not necessarily need cooling for preservation. Considerations about hygiene are important, as well as control of vermin such as insects, mice and rats. It is advised to fit the store with security locks to avoid pilfering.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose, st.st., mobile, 2 trays (*)	2			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
003	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	5			

03. Cold Store

Activities:

Storage of fresh bulk food supplies that need cooling for short term preservation. The unit is permanently kept at a temperature of 4 °C and is not equipped with a freezing facility. Since the unit has limited capacity, planning of the volume of daily fresh supplies is of concern. Hygienic aspects of the cold store must be given proper consideration.

Equipment:

Sq	Item description	Q	C	M	E
001	Cold room, walk-in type, 2.00 x 2.00 m	1	C	M	E
002	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	4			

04. Staff Change (10)

Activities:

The facilities provided allow staff (about ten people) to change into their uniform and for storage of clothing and personal belongings in lockers. Soiled linen trolleys collect uniforms for washing after an appropriate usage interval.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	2			
002	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	2			
003	Locker, 1 vertical compartment, metal, 0.30 m	10			
004	S5005500 Chair, stackable, without armrests	2			
005	Basket, waste-paper, metal (*)	1			

05. Toilet

Activities:

The toilet area provides sanitation and hand washing facilities. The number of toilets and wash-hand basins is subject to the specific planning of the facility, in accordance with the number of employees active in the area.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white (*)	1			
002	Dispenser, paper towel, metal (optional) (*)	1	C		
003	Dispenser, soap, hand operated (optional) (*)	1	C		

06. Staff Dining

Activities:

Locate adjacent to the kitchen and food production area. The seating area should be placed next to the servers, providing easy access. The area provides dining facilities for about 60 staff members.

Equipment:

Sq	Item description	Q	C	M	E
001	Ice cube machine, 21 kg/24 hr	1		M	E
002	S5005500 Chair, stackable, without armrests	60			
003	Table, epoxy coated frame, laminated top, dining, 1.60 x 0.80 m	15			
004	S0190000 Pedal bin, st. st (*)	2			

07. Staff Lounge

Activities:

Staff rest during work breaks, but the area can also be used for meetings and briefing about planned catering and related activities.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
002	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
003	S0002077 Refrigerator, 140 l + 20 l (*)	1			E
004	S5005500 Chair, stackable, without armrests	20			
005	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	4			
006	Basket, waste-paper, metal (*)	2			

08. Office

Activities:

Administration of the catering services and ordering of materials can be conducted in the office of the kitchen supervisor. Filing cabinets are provided for the storage of paper records. A work desk is provided, as well as filing facilities.

Equipment:

Sq	Item description	Q	C	M	E
001	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
002	Cabinet, filing, 4 drawers, 0.50 m	1			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	2			
006	Basket, waste-paper, metal (*)	1			

09. Vegetable Preparation

Activities:

Sorting and cleaning of vegetables, and chopping for further processing in the cooking area.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purposes, st. st., mobile, 2 trays (*)	1			
002	Kitchen machine, universal	1			E
003	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
004	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	2	C	M	
005	Scale, kitchen type, 2000 g, <> 20 g	1			
006	S0190000 Pedal bin, st. st (*)	1			

10. Fish/Meat Preparation

Activities:

Sorting and cleaning of fish and or meat supplies, cutting for further processing in the cooking area.

The hygienic aspects and refrigeration required for the handling of fish and meat must be given proper consideration.

Equipment:

Sq	Item description	Q	C	M	E
001	Chopping block, with chopper	2			
002	Slicer, gravity feed	1			E
003	Meat saw, electric	1			E
004	Meat mincer, heavy duty	1			E
005	Bin, disposal, mobile, with lid (*)	1			
006	Worktable, laminated top, with cabinets under the table top, 2.00 m	2	C		
007	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
008	Refrigerator, 300 l + 85 l	1			E
009	Scale, bench top, 15 kg, <> 5 g	1			
010	Scale, kitchen type, 2000 g, <> 20 g	1			
011	Container, trash, mobile, bin with lid	1			
012	S0190000 Pedal bin, st. st (*)	1			

11. Cooking

Activities:

The food production system is mainly cook-serve oriented, since this system still remains the most economical for quality food. In this system, food is prepared a few hours before serving time. Bulk foods are prepared from raw materials, finished and served immediately.

Convenience products may supplement this traditional preparation method.

Gas is essentially the main source of energy for the equipment provided in the cooking area.

The personnel safety and hygiene aspects surrounding serving to patients and staff must be given adequate consideration.

Consideration should also be given to the fact that the finished products can be transported only a short distance and remain safe for consumption, pursuant to health regulations.

Equipment:

Sq	Item description	Q	C	M	E
001	Wall clock (*)	1	C		E
002	S0187004 Trolley, general purpose, st.st., mobile, 2 trays (*)	6			
003	Planetary Mixer	1			E
004	Extraction hood and fan, with filters, approximately 3.00 x 1.50 m	1	C	M	E
005	Cooking range, gas, 6 burners with oven and cabinet	2		M	E
006	Frying pan, 80 l, tilting, gas heated	1		M	
007	Boiling pan, gas, 150 l, autoclave type	2	C	M	E
008	Worktable, laminated top, with cabinets under the table top, 2.00 m	2	C		
009	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
010	Refrigerator, 300 l + 85 l	1			E
011	Scale, bench top, 15 kg, <> 5 g	1			
012	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			
013	S0190000 Pedal bin, st. st (*)	2			

12. Bakery

Activities:

Specialized area for bread and pastry production.

The hygiene implications of refrigerating and working with pastry items must be considered.

Equipment:

Sq	Item description	Q	C	M	E
001	Oven, pastry	1		M	E
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	4	C		
003	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
004	Refrigerator, 300 l + 85 l	1			E
005	Scale, bench top, 15 kg, <> 5 g	1			
006	Scale, kitchen type, 2000 g, <> 20 g	1			
007	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			
008	S0190000 Pedal bin, st. st (*)	1			

13. Store, crockery

Activities:

Used as the storage of a hospital's tableware items and kitchen equipment. It is envisaged that tableware for the dining area and for the inpatient area will be supplied and collected from this store.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose, st.st., mobile, 2 trays (*)	1			
002	Set, pots and pans, kitchen, medium, 100 beds	1			
003	Set, kitchen tools, medium, 100 bed general hospital	1			
004	Set, table ware, medium, 100 bed	1			
005	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	4			

14. Food Trolley Bay (8)

Activities:

The organization and preparation of the food to be issued to the inpatient departments of the hospital as well as to the dining area of the kitchen takes place here.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose, st.st., mobile, 2 trays (*)	8			

15. Cart Wash

Activities:

Food distribution trolleys are cleaned upon return from periphery delivery through the hospital and the dining area of the catering department.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, cleaning	1			

16. Dish Wash

Activities:

Tableware is cleaned upon return from the different hospital in-patient departments and the dining area. The area is provided with an automated dish washer for this purpose.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose, st.st., mobile, 2 trays (*)	1			
002	Bin, disposal, mobile, with lid (*)	1			
003	Dish washer, front loader model, complete with tables and baskets	1	C	M	E
004	Hose with handle for washing kitchen utensils	1		M	
005	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
006	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	2	C	M	

17. Pot Wash

Activities:

Larger items such as pots and pans are cleaned and washed upon return from the different hospital in-patient departments and the dining area. The processing is in essence manual, and appropriate sinks are provided for this purpose.

Equipment:

Sq	Item description	Q	C	M	E
001	Pistol, spray cleaning	1		M	
002	Bin, disposal, mobile, with lid (*)	1			
003	Sink unit, for pot washing, st. st., 1.75 m	1	C	M	
004	Worktable, laminated top, with cabinets under the table top, 2.00 m	2	C		
005	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	2			

18. Trash, refuse collection

Activities:

The collection and disposal of waste from the vegetable cleaning area, the fish/meat preparation area, the cooking and bakery sections of the kitchen takes place here, as well as disposal of leftovers returning from the different hospital inpatient departments and the dining area.

Equipment:

Sq	Item description	Q	C	M	E
001	Container, trash, mobile, bin with lid	1			

19. Cleaner's room

Activities:

The space and facilities provided should be sufficient for parking and manoeuvring cleaning machines and a cleaner's trolley, and for the cleansing of cleaning equipment and the disposal of fluids and used cleaning materials. Hand-washing facilities are also required. Shelving and vertical storage should not encroach on the working space or restrict access to the cleaner's sink.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Trolley, cleaning	1			
003	Rack, mops (*)	1			
004	S2170000 Pail w/bail,handle,polyethylene,10 litre (*)	2			
005	Set, cleaning utensils, broom, mop, etc. (*)	1			
006	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			

Renewable/Consumables:

Please note that these items are the essentials but not limited for use in this area.

Sq	Item description
001	Food packing materials, boxes and bags
002	Aluminium foil
003	Plastic foil
004	Hand soaps
005	Detergent liquids
006	Water softener
007	Washing brushes
008	Plastic dustbin bags

Capacity:

The department's work load in general depends upon the number of meals served, operational factors such as food production methods, menu selection, staffing, and hours of operation. Capacity calculation determinants include food production methods, the size of production equipment, dry/refrigerated storage space, and the number of dining rooms, and peripheral pantries.

The cooling capacity was calculated on the basis of about 12 litres per meal. The dry and refrigerated storage capacity should, in general, be sufficient for 2 to 3 days of operation. The department is capable of producing approximately 120 patient meals on a daily basis and as many meals for personnel.

Sufficient trolleys are provided to handle the food produced, in order to assure timely and warm distribution. It is advised to recalculate the capacity of the catering area to meet the particular requirements of each hospital.

Location:

The catering unit is located within the logistics services area, with direct access from the outside for the delivery of daily supplies and easy access for staff. An appropriate pathway facilitates the movement of the catering and the wash-up, to and from the hospital's in-patient units, and the staff dining room which is usually located in a separate building. The location of the catering area should accommodate the requirements for mechanical and electrical services as well as fume extraction. In addition, the location of the catering area should satisfy the requirements for staff working conditions such as lighting levels (natural or illuminated), noise, humidity and temperature.

3.3.3.3 Central Store

Description/Activities:

Materials management is responsible for receiving, checking, storing (central), issuing and dispatching to hospital supplies to the various users. The stores must have stock to allow the hospital to operate for overlapping periods of one month. A minimum stock level control is calculated according to the delivery and time needs of the hospital users.

The following services can be provided:

- Management of supplies

- Receiving and stowage of supplies

- Receiving and temporary holding of new equipment and or furniture

- Distribution and restocking of supplies to consumer units on a scheduled and on-call basis using pre-established levels.

- Administration and management of the facility's supply system in cooperation with the managers of consumer units.

Material management services exclude food products, disposable supplies and chemicals: they are respectively handled by the catering services, the pharmacy department and the laboratory.

No particular requirements with regard to equipment are given apart from adequate shelving and wall separations where necessary.

It is advisable to fit the store with locks and/or supervision or access control, to avoid pilfering.

The central store department should ideally consist of the following room:

- 01 Store, general

01. Store, general

Activities:

General centralised storage and restocking of daily inventory of most materials used in the hospital take place here.

Equipment:

Sq	Item description	Q	C	M	E
001	S0005007 Truck,trolley,platform,manual,1000kg	1			
002	Worktable, laminated top, with cabinets under the table top, 2.00 m	2	C		
003	Set, table ware, large, 150 bed	1			
004	Ladder, 5 steps	1			
005	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	20			
006	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
007	S5005500 Chair, stackable, without armrests	2			
008	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
009	Chart, patient record	10			
010	S5090005 Bed net, LLIN, white,150x190x180cm (h x l x w)	120			
011	Support, knee, for in-bed patients, adult	5			
012	Crutches, elbow type, pair	10			
013	Walking stick	5			
014	Wheelchair, non-foldable, universal (*)	4			

Capacity:

Demand for storage space and staff is driven by the mix of services and volume of activity at each site. Each consuming unit in smaller facilities may itself manage material storage. However, this service is typically centralised to achieve economies of scale and to minimise staffing requirements. The capacity of the department has been calculated according to the common ratio of 2 m²/bed, thus requiring approximately 200 m² space in total.

Location:

The department is located independently from any other department and only requires direct access from outside and within the logistics services area. It should facilitate the movement of trolleys to and from the hospital.

The location of the central store should be decided so that noise and traffic disturbance to patients is minimised. In addition, the location of the central store should satisfy the requirements for staff working conditions such as lighting levels (natural or illuminated), noise, humidity and temperature.

3.3.3.4 Housekeeping (Domestic Hygiene)

Description/Activities:

The environmental services department is responsible for maintaining a clean and sanitary environment in the hospital, including floors, carpeting, tiles, drapery, windows, lights, vents, and upholstered items.

This department is also responsible for furniture moves, replacement of patient room furniture, and trash collection. Environmental services typically arranges with the maintenance department for pest control, waste processing, window washing, furniture repairs, and the purchasing of necessary material for trash receptacles.

The number of housekeeping rooms or closets is determined by the needs of the hospital. A service sink with a drain is provided for mops and other cleaning equipment. Shelves or carts for the storage of cleaning chemicals and supplies have been planned.

Hospital finishes, furniture and accessories are designed to withstand the rigours of constant cleaning and sanitising. Such measures help to maintain standards of cleanliness that support a healing environment.

The housekeeping (domestic hygiene) department should ideally consist of the following rooms as a minimum:

- 01 Supervisor
- 02 Store, housekeeping
- 03 Soiled utility
- 04 Trash, refuse collection

01. Supervisor

Activities:

Administration of the domestic hygiene and the ordering of materials and products can be conducted in the housekeeping department supervisor's office. Filing cabinets are provided for the maintenance of paper records. A work desk is provided, as well as filing facilities.

Equipment:

Sq	Item description	Q	C	M	E
001	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
002	Cabinet, filing, 4 drawers, 0.50 m	1			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	2			
006	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
007	Basket, waste-paper, metal (*)	1			

02. Store, housekeeping

Activities:

The storage of bulk cleaning supplies and utensils necessary to replenish the cleaning trolleys located at the different periphery cleaner rooms takes place here.

Considerations about safety (e.g. proper ventilation) are important. It is advisable to provide the store with security and/or supervision to avoid pilfering.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, clean linen distribution	1			
002	S0187004 Trolley, general purposes, st. st., mobile, 2 trays (*)	1			
003	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			

03. Soiled utility

Activities:

The centralised routine cleaning and basic maintenance of cleaning utensils.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	3			
002	S0187004 Trolley, general purposes, st. st., mobile, 2 trays (*)	1			
003	Bin, disposal, mobile, with lid (*)	1			
004	Worktable, laminated top, with cabinets under the table top, 2.00 m	1	C		
005	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
006	Towel, hand, white (*)	1			
007	Dispenser, paper towel, metal (optional) (*)	1	C		
008	Dispenser, soap, hand operated (optional) (*)	1	C		
009	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			
010	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	2			

04. Trash, refuse collection

Activities:

Trash and waste should be collected by the environmental services staff from the different soiled utility rooms located throughout the hospital. Coordination with the waste management department for handing-over and processing is required.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen bags, collection	1			
002	Container, trash, mobile, bin with lid	1			

Renewable/Consumables:

Please note that these items are the essentials. Also they are not limited to usage in this area.

Sq	Item description
001	Detergent liquids
002	Hand soaps
003	Cleaning liquids
004	Cleaning clothes
005	Paper towels
006	Plastic dustbin bags

Capacity:

The domestic hygiene department must have sufficient capacity to hold and control an appropriate level of stock of cleaning materials and products, in order to ensure its daily maintenance activities. Capacity and space allocation calculations should take into consideration staff as well as equipment.

Location:

It is advisable to plan the environmental services near the materials management department and the engineering/maintenance services. Although the housekeeping carts are usually kept in the various housekeeping closets throughout the hospital, the location of the department should facilitate the movement of waste processing trolleys to and from the hospital.

3.3.3.5 Waste Management

Description/Activities:

The waste management area serves as a central collection point for all hospital waste material. It provides a secure, short term storage area for hospital waste. It provides a safe handling area for sorting and segregating waste according to the category and preparation for destruction, disposal or recycling as appropriate. Staff handling waste material must be fully conversant with hospital or recognised guidelines regarding the classification and safe handling of waste, the use of colour coded bins/sacks, decontamination procedures and appropriate methods of destruction, disposal or recycling. Staff must also be fully conversant with hospital or recognised guidelines regarding accidental contamination e.g. spillage, needle stick injuries etc. with respect to seeking appropriate and effective treatment and reporting procedures. A designated person(s) should be responsible for ensuring that collected waste material is properly bagged and labelled in accordance with recognised guidelines such as "Safe management of wastes from health-care activities", WHO, 1999. Moreover, this designated person should keep documentary evidence of hazardous, pathological and pharmaceutical waste destruction together with copies of consignment notes for the carriage and disposal of hazardous waste off-site. The packing for disposal off-site of such hazardous, pathological and pharmaceutical waste shall meet or exceed United Nations requirements: -

- United Nations packaging requirements for infectious substances, class 6.2, UN No. 2814 "Infectious substance affecting humans (adapted to hazardous health-care waste)".
- United Nations packaging requirements for infectious substances, class 6.2, UN No. 3291 "Clinical waste, unspecified, or (bio) medical waste, or regulated medical waste (adapted to hazardous health-care waste)".

The waste management area encompasses the following:

- 01 Waste Room
- 02 Incinerator

01. Waste Room

Activities:

The waste room provides a safe handling area for sorting and segregating waste according to category and preparation for destruction, disposal or recycling as appropriate.

The room must be secured at all times to prevent unauthorised access to potentially hazardous waste.

There should be clear, unrestricted access to the waste room suitable for manoeuvring waste collection trolleys in and out.

The room should be of sufficient size to permit the sorting and segregating of waste according to category.

Waste category	Description and examples
Infectious waste	Waste suspected of containing pathogens, e.g. laboratory cultures; waste from isolation wards; tissues (swabs), materials, or equipment that have been in contact with infected patients; excreta.
Pathological waste	Human tissues or fluids, e.g. body parts; blood and other body fluids; placenta.
Sharps	Sharp waste e.g. needles; infusion sets; scalpels; knives; blades; broken glass.
Pharmaceutical waste	Waste containing pharmaceuticals, e.g. pharmaceuticals that have expired or no longer needed; items contaminated by or containing pharmaceuticals (bottles, boxes).
Genotoxic waste	Waste containing substances with genotoxic properties, e.g. waste containing cytostatic drugs (often used in cancer therapy); genotoxic chemicals.
Chemical waste	Waste containing chemical substances e.g. laboratory reagents; film developer; disinfectants that are expired or no longer needed; solvents.
Wastes containing heavy metals	Batteries; broken thermometers; blood-pressure gauges; etc.
Pressurized containers	Gas cylinders; gas cartridges; aerosol cans.
Recommended colour-coding for health-care waste	
Highly infectious waste	Yellow, marked "HIGHLY INFECTIOUS"
Other infectious waste	Yellow
Sharps	Yellow, marked "SHARPS"
Chemical & pharmaceutical	Brown
General health-care waste	Black

The room must have storage facilities for protective clothing such as boots, heavy duty gloves, overalls, protective eyewear.

The room must have storage facilities for decontamination and spillage control, e.g. absorbent material, chemical disinfectant(s), colour-coded waste bags, etc.

The room must be fitted with a wash-hand basin with hot and cold water.

The flooring must be hard wearing, impervious, joint-less and slip resistant, with good drainage suitable for daily cleaning with detergent and hot water or chemical disinfectant.

The room should preferably be ventilated with separate duct/exhaust to the atmosphere away from food preparation, patient or staff areas.

Unless a refrigerated waste room is available, storage times for healthcare waste (i.e. the delay between production and treatment) should not exceed the following recommendations:

- Temperate climate: 72 hours in winter, 48 hours in summer.
- Warm climate: 48 hours during the cool season, 24 hours during the hot season.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Roll container, soiled transport	2			
003	Dispenser, paper towel, metal (optional) (*)	1	C		
004	Dispenser, soap, hand operated (optional) (*)	1	C		
005	Container, trash, mobile, bin with lid	3			
006	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	5			
007	Gloves, handling, small	1			
008	Gloves, handling, medium	1			

02. Incinerator

Activities:

The room or covered area housing the incinerator should be located at least 30m away from the hospital facility.

The room, shack or covered area housing the incinerator must be constructed in accordance with local building and environmental emission regulations.

The incinerator operator will be responsible for:

Removal of ashes left inside the pyrolytic chamber (after cooling down).

Loading of waste packages to be incinerated.

Ignition of fuel burner in post-combustion chamber.

Ignition of the pyrolytic fuel burner to start waste burning in the pyrolytic chamber.

Pyrolysis of waste (maintaining >800°C) and monitoring of gas production.

Monitoring high-temperature burning of gas inside post-combustion chamber.

Stopping the fuel burners after completion of waste and gas burning, and letting the incinerator cool down.

The operator is responsible for ensuring an adequate fuel supply (oil, gas, kerosene, etc.) and first line maintenance of the incinerator and reporting any defects to the hospital maintenance manager and/or administrator.

Additionally, the operator maintains a log of incinerator operating hours/times together with such data as, but not limited to: combustion/pyrolytic chamber and exhaust stack temperatures, gas production, fuel consumption, etc.

Equipment:

Sq	Item description	Q	C	M	E
001	Incinerator, fuel operated >800 C	1	C	M	E

Renewable/Consumables:

Sq	Item description
001	Absorbent material,
002	Chemical disinfectant(s).
003	Cleaning material(s).
004	Heavy duty thermal protection gloves.
005	Colour coded, heavy duty waste disposal bags with secure closure ties.
006	Protective clothing (boots, heavy duty gloves, overalls, protective eyewear).
007	Chemical absorbent roll,
008	Absorbency approx. ~ 25litres/roll.

3.3.3.6 Engineering and Maintenance

Description/Activities:

The primary functions of the engineering and maintenance department are:

- Corrective (repair) and preventive maintenance activities.
- Equipment maintenance management, documentation and inventory control (hardcopy or electronic).
- Technical assistance and support with equipment acquisition and retirement.
- In-service equipment training for clinical and medical staff.
- Technical staff training in maintenance techniques, policies and procedures.
- Purchase and stock control of spare parts.
- Technical library for service documentation.

The engineering and maintenance area encompasses the following:

- 01 Office
- 02 Staff Change
- 03 Toilet
- 04 Shower
- 05 Store
- 06 Biomedical (electro-mechanical) Workshop
- 07 Carpentry and Painting Workshop
- 08 Plant, Central, Medical-Gas, 100 Beds
- 09 Cleaner's Room

01. Office

Activities:

- Planning and co-ordinating corrective (repair) maintenance requests.
- Planning and co-ordinating planned preventive maintenance.
- Maintaining equipment maintenance records and inventory control (hardcopy or electronic).
- Planning and co-ordinating equipment acquisition and introduction into service.
- Planning and co-ordinating in-service equipment training for clinical and medical staff.
- Training technical staff in repair and maintenance techniques.
- Training technical staff in equipment safety checks and performance verification procedures.
- Training staff in safe handling of equipment containing and/or contaminated by body fluids (blood, saliva, secretions, urine) or other hazardous substances.
- Training staff in equipment decontamination procedures.
- Planning and co-ordinating equipment retirement and withdrawal from service.
- Ordering and stock control of spare parts.
- Library for architectural, civil, mechanical and electrical drawings.
- Library for maintenance manuals (operator/user manuals, service manuals, circuit diagrams, schematics and spare parts list).
- Library for engineering reference books and educational material.

Equipment:

Sq	Item description	Q	C	M	E
001	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
002	Cabinet, filing, 4 drawers, 0.50 m	1			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	4			
006	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			
007	Basket, waste-paper, metal (*)	1			

02. Staff Change

Activities:

- Staff changing facility with lockers for safe storage of personal items.
- The room has storage facilities for protective clothing (e.g. gloves, overalls, protective eye and footwear).
- The room must be supplied with a wall-mounted first aid dispenser and eye wash station.
- The room is supplied with a trolley for the collection and transport of used protective clothing.
- The flooring shall be hard wearing, impervious, joint-less and slip resistant with good drainage suitable for daily cleaning with detergent and hot water or chemical disinfectant.

Equipment:

Sq	Item description	Q	C	M	E
001	Trolley, soiled linen, 2 rings.	1			
002	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			
003	Locker, 1 vertical compartment, metal, 0.30 m	10			
004	Basket, waste-paper, metal (*)	1			

03. Toilet

Activities:

- Staff toilet for personal hygiene.
- Fitted with a wash-hand basin with hot and cold water for personal hygiene.
- Sited next to staff shower facility.
- Flooring should be hard wearing, impervious, joint-less and slip resistant, with good drainage suitable for daily cleaning with detergent and hot water or chemical disinfectant.

Equipment:

Sq	Item description	Q	C	M	E
001	Towel, hand, white (*)	1			
002	Dispenser, paper towel, metal (optional) (*)	1	C		
003	Dispenser, soap, hand operated (optional) (*)	1	C		

04. Shower

Activities:

- Staff shower for personal hygiene.
- Sited next to staff toilet facility.
- Utilized as emergency deluge shower in the event of accidental contact with hazardous substances.
- Flooring must be hard wearing, impervious, joint-less and slip resistant, with good drainage suitable for daily cleaning with detergent and hot water or chemical disinfectant.

Equipment:

Sq	Item description	Q	C	M	E
001	Dispenser, soap, hand operated (optional) (*)	1	C		

05. Store

Activities:

- Storage area for storing maintenance department material such as:
 - Consumable items (e.g. adhesives, batteries, bulbs, fuses, lubricants, mechanical fixings, paints, seals ("O"-rings/Gaskets), solvents, etc.).
 - Defective equipment awaiting repair.
 - Flammable and hazardous substances.
 - Retired equipment awaiting disposal.
 - Spare parts and assemblies.
 - Test equipment.
 - Tools (electrical, mechanical and hand).

The store is fitted with shelving of suitable size and dimensions to enable segregation and safe and easy access to stored material.

It should have clear, unrestricted access to the store room suitable for manoeuvring equipment and trolleys in and out.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose, st.st., mobile, 2 trays (*)	1			
002	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	3			

06. Biomedical (electro-mechanical) Workshop

Activities:

Workshop area for performing corrective (repair) and/or preventive maintenance on biomedical, electro-mechanical equipments.

Decontaminating equipment containing and/or contaminated by body fluids (blood, saliva, secretions, urine) or other hazardous substances prior to maintenance.

Receiving and executing corrective maintenance requests.

Receiving and executing planned preventive maintenance requests.

Maintaining equipment maintenance records and inventory control (hardcopy or electronic).

Checking new equipment and introduction into service.

Executing in-service equipment training for clinical/medical staff.

Training technical staff in repair and maintenance techniques.

Performing equipment safety checks and performance verification.

Withdrawing and retiring equipment from service due to age, cost, and obsolescence or safety reasons.

Stock control and ordering of spare parts.

Maintaining up-to-date library of educational/reference materials and service documentation.

The workshop is fitted with shelving of suitable size and dimensions to enable segregation, safe and easy access to stored material.

The workshop should have clear, unrestricted access suitable for manoeuvring equipment in and out.

Consideration should be given to appropriate lighting levels for safe, intricate working.

Flooring should be hard wearing, impervious, joint-less and slip resistant, with good drainage suitable for daily cleaning with detergent and hot water or chemical disinfectant.

Equipment:

Sq	Item description	Q	C	M	E
001	Wall clock (*)	1	C		E
002	Equipment for bio-medical workshop, small	1	C	M	E
003	Equipment for electrical workshop, large	1	C	M	E
004	Equipment for mechanical workshop, small	1	C	M	E
005	Set, tools, electrician	1			E
006	Set tools, electronic	1			E
007	Workbench, workshop, 2 m	2	C		
008	Cabinet, workshop, open, with shelves	2			
009	Multi-parameter patient simulator	1			E
010	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	2			
011	Cabinet, filing, 4 drawers, 0.50 m	1			
012	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
013	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	2			
014	S0190000 Pedal bin, st. st (*)	1			
015	Cleaner, ultrasonic, 2 tanks of 18 l, bench top	1			E

07. Carpentry and painting workshop

Activities:

Performing corrective (repair) and/or preventive maintenance on building fabric and structure, primarily painted surfaces and wooden items.

Receiving and executing corrective maintenance requests.

Receiving and executing planned preventive maintenance requests.

Maintaining equipment maintenance records and inventory control.

Training technical staff in repair and maintenance techniques.

Stock control and ordering of consumable materials.

The workshop is fitted with shelving of suitable size and dimensions to enable segregation and safe and easy access to stored material.

The workshop should have clear, unrestricted access suitable for manoeuvring large items in and out.

Consideration should be given to providing adequate exhaust (woodchip and dust) and ventilation (paint, solvent fumes).

Flooring must be hard wearing, impervious, joint-less and slip resistant, with good drainage suitable for daily cleaning.

Equipment:

Sq	Item description	Q	C	M	E
001	Equipment for carpentry workshop, large	1		M	E
002	Equipment for painter workshop, small	1		M	E
003	Set, tools, carpenter	1			
004	Workbench, workshop, 2 m	1	C		
005	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	2			
006	S0169005 Stool, height adjustable with gas spring, mobile, st. st.	1			
007	S0190000 Pedal bin, st. st (*)	1			

08. Plant, central, medical-gas, 100 beds

Activities:

Plant room, housing the medical gas system comprising generally of main manifold, cylinder bank change-over mechanism, primary distribution pipe work, alarms, condition and status monitoring and medical gas cylinders/racks.

The primary activities performed within the medical gas plant room are:

- Corrective (repair) and preventive maintenance of medical gas plant as necessary.
- Daily recording and documenting of medical gas plant status such as alarm occurrence/status, capacity (empty/full cylinders), consumption, maintenance etc.
- Ordering and replenishment of medical gases (cylinders) and documented stock control.
- Safety checks and verification of medical gases received (contents, pressure, medical use certification, assay of contents etc)

The medical gas plant room must be secured against unauthorised access.

The medical gas plant room must be supplied with cylinder trolleys for easy, safe handling and movement of cylinders.

The medical gas plant must have clear, unrestricted access suitable for manoeuvring large medical gas cylinders in and out.

The medical gas plant must have large, unrestricted access onto adjacent roadway suitable for manoeuvring medical gas cylinders to and from delivery vehicles.

Vehicular access should be covered, shaded from direct sunlight/excessive heat.

Consideration should be given to appropriate fire fighting, fire suppression equipment where flammable gases under pressure are stored.

Flooring should be hard wearing, impervious, joint-less and slip resistant, with good drainage suitable for daily cleaning.

Equipment:

Sq	Item description	Q	C	M	E
001	Plant, central, medical-gas, 100 beds (optional)	1	C	M	E

09. Cleaner's room

Activities:

- Parking cleaning equipment.
- Storing cleaning materials.
- Filling and emptying cleaning equipment and containers.
- Disposal of liquid waste.
- Cleaning and drying equipment.
- Hand washing facilities.
- Security for personal items.

Equipment:

Sq	Item description	Q	C	M	E
001	Worktable, 1 sink, with cabinets under the table top, 1.50 m (*)	1	C	M	
002	Trolley, cleaning	1			
003	Rack, mops (*)	1			
004	S2170000 Pail w/bail,handle,polyethylene,10 litre (*)	2			
005	Set, cleaning utensils, broom, mop, etc. (*)	1			
006	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	1			

Renewable/Consumables:

Sq	Item description
001	Adhesive kit
002	Cable sleeve, heat shrinkable,kit,1.0-6.4mm
003	Cable, grommet, kit, black, PVC
004	Cable, marker, kit, dia 1.5/2.8mm
005	Cable, tie, kit
006	Circlip,steel,kit,internal/external,E,1.4-12mm
007	Electrical starter, kit
008	Fuse,kit,1.0in
009	Fuse,kit,20mm
010	Fuse, kit, anti surge
011	Grommet,blind,kit,4.8-45mm dia
012	Masonry, plasterboard fixing kit, Rawlplug, Supadriv,c/sk woodscrews, c/w polypropylene storage box
013	Mechanical starter,kit
014	Screw kit,high tensile steel,cap set screws,6BA,4BA,2BA
015	Screw kit,high tensile steel,cap set screws,M3,M4,M5
016	Screw,grub,kit,steel,black,ranges M1.6-M2.5,10BA-6BA
017	Screw,machine,slotted,cheesehead,Nylon 6.6,kit,M3,M4,M5
018	Screw,self tapping,slotted,Supadriv panhead,kit,zinc plated steel,No4-10
019	Screw,wood,twin/threaded,slotted,zinc plated steel,kit,1250,16 compartment,plastic box
020	Seal,O ring,kit,nitrile,imperial
021	Seal,O ring,kit,nitrile,metric
022	Service engineer,kit,chemicals
023	Spring,kit,extension,torsion,compression,light duty
024	Tape,adhesive,PVC,insulating,various colours,19mmx10m,kit
025	Washer,fibre,red vulcanised,kit

3.3.3.7 Transport

Description/Activities:

Road transport of patients and/or personnel from lower level facilities to this first referral level hospital. The transport can be organised as an emergency or on an elective basis.

Road transport of patients and/or personnel as part of a referral to a facility able to provide a higher level of care. The transport can be organised as an emergency or on an elective basis.

With respect to the emergency transport of patients, one should distinguish between: (i) critical emergencies requiring immediate transport after stabilising, (ii) deferrable emergencies when transport is required within a few hours, (iii) non-emergencies: where the transport can be organized on an elective basis.

The transport services should work on demand from, or in close liaison with the A&E department of the hospital. They should also be available outside normal operating hours of the different clinics on the premises.

The facilities required to provide appropriate transportation services highly depends on the actual setting in which a first referral hospital works. Planning of transportation services that includes the most appropriate equipment should consider: distance to lower and higher level providers; road and weather conditions; and the expected mix and volume of transportation of personnel and patients to and from the hospital. The equipment planning therefore includes options, quantity "1", such as a basic ambulance, van type car, motorcycle and bicycle.

The transport department should preferably consist of the following room as a minimum:

01 Transport

01. Transport

Activities:

Storage of transport equipment including protection against adverse weather conditions.
 Common cleaning and maintenance of all means of transport, in order to assure maximum uptime and availability.

Equipment:

Sq	Item description	Q	C	M	E
001	S0008780 Ambulance, budget (optional)	1	C	M	E
002	S0008787 Car, van type for transport (optional)	1	C	M	E
003	S0004125 Motorcycle, 100cc (optional)	1		M	
004	S0004208 Bicycle, heavy duty, roadster, gents (optional)	1		M	
005	S0004209 Bicycle, heavy duty, roadster, ladies (optional)	1		M	

Renewable/Consumables:

Sq	Item description
001	Cleaning liquids
002	Cleaning clothes
003	Hand soap
004	Paper towels

Capacity:

Capacity planning with regard to the transportation services required at first referral level is subject to a variety of considerations. Because the foremost challenge of a transport department is to make it sufficiently flexible to handle both high and low patient volumes and a variety of cases that come from a diverse population, it is advised that the planning exercise is based on current and future needs assessments, among others taking in to account patients accessibility to health services at lower and higher level, as well as the mobility of health care professionals.

Location:

The connection between the transport services and the associated hospital departments are crucial for efficiency and functionality. Therefore the transportation service should be located adjacent to the accident and emergency and the outpatient poly-clinic departments. The services require a separate access road to the hospital site, with a dedicated covered parking bay for the ambulance.

3.3.3.8 Mortuary

Description/Activities:

Mortuary unit for the reception and storage of bodies.

Bodies may be received from the hospital/medical facility directly or from external sources.

Access to and from the mortuary to be shielded from the view of patients and visitors and secured against accidental and/or unauthorised entry.

Mortuary to have convenient and separate access for medical/mortuary staff, visiting relatives and undertakers.

Mortuary to have large, unrestricted access onto roadway suitable for manoeuvring trolleys to and from mortuary to waiting vehicles (ambulances, hearses, etc.)

Vehicular access should be covered.

The mortuary area encompasses the following:

01 Body Store

01. Body Store

Activities:

Receiving bodies from the hospital/medical facility directly or from external sources.
 Identification and/or verification and labelling of the body.
 Documentation and record keeping in accordance with local regulations.
 Shrouding the body and transfer to refrigerated body store.
 Removal/transfer of the body for burial or cremation according to cultural, religious beliefs.
 Removal/transfer of the body to external post-mortem/bier room facility.
 Clinical hand washing.
 Parking and storage of handling equipment, e.g. hoist, concealment trolley.
 Secure storage of deceased personal effects, valuables.
 Room to be fitted with hose and hot/cold water wash down unit.
 The flooring must be hard wearing, impervious, joint-less and slip resistant, with good drainage suitable for daily cleaning with detergent and hot water or chemical disinfectant.

Equipment:

Sq	Item description	Q	C	M	E
001	Mortuary cooling unit, 3 corpses, 1 door, 3 trays	2	C	M	E
002	Trolley, mortuary, height adjustable	1			
003	S5005500 Chair, stackable, without armrests	2			
004	Table, epoxy coated frame, laminated top, 1.20 x 0.50 m (*)	1			

Renewable/Consumables:

Sq	Item description
001	Body shrouds, linen sheets
002	Body bags (Adult/child) for external transfer
003	Protective clothing for mortuary attendants, such as but not limited to: boots, caps, disposable aprons & latex gloves, etc.

3.3.4. Administrative Services

- 3.3.4.1 Security
- 3.3.4.2 Medical Records
- 3.3.4.3 Procurement

3.3.4.1 Security

Description/Activities:

Safety and security services within a hospital setting provide general security, guard patrol, preliminary investigations, but could also be involved in fire prevention, control policies and training, disaster planning and training, and measures for the general safety of staff, patients and visitors. Other services may include lost-and-found and patient assistance.

The department operates 24 hours per day, seven days a week.

Depending on the location of the hospital, urban or rural, security can be a major concern. It is advisable to consider security issues at the earliest stages of the planning and design of hospital services. Greater emphasis is being placed nowadays on safety and security at health care campuses because of a rising perception of more violence and criminal activity.

The security department should preferably consist of the following room as a minimum:

01 Office

01. Office

Activities:

The administration and organization of the security services can be conducted in the office of the department supervisor. Filing cabinets are provided for the maintenance of paper records. A work desk is provided, as well as filing facilities. Additionally, a two-radio has been allocated for communication during surveys.

Equipment:

Sq	Item description	Q	C	M	E
001	Radio, two way, on-site	1			E
002	Desk, office, single pedestal, 1.20 x 0.70 m (*)	1			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
004	Chair, desk, height adjustable (*)	1			
005	S5005500 Chair, stackable, without armrests	2			
006	Basket, waste-paper, metal (*)	1			

Capacity:

Capacity planning with regard to safety and security services is again subject to a variety of considerations, among others to the above-mentioned reflection of the perception of safety in and around the hospital. Depending on the scope of the services of the department, the extent of the premises and the level of security envisaged, an appropriate number of staff members and adequate equipment should be assigned to guarantee 24/7 service.

Location:

Safety and security has high visibility near entrances and parking areas. It is common to place this function close to the emergency entrance, inasmuch as this is a 24-hour entrance to the hospital. Furthermore the service has functional relationships with the polyclinic, the parking areas of the hospital site and areas where cash is handled. Also, fast access to central and remote areas on the premises should be a concern when locating the safety and security services.

4.2 Medical Records

Description/Activities:

Medical records will be centralised for both inpatients and outpatients. Both categories of patients will have a separate filing system with cross reference from one to the other. The department has functional relations with:

- (i) Out-patient reception: all functions related to registration of outpatients including but not limited to patient identification, establishing of outpatient records.
- (ii) In-patient admission: all functions related to registration of inpatients (cross reference index with the outpatient records) including but not limited to patient identification, establishing of inpatient records, the opening of administrative (billing and invoicing) records.
- (iii) Statistics and data processing services: responsible for the data collection system in the hospital, collection and treatment of all data pertaining to hospital utilization, mortality and morbidity statistics, issuing of statistical reports to the hospital administration and medical staff, secretarial services related to the management of the medical records department, including transmission of reports to the authorities and other health care facilities.

The main objective of the medical record area is filing, i.e. all functions related to filing and retrieval of records, results of examinations and diagnostic reports and all documents pertaining to a particular patient of the hospital.

Although subject to reconsideration and verification with applicable local policies, it is advisable to keep filing for both in- and out-patients records for 3 years. Passive filing, limited to in-patient files only, shall normally not exceed a 10 year period. The X-ray files are included in the in-patient records.

All equipment planning in this set-up is standard manual equipment. Plastic patient identification cards can be introduced progressively.

The medical records department should preferably consist of the following room as a minimum:

01 Records

01. Records

Activities:

Filing of in-patient and out-patient records according the system applicable in the hospital and to requirements of the local and/or national authorities.

Equipment:

Sq	Item description	Q	C	M	E
001	S0187004 Trolley, general purpose, st. st., mobile, 2 trays (*)	1			
002	Shelf, coated steel, 5 levels, starter, 1.00 m (*)	20			
003	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			

Renewable/Consumables:

Please note that these items are the essentials. Also their usage is not limited to this area.

Sq	Item description
001	Medical record cart holders

Capacity:

The active file capacity planned is for approximately 15,000 files for inpatients and 35,000 outpatient files. Passive filing has capacity for 40,000 files. Capacity and space allocation calculations should also take into consideration facilitation for staff.

Location:

As the hub for any comprehensive examination/treatment plan for all patients, the medical records department is located close to the main entrance and the outpatient department. Connection between the medical records services and its associated hospital functions is crucial for efficiency and functionality. The passive filing system could be located elsewhere in the hospital if required.

3.3.4.3 Procurement

Description/Activities:

The administrative services of the hospital are important for daily operation, but also to support the management of health services.

Hospital administration includes amongst others, accounting services, invoicing and billing, communications, personnel management, public relations, and procurement services.

The procurement department oversees and manages the acquisition of the necessary products and materials, required in the hospitals, hereby supporting the continuity in services of the different areas of the hospital.

The department's activities occur both at the beginning and the final administrative stages of goods ordering and delivery. The latter must take place in close conjunction with the different material stores for inventory control and goods received by the different supply areas (amongst others, kitchen, pharmacy, laboratory, central store) and also with the financial administration for billing or invoicing.

The present planning of procurement services envisages computer-assisted administration.

The procurement department should preferably consist of at least the following room:

01 Office (4)

01. Office (4)

Activities:

Desk-based administration and organization of the procurement services can be conducted in this office. Computers and a photocopier are provided along with conventional filing cabinets for the collection and storage of paper records. Work desks for four employees have been planned.

Equipment:

Sq	Item description	Q	C	M	E
001	Telephone Unit (*)	4			E
002	Desk, office, single pedestal, 1.20 x 0.70 m (*)	4			
003	Cabinet, filing, 4 drawers, 0.50 m	2			
004	S0005021 Cabinet, st., double door, 4 shelves, adjust. (*)	1			
005	Cabinet, photocopier, 1.00 m	1			
006	Chair, desk, height adjustable (*)	4			
007	S5005500 Chair, stackable, without armrests	4			
008	Basket, waste-paper, metal (*)	2			
009	Photocopier	1			E
010	Computer, personal, stand- alone, desktop	3			E
011	Computer, personal, stand- alone, desktop, with laser printer	1			E

Renewable/Consumables:

Please note that these items are the essentials. Also their usage is not limited to this area.

Sq	Item description
001	Office materials, pencils, files, etc.
002	Printer and photocopier paper
003	Printer cartridges
004	Photocopier cartridges

Capacity:

It is envisaged in the present plans that four employees are able to manage the workload involved in the procurement of products and materials for the hospital. Their tasks primarily involve desk work, including the use of computer, paper storage, telephoning and interviewing. To this end the department shall have sufficient office space to house the four employees as planned for in this setup, but also space for office equipment and to cater for interviewing and discussion.

Location:

Although any location in the hospital is theoretically acceptable, the procurement services should preferably be located in the vicinity of other administrative areas such as the management or financial administration. Furthermore, consideration could be given to working relations with and the distance from the different material stores and/or goods receiving areas.

3.4 Room-by-room space program for typical first referral level hospital

	# bed	Net m2	Tot Net m2	Conv Net-Gross Gross m2	Tot Gross m2
3.3.1 Essential Clinical Services					3247
3.3.1.1 Medical Ward, 30 beds			441	1,35 595	
01 Staff Toilet		3			
02 Clean Utility		9			
03 Nurse Station		8			
04 Clean Linen Room		8			
05 Single Bed Room	1	14			
06 Toilet		3			
07 Single Bed Room	1	14			
08 Toilet		3			
09 6-Bed Bay	6	55			
10 6-Bed Bay	6	55			
11 6-Bed Bay	6	55			
12 6-Bed Bay	6	55			
13 Toilet (20)		60			
14 2-Bed Room	2	22			
15 2-Bed Room	2	22			
16 Treatment/Dressing/Injection		14			
17 Store, equipment, inpatient		8			
18 Kitchen		12			
19 Bathroom		5			
20 Soiled Utility		8			
21 Cleaner's room.		8			
3.3.1.2 Surgical Ward, 30 beds			441	1,35 595	
01 Staff Toilet		3			
02 Clean Utility		9			
03 Nurse Station		8			
04 Clean Linen Room		8			
05 Single Bed Room	1	14			
06 Toilet		3			
07 Single Bed Room	1	14			
08 Toilet		3			
09 6-Bed Bay	6	55			
10 6-Bed Bay	6	55			
11 6-Bed Bay	6	55			
12 6-Bed Bay	6	55			
13 Toilet (20)		60			
14 2-Bed Room	2	22			
15 2-Bed Room	2	22			
16 Treatment/Dressing/Injection		14			
17 Store, equipment, inpatient		8			
18 Kitchen		12			
19 Bathroom		5			
20 Soiled Utility		8			
21 Cleaner's room		8			

	# bed	Net m2	Tot Net m2	Conv Net-Gross Gross m2	Tot Gross m2
3.3.1.3 Paediatric Ward, 15 beds			310	1,35	419
01 Staff Toilet		3			
02 Clean Utility		9			
03 Nurse Station		8			
04 Clean Linen Room		8			
05 Single Bed Room, paed (0-4)	1	14			
06 Toilet		3			
07 Single Bed Room, paed (4-12)	1	14			
08 Toilet		3			
09 Single Bed Room, paed (0-4)	1	14			
10 Toilet		3			
11 6-Bed Bay, Paed (0-4)	6	36			
12 6-Bed Room, Paed (4-12)	6	55			
13 Toilet (10)		30			
14 Nursing Mothers Room (6)		55			
15 Treatment/Dressing/Injection		14			
16 Store, eq, inpatient, paediatric		8			
17 Kitchen		12			
18 Bathroom		5			
19 Soiled Utility		8			
20 Cleaner's room		8			
3.3.1.4 Maternity Ward, 25 beds			452	1,35	610
01 Staff Toilet		3			
02 Clean Utility		9			
03 Nurse Station		8			
04 Isolation Room, baby		12			
05 Milk Formula		6			
06 Clean Linen Room		8			
07 Single Bed Room	1	14			
08 2-Bed	2	22			
09 2-Bed	2	22			
10 6-Bed Bay	6	55			
11 6-Bed Bay	6	55			
12 Toilet (10)		30			
13 Nursery (8)	8	32			
14 Store, equipment, inpatient		8			
15 Kitchen		12			
16 Bathroom		5			
17 Soiled Utility		8			
18 Cleaners room		8			
19 Store, equipment, delivery		11			
20 6-Bed Bay Labor		70			
21 Toilet		3			
22 Delivery Room		19			
23 Toilet		3			
24 Shower		2			

	# bed	Net m2	Tot Net m2	Conv Net-Gross Gross m2	Tot Gross m2
25 Delivery Room		19			
26 Soiled Utility		8			
3.3.1.5 Surgical Suite, 2 theatres			310	1,60	496
01 Reception / Nurse		14			
02 Entrance/patient transfer		30			
03 Staff Change		15			
04 Toilet		3			
05 Shower		2			
06 Staff Change		15			
07 Toilet		3			
08 Shower		2			
09 Head Nurse		12			
10 Doctors Office		12			
11 Theatre (No 1)		40			
12 Scrub (2)		10			
13 Set up area		12			
14 Theatre (No 2)		40			
15 Store, equipment, surgical suite		12			
16 Store, sterile supplies		12			
17 Clean Utility, surg. suite		12			
18 3-Bed Recovery		28			
19 Staff Lounge		20			
20 Soiled Utility		8			
21 Cleaners room		8			
3.3.1.6 Accident and Emergency (A & E)			163	1,35	220
01 Waiting		40			
02 Toilet		3			
03 Reception/Nurse		14			
04 Staff Toilet		12			
05 Resuscitation (1)		15			
06 Cubicles (2)		24			
07 Treatment		14			
08 Plaster Room		16			
09 Clean Utility		9			
10 Soiled Utility		8			
11 Cleaners room		8			
3.3.1.7 General Out-patient Dep (OPD)			231	1,35	312
01 Waiting		40			
02 Toilet		3			
03 Reception/Nurse		14			
04 Clean Utility		9			
05 Staff Toilet		12			
06 Consultation/Examination		12			
07 Consultation/Examination		12			
08 Eye		15			
09 ENT		15			

	# bed	Net m2	Tot Net m2	Conv Net-Gross Gross m2	Tot Gross m2
10 Dental		18			
11 Paediatrics		17			
12 Gynaecology		17			
13 Obstetrics (USG optional)		17			
14 Treatment/Dressing/Injection		14			
15 Soiled Utility		8			
16 Cleaners room		8			
3.3.2 Essential Clinical Support Services					1700
3.3.2.1 Imaging Centre			227	1,30 295	
01 Waiting		40			
02 Toilet		3			
03 Reception / Filing		14			
04 Radiologist / Viewing		21			
05 Staff Toilet		12			
06 Sub-Waiting		13			
07 Bucky		24			
08 Ultrasound (optional)		16			
09 Cubicle/change (5)		9			
10 Fluoroscopy (optional)		38			
11 Toilet		3			
12 Dark Room		9			
13 Store, chemicals, x-ray		3			
14 Store, film, x-ray		6			
15 Soiled Utility		8			
16 Cleaners room		8			
3.3.2.2 Clinical Laboratory			311	1,25 389	
01 Waiting (10)		13			
02 Reception/Specimen Collection		15			
03 Blood Sampling		9			
04 Toilet		3			
05 Blood Donation		16			
06 Hematology and blood bank area		6			
07 Chief Laboratory		9			
08 Staff Toilet		12			
09 Chemistry work area		43			
10 Bacteriology work area		44			
11 Pathology work area		48			
12 Glass Wash		8			
13 Sterilization, laboratory		48			
14 Store laboratory		7			
15 Store, chemicals, laboratory		14			
16 Soiled Utility		8			
17 Cleaners room		8			

	# bed	Net m2	Tot Net m2	Conv Net-Gross Gross m2	Tot Gross m2
3.3.2.3 Central Sterile Supply			414	1,25	518
01 Receiving/Washing, CSSD		138			
02 Non-Sterile Supply		12			
03 Packing/sterile area		180			
04 Autoclave (2)		50			
05 Sterile store/issuing		20			
06 Staff Change		11			
07 Toilet		3			
3.3.2.4 Physio & Reh (optional)			270	1,30	351
01 Waiting		40			
02 Toilet		3			
03 Reception/Nurse		14			
04 Staff Change		11			
05 Staff Toilet		12			
06 Clean Utility		9			
07 Patient Change		8			
08 Shower		2			
09 Gymnasium		150			
10 Toilet (wheelchair access)		5			
11 Soiled Utility		8			
12 Cleaner's room		8			
3.3.2.5 Pharmacy			118	1,25	148
01 Outpatient issues/hatch		12			
02 Receiving, pharmacy		40			
03 Office		10			
04 Bulk Store, pharmacy		18			
05 Dispensing		15			
06 Counter ward issue		12			
08 Toilet		3			
09 Cleaner's room		8			
3.3.3 Essential Non-Clinical Support Services					1323
3.3.3.1 Laundry and Linen			188	1,25	235
01 Soiled Linen, Sorting		8			
02 Infected Linen Pre-wash		6			
03 Store, chemicals, laundry		3			
04 Washing/Drying		60			
05 Processing, clean work area		46			
06 Store, clean linen and issuing		8			
07 Sewing and repairs		16			
08 Cleaners room		8			
09 Staff Change (10)		20			
10 Toilet		3			
11 Office		10			

	# bed	Net m2	Tot Net m2	Conv Net-Gross	Gross m2	Tot Gross m2
3.3.3.2 Kitchen			496	1,25	620	
01 Receiving, food supplies		35				
02 Dry Store		102				
03 Cold Store		21				
04 Staff Change (10)		20				
05 Toilet		3				
06 Staff Dining		90				
07 Staff Lounge		20				
08 Office		10				
09 Vegetable Preparation		17				
10 Fish/Meat Preparation		18				
11 Cooking		33				
12 Bakery		37				
13 Store, crockery		7				
14 Food Trolley Bay (8)		8				
15 Cart Wash		7				
16 Dish Wash		40				
17 Pot Wash		14				
18 Trash, refuse collection		6				
19 Cleaners room		8				
3.3.3.3 Central Store			105	1,25	131	
01 Store, general		105				
3.3.3.4 Housekeeping (Domestic Hygiene)			29	1,25	36	
01 Supervisor		9				
02 Store, housekeeping		6				
03 Soiled Utility		8				
04 Trash, refuse collection		6				
3.3.3.5 Waste Management			24	1,25	30	
01 Waste Room		8				
02 Incinerator		16				
3.3.3.6 Engineering and Maintenance			188	1,25	235	
01 Office		10				
02 Staff Change		11				
03 Toilet		3				
04 Shower		2				
05 Store		10				
06 Biomedical workshop		44				
07 Carpentry and painting workshop		72				
08 Plant, central, medical-gas, 100 b		28				
09 Cleaners room		8				
3.3.3.7 Transport			12	1,25	15	
01 Transport		12				
3.3.3.8 Mortuary			16	1,25	20	
01 Body Store (6)		16				

	# bed	Net m2	Tot Net m2	Conv Net-Gross	Gross m2	Tot Gross m2
3.3.4. Administrative Services						243
3.3.4.1 Security			10	1,25	13	
01 Office		10				
3.3.4.2 Medical Records			150	1,35	203	
01 Records		150				
3.3.4.3 Procurement			22	1,25	28	
01 Office (4)		22				

Summary and ratios	
Total net m2	4.928
Total gross m2	6.512
Overall net-gross conversion ratio	1,32
Number of bed	100
m2 per bed	65

4. Definitions, Glossary and Assumptions

Unless otherwise indicated, any word or phrase listed below under definitions, shall, wherever and whenever used in this document, mean the following:

Access: provision must be made for easy access by disabled persons in accordance with NBR requirements.

Accessories: are complementary and add to the functions of an item of equipment, but are not always essential, e.g. a 20X objective is useful if you are using a microscope to examine plasma for parasites, but is not required for other functions.

Accident and Emergency (A&E) Unit: is a department where 24 hour emergency service is rendered to members of the public. Arrangements for multi-disciplinary admission facilities including intensive care must be made. 24 hour X-ray facilities must be available on the premises. A laboratory service or acceptable alternative must be available. A blood transfusion service must be available.

Administrative Control Area: is a room or area for administrative control, enquiries, the admission of patients and storage of records. This must be separate from the nursing unit. Access must not be through patient care areas.

Ceilings: the operating room ceilings must be dust proof.

Clean Utility Room: is a room for the storage of clean linen, sterilised packs, dressings and pharmaceutical supplies. It can be used as a set-up area for wards.

Cleaners' Room/Janitors': is a room for the storage of cleaning equipment, the drawing of clean water, the disposal of dirty water, and the washing and drying of cleaning equipment. This room may be combined with the dirty utility room.

Cleaning: is the process of removing visible material, such as dirt, grease, blood and body fluids and reducing the number of infectious micro-organisms (bacteria, viruses, fungi and spores).

Clinical Basin: is a wash-hand basin which can be operated without hand contact. The outlet spout should be located away from the wall.

Comprehensive Inpatient Rehabilitation Unit: is a facility that makes provision for a therapeutic programme that enables the post-acute, but medically stable patient, with remaining disabilities due to surgery, illness or trauma, to regain and maintain their optimal physical, sensory, intellectual and social functional levels, thus providing them with maximum levels of independence.

Consumables: are essential for an item to perform its basic function, e.g. immersion oil is essential for microscopes. Consumables are also items that are used within a short time, e.g. cotton wool.

Corridors: all corridors where patients are being transported must have the following unobstructed width measured between walls, in order to allow passing of stretcher patients as a minimum.

Operating Theatre Units	2,3 m
Delivery Unit	2,3 m
All Other	2,0 m

Demarcated Area: is an area where access is both restricted and controlled to allow for maximum privacy and patient safety.

Dimensions: The plan dimensions of any room or space must comply with National Building Requirements (NBR) scale requirements of the country.

Dirty Utility Room/Sluice Room: is a room used for the emptying, cleaning and storage of bedpans, urine bottles and equipment.

Disinfection: is the process of removing or reducing the number of micro-organisms to levels that are no longer harmful. Disinfection kills viruses, fungi and bacteria but not spores such as tetanus. Disinfection is, therefore, safe for items that are used for some purposes but not for those where all organisms must be destroyed.

Disposables: are items designed for single use. Disposables should only be used once and should not be re-used.

Disposal of Medical Waste and Anatomical Waste: an incinerator, macerator or other safe disposal system or arrangements shall be provided for the disposal of medical waste and must comply with relevant standards and all statutory regulations. Incinerators should also comply with the guidelines in terms of the Atmospheric and Pollution Prevention Act with reference to air pollution control.

Doors: doors giving access to rooms in which patients are or are to be accommodated or related, shall be at least 1, 2 m wide.

Emergency Trolley/Crash Cart: is a mobile cart used for the storage of all appropriate resuscitation equipment and pharmaceuticals.

Equipment: is capital equipment and durable items that last for several years, e.g. beds, examination tables, sterilisers, microscopes, weighing scales, and bedpans.

Fire Protection: fire hydrants, fire hoses, fire extinguishers, fire escapes and emergency exits shall be provided in accordance with the NBR and the local authority regulations.

Floors: the floors of all rooms and corridors shall be finished to a smooth washable surface or covered with washable material. No carpets or wooden skirting will be allowed in the operating theatre suite, sterilising department, dirty utility room, kitchen, ablution rooms, procedure room, laundry, cleaner's room, clean utility room, soiled linen room, delivery room, etc. The floors of all operating and delivery rooms shall be of impervious material and provide a continuous and smooth impervious surface including the joint between the wall and floor. Anti-static flooring where needed.

Impervious: means impenetrable to liquid substances.

Lifts: multi-storey buildings must have lift(s) of dimensions to safely transport patients in beds. Where orthopaedic surgery is performed, at least one lift should be of sufficient dimensions to accommodate patient beds with traction apparatus attached.

Main Kitchen: is a room or rooms equipped for the receipt of, storage and preparation of food and beverages.

Medical Waste Disposal: is the safe and hygienic disposal of medical waste.

Nurse Station: is the control point for all activities in the patient care areas.

Nursing Unit or Ward: is a unit with the facilities to accommodate patients as specified in this regulation.

Operating Room, Operating Theatre: is a room within the operating suite in which surgical or other invasive procedures are carried out.

Operating Suite: refers to rooms within the demarcated area where surgical interventions are performed or support is provided to these surgical activities.

Pantry/Ward Kitchen: is a room or area which forms an integral part of a nursing unit or units, for the preparation of food and beverages. If food is prepared in this room, it must comply with the main kitchen requirements.

Patient Care Facility: is any hospital or any other institution, building or place where provision is made for the treatment and nursing care of persons, including the following:

Emergency Unit;
Obstetrics; and
Surgical and Medical Treatment.

Procedure Room: is a room in which certain restricted procedures can be performed without making use of general anaesthetics. This room may be situated outside the operating suite.

Recovery Room or Area: means the section of an operating suite specially set aside for immediate post operative recovery, resuscitation, nursing and special care of patients, until such time as such patients are considered to have recovered sufficiently to be safely removed from the operating suite.

Re-usables: are items designed to be used more than once. Re-usables should only be used after proper cleaning and sterilisation and/or disinfection.

Room Heights: in accordance with the NBR. Any additional height specified in these regulations shall be the vertical dimension from the top of the finished floor to the underside of the ceiling.

Signage: must comply with the primary function of guiding the visitor/patient to the areas/departments/wards/rooms, which are their normal destinations, and to indicate the exits clearly. All restricted access rooms or areas must be clearly indicated by appropriate signs.

Soiled Utility and Waste Room: is a room used for the collection and temporary storage of soiled linen and waste. This room may be combined with the dirty utility room.

Spare parts: are required to maintain the basic function of an item of equipment, e.g. to replace damaged, worn or lost parts, or as part of Planned Preventive Maintenance (PPM) to prevent breakdown.

Standard List: is a model list of standardised medical supplies and equipment, based on the type of preventive care, diagnostic tests, and treatments a health facility is expected to carry out.

Sterilisation: is the process of destroying or removing all forms of living organisms, including bacteria, viruses, fungi and spores.

Sterilisation and Disinfection: Unit This facility is for the receiving, decontamination, preparation, packing, sterilising, storing and issuing of instruments and other reusable materials.

Supplies: are items that need replacing on a routine basis, including disposables, single use items, e.g. disposable syringes and needles; expendables (sometimes also called consumables), items that are used within a short time, e.g. cotton wool and laboratory stains; reusable items, e.g. catheters and re-sterilisable syringes; and other items with a short lifespan, e.g. thermometers.

Treatment Room: is the room used for the treatment of patients on the wards.

Walls: all of the surface of inside walls must be covered with a smooth finish and must be painted with a durable washable paint or covered with a similar washable impervious material. The wall behind the wash-hand basin, clinical basin, sink and slop hopper shall have a washable impervious covering up to a height of at least 450mm above, and a distance of at least 150mm on each side of such fitting.

Wash-Hand Basin: consists of a wash basin with hand drying facilities adjacent to it.

5. Acknowledgement

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6. References

- [1]. WHO, Regional Publications, Western Pacific Series No. 4, Regional Office for the Western Pacific, 1996.
- [2]. WHO, Laboratory Services for Primary Health Care: Requirements for Essential Clinical Laboratory Tests, 1998.
- [3]. WHO, Laboratory Services at the Primary Health Care Level, 1987.
- [4]. WHO, Strategies for the prevention of blindness in national programmes, a primary health care approach, Second Edition, 1997.
- [5]. WHO, Strategies for the prevention of blindness in national programmes, a primary health care approach, Second Edition, 1997, pg.10.