



सत्यमेव जयते

Indian Public Health Standards (IPHS) for 301 to 500 bedded District Hospitals

January
2007



Directorate General of Health Services
Ministry of Health & Family Welfare
Government of India



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Foreword

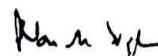
District Hospital is an integral part of the District Health System (DHS), which is, the point of origin for implementing various health policies and delivery of health care. It fulfills the need of secondary level of health care acting as a centre for curative, preventive, and promotive health care services as well as interface with institutions controlled by non-government and private voluntary health organizations. The current functioning of most of the District Hospitals is below the level of expectations due to non-uniformity in staff/bed strength, equipments and service availability and population coverage.

The National Rural Health Mission (NRHM) launched by the Hon'ble Prime Minister of India on 12th April, 2005 aims to restructure the delivery mechanism for health towards providing universal access to equitable, affordable and quality health care that is accountable and responsive to the peoples needs, reducing child and maternal deaths as well as stabilizing population and ensuring gender and democratic balance. As envisaged under NRHM, Sub-districts/Sub-divisional Hospitals would be upgraded from its present level to a level of set of Standards called 'Indian Public Health Standards (IPHS)'.

The Indian Public Health Standards (IPHS) for District Hospitals has been worked out by constituting an Expert Group comprising of various stakeholders under the Chairmanship of Director General Health Services, Ministry of Health & Family Welfare, Government of India. These Standards have been prepared bed strength-wise for 101-200 beds, 201-300 beds and 301-500 beds. The Indian Public Health Standards (IPHS) for District Hospital has been prepared, keeping in view the minimum resources available and mention functional level of the Hospitals in terms of space, manpower, instruments, drugs and other basic health care services. Constitution of Rogi Kalyan Samittee /Management Committee with involvement of PRIs, Citizen Charter are expected to make improvement in the functioning and accountability of these Hospitals.

Of course, setting Standards is a dynamic process and this document provides at this stage the standards for a minimum functional grade for a District Hospital. I hope that this document will be useful to all the stake holders. Any comment for further improvement is most welcome.

I would like to acknowledge the efforts put in by the Director General of Health Services and Infrastructure Division in preparing the Guidelines.



(Naresh Dayal)

Secretary (H&FW)

Ministry of Health & Family Welfare

Government of India

New Delhi

Dated : 16th May, 2007

Preface

District Hospitals function as a secondary level of health care which provides curative, preventive and promotive healthcare services to the people in the district. It is also the fundamental platform for implementing various health policies and delivery of healthcare and management of health services for defined geographical areas. The Government of India through the National Rural Health Mission (NRHM) is committed to strengthen these Hospitals to a level of Indian Public Health Standards (IPHS).

Standards are a means of describing a level of quality that health care organizations are expected to meet or aspire to. The performance of these Hospitals can then be assessed against the set of Standards prescribed. For the first time under National Rural Health Mission (NRHM), an effort has been made to prepare Indian Public Health Standards (IPHS) for District Hospitals in the country.

The Standards have been prepared in consultation with the Expert Group constituted for this purpose and taking in to consideration the minimum functional level needed for providing a set of assured services.

Setting Standards is a dynamic process and this document is not an end in itself. Further revision of Standards will occur as and when these Hospitals achieve a minimum functional grade. The contribution of the Expert Group members, and the efforts made by the Infrastructure Division of the Ministry of Health & Family Welfare in bringing out the first document of IPHS for District Hospitals is well appreciated.

I hope that this document will be of immense help to the State governments and other stakeholders in bringing up these Hospitals to the level of Indian Public Health Standards.



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Dated : 16th May, 2007

Acknowledgements

Indian Public Health Standards (IPHS) for the District Hospitals fulfill the needs of secondary level of healthcare providing curative, preventive and promotive healthcare services to the people in the district. The document is the result of efforts put in by both the government and non-government organizations. As the population and geographical area of a district varies in different States and UTs, an attempt has been made to formulate IPHS for District Hospitals having different bed strengths such as 101-200, 201-300 and 301-500 bedded hospitals. This document contains the Standards set for 301-500 bedded hospital at district level.

I gratefully acknowledge the valuable contribution made by all the members of the Expert Group constituted to formulate Indian Public Health Standards (IPHS) for the District Hospitals. I am thankful to them individually and collectively.

I also gratefully acknowledge the initiative, encouragement and guidance provided by Dr. R.K. Srivastava, Director General of Health Services and Smt. S. Jalaja, Additional Secretary. The help and encouragement provided by Shri Amarjeet Sinha, Joint Secretary(H&FW), M/o Health & Family Welfare, Government of India is also gratefully acknowledged.

I would specifically like to thank Dr. R.N. Salhan, Addl D.G. and Medical Superintendent (Safdarjang Hospital), Dr. Shivalal, Additional D.G. and Director(NICD) and Shri S. Majumdar, Chief Architect, Bureau of Design, Ministry of Health & Family Welfare for their valuable contribution and guidelines in formulating the IPHS for the District Hospitals.

The preparation of this document has been made possible by the assistance provided by Smt. Sushma Rath, Under Secretary (ID/PNDT) and the secretarial and typing assistance provided by Sh. Brij Mohan Singh Bhandari. The assistance provided by the staff of Rural Health Section of the M/o Health & Family Welfare is duly acknowledged.



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1. Introduction

India's Public Health System has been developed over the years as a 3-tier system, namely primary, secondary and tertiary level of health care. District Health System is the fundamental basis for implementing various health policies and delivery of healthcare, management of health services for define geographic areas. District hospitals is an essential component of the district health system and functions as a secondary level of health care which provides curative, preventive and promotive healthcare services to the people in the district.

Every district is expected to have a district hospital linked with the public hospitals/health centres down below the district such as Sub-district/Sub-divisional hospitals, Community Health Centres, Primary Health Centers and Sub-centres. As per the information available, 609 districts in the country at present are having about 615 district hospitals. However, some of the medical college hospitals or a sub-divisional hospital is found to serve as a district hospital where a district hospital as such (particularly the newly created district) has not been established. Few districts have also more than one district hospital.

The Government of India is strongly committed to strengthen the health sector for improving the health status of the population. A number of steps have been taken to that effect in the post independence era. One such step is strengthening of referral services and provision of speciality services at district and sub-district hospitals. Various specialists like surgeon, physicians, obstetricians and gynecologists, pediatrics, orthopedic surgeon, ophthalmologists, anesthetists, ENT specialists and dentists have been placed in the district headquarter hospitals.

The district hospitals caters to the people living in urban (district headquarters town and adjoining areas) and the rural people in the district. District hospital system is required to work not only as a curative centre but at the same time should be

able to build interface with the institutions external to it including those controlled by non-government and private voluntary health organization. In the first changing scenario, the objectives of a district hospital need to unify scientific thought with practical operations which aim to integrate management techniques, interpersonal behaviour and decision making models to serve the system and improve its efficiency and effectiveness.

The current functioning of the most of the district hospitals in the public sector are not up to the expectation especially in relation to availability, accessibility and quality. The staff strength, beds strength, equipment supply and service availability and population coverage are not uniform among all the district hospitals.

As per Census 2001, the population of a district varies from as low as 32,000 (Yanam in Pondicherry, Lahul & Spiti in Himachal Pradesh) to as high as 30 lakhs (Ludhiana, Amritsar districts). The bed strength also varies from 75 to 500 beds depending on the size, terrain and population of the district. As per the second phase of the facility survey undertaken by the Ministry of Health & Family Welfare, Government of India, covering 370 district hospitals from 26 states have revealed that 59% of the surveyed district hospitals have tap water facility. The electricity facility is available in 97% of the districts with a stand by generator facility in 92% of the cases. Almost all the DHs in India have one operation theatre and 48% of them have an OT specifically for gynecological purpose. About 73% of the surveyed district hospitals have laboratories. A separate aseptic labor room is found in only 45% of the surveyed district hospitals. Only half of the total number of district hospitals have OPD facility for RTI/STI. As regards manpower 10% of the district hospitals do not have O&G specialists and pediatricians. 80% of the DHs have at least one pathologist and 83% of the total DHs have at least one anesthetist. The position of general duty officers, staff nurses, female health workers and laboratory technicians are available in almost all

district hospitals. Only 68% of the district hospitals have linkage with the district blood banks.

Most of the district hospitals suffer from large number of constraints such as

- ◆ Buildings are either very old and in dilapidated conditions or are not maintained properly.
- ◆ The facilities at district hospitals require continued upgradation to keep pace with the advances in medical knowledge, diagnostic procedures, storage and retrieval of information. It has been observed that development of hospitals is not keeping pace with the scientific development.
- ◆ A typical district hospital lacks modern diagnostics and therapeutic equipments, proper emergency services, intensive care units, essential pharmaceuticals and supplies, referral support and resources.
- ◆ There is a lack of trained and qualified staff for hospitals management and for the management of other ancillary and supportive services viz. medical records, central sterilization department, laundry, house keeping, dietary and management of nursing services.
- ◆ There is lack of community participation and ownership, management and accountability of district hospitals through hospital management committees.

District Hospitals have come under constantly increasing pressure due to increased utilization as a result of rapid growth in population, increase awareness among common consumers, biomedical advancement, resulting in the use of sophisticated and advanced technology in diagnosis and therapies, and constantly rising expectation level of the use of the services. The need for evaluating the care being rendered through district hospitals has gained strength of late. There is an urgent need to provide guidance to those concerned

with quality assurance in district hospitals services to ensure efficiency and effectiveness of the services rendered.

Standards are a means of describing the level of quality that health care organization are expected to meet or aspire to. The key aim of the standard is to underpin the delivery of quality services which are fair and responsive to clients' needs, which should be provided equitably and which deliver improvements in health and well being of the population. Standards are the main driver for continuous improvements in quality. The performance of district hospitals can be assessed against a set of standards.

The National Rural Health Mission (NRHM) has provided the opportunity to set Indian Public Health Standards (IPHS) for various health institutions at various levels starting from Sub-centres, Primary Health Centres, Community Health Centres and so on up to the district level hospitals.

The present draft guidelines are an effort to prepare Indian Public Health Standards for the District Hospitals. This is not to say that standards for various hospitals do not exist in the country. The Bureau of Indian standards (BIS) have developed standards for hospitals services for 30 bedded and 100 bedded hospitals and standards for 250 bedded, 500 bedded teaching and non teaching and 750 bedded teaching and non teaching will be published by BIS later. However, these standards are considered very resource intensive and lack the processes to ensure community involvement, accountability, the hospital management, and citizens' charter etc peculiar to the public hospitals. In this context a set of standards are being recommended for district hospitals to be called as **Indian Public Health Standards (IPHS) for District Hospitals**. Setting standards is a dynamic process. The current effort is only to workout standards for a minimum functional grade level district hospital. Reference has been made to the BIS Standard for 100 bedded hospitals; Rationalisation of Service Norms for Secondary

Care Hospitals prepared by Govt. of Tamil Nadu; District Health Facilities, Guidelines for Development and Operations, WHO, 1998 and Indian Public Health Standards (IPHS) for Community Health Centres. This document contains the standards to bring the District Hospitals to a minimum acceptable functional grade with scope for further improvement in it.

Most of the existing hospitals below district level (31-50 Bed category) are located in older buildings in urbanized areas / towns as compared to most Primary Health Centres / Sub-centres. The expansions already done have resulted in construction touching the boundaries walls with no scope of further expansions. As far as possible, States should not dislocate the said hospitals to a new location (in case of dislocating to a new location, the original client group will not be able to have same access to the desired health facilities).

Setting standards is a dynamic process. This document contains the standards to bring the District Hospitals to a minimum acceptable functional grade with scope for further improvement in it. These standards are flexible as per the requirements and resources available to the concerned State/UT Government. The timeframe for implementation and achievement of these Standards could be extended for five years and to be done in phases.

2. Objectives of Indian Public Health Standards (IPHS) for District Hospitals:

The overall objective of IPHS is to provide health care that is quality oriented and sensitive to the needs of the people of the district. The specific objectives of IPHS for DHs are:

- i. To provide comprehensive secondary health care (specialist and referral services) to the community through the District Hospital.
- ii. To achieve and maintain an acceptable standard of quality of care.
- iii. To make the services more responsive and

sensitive to the needs of the people of the district and the hospitals/centers from which the cases are referred to the district hospitals

3. Definition

The term District Hospital is used here to mean a hospital at the secondary referral level responsible for a district of a defined geographical area containing a defined population.

4. Grading of District Hospitals:

The size of a district hospital is a function of the hospital bed requirement, which in turn is a function of the size of the population it serves. In India the population size of a district varies from 35,000 to 30,00,000 (Census 2001). Based on the assumptions of the annual rate of admission as 1 per 50 populations and average length of stay in a hospital as 5 days, the number of beds required for a district having a population of 10 lakhs will be around 300 beds. However, as the population of the district varies a lot, it would be prudent to prescribe norms by grading the size of the hospitals as per the number of beds.

Grade I: District Hospitals norms for 500 beds

Grade II: District Hospitals norms for 300 beds

Grade III: District Hospitals norms for 200 beds

Grade IV: District Hospital norms for 100 beds.

The disease prevalence in a district varies widely in type and complexities. It is not possible to treat all of them at district hospitals. Some may require the intervention of highly specialist services and use of sophisticated expensive medical equipments. Patients with such diseases can be transferred to tertiary and other specialized hospitals. A district hospital should however be able to serve 85-95% of the medical needs in the districts. It is expected that the hospital bed occupancy rate should be atleast 80%.

The minimum functional grade of the different grades of district hospitals requiring the

physical infrastructure, manpower, diagnostic and investigation facilities, equipment norms, drugs and other supportive services etc. has been given.

5. Functions

A district hospital has the following functions:

1. It provides effective, affordable healthcare services (curative including specialist services, preventive and promotive) for a defined population, with their full participation and in co-operation with agencies in the district that have similar concern. It covers both urban population (district headquarter town) and the rural population in the district.
2. Function as a secondary level referral centre for the public health institutions below the district level such as Sub-divisional Hospitals, Community Health Centres, Primary Health Centres and Sub-centres.
3. To provide wide ranging technical and administrative support and education and training for primary health care.

6. Essential Services (Minimum Assured Services)

Services include OPD, indoor, emergency services.

Secondary level health care services regarding following specialties will be assured at hospital:

6.1 Consultation services with following specialists:

General Medicine
General Surgery
O&G services
Paediatrics including Neonatology
Emergency (Accident & other emergency)
Critical care
Anaesthesia

Ophthalmology

ENT

Dermatology and Venerology (Skin & VD)
RTI/STI

Orthopaedics

Radiology including ultrasonologist

Radiotherapy

Dental care

Public Health Management

Psychiatry

Plastic Surgery

Allergy

Super Specialties

Cardiology

Cardio-thoracic Vascular Surgery

Gastro-enterology

Surgical Gastro-enterology

Nephrology

Urology

Neurology

Neurosurgery

Oncology

Endocrinology/Metabolism

6.2 Diagnostic and other Para clinical services regarding:

Laboratory services

Imaging services

CT Scan services

Sonography

ECG

EEG

Echocardiogram

Endoscopy

Angiography

Echocardiography
 Pathology
 Blood Bank
 Physiotherapy
 Dental Technology (Dental Hygiene)
 Drugs and Pharmacy

6.3 Ancillary and support services: Following ancillary services shall be ensured:

Medico-legal/postmortem*
 Ambulance services
 Dietary services
 Laundry services
 Security services
 Waste management
 Counseling services for domestic violence, gender violence, adolescents, etc. Gender and socially sensitive service delivery be assured.
 Ware housing/central store
 Maintenance and repair
 Electric Supply (power generation and stabilization)
 Water supply (plumbing)
 Heating, ventilation and air-conditioning
 Transport
 Communication
 Medical Social Work
 Nursing Services
 Sterilization and Disinfection
 Horticulture (Landscaping)
 Lift and vertical transport
 Refrigeration

* Subject to location at District Headquarter

6.4 Administrative services

- (i) Medical records (Provision should be made for computerized medical records with anti-virus facilities whereas alternate records should also be maintained)
- (ii) Procurement
- (iii) Personnel
- (iv) Housekeeping and Sanitation
- (v) Education and training
- (vi) Inventory Management

Financial powers of Head of the Institution

Medical Superintendent to be authorized to incur and expenditure up to Rs.25.00 lakhs for repair/upgrading of impaired equipments/instruments with the approval of executive committee of RKS. Financial accounting and auditing be carried out as per the rules along with timely submission of SOEs/UCs.

No equipment/instruments should remain non-functional for more than 30 days. It will amount to suspension of status of IPHS of the concerned institutions for absence period.

Outsourcing of services like laundry, ambulance, dietary, housekeeping and sanitation, waste disposal etc. to be arranged by hospital itself. Manpower and outsourcing work could be done through local tender mechanism.

6.5 Services under various National Health and Family Welfare Programmes

6.6 Epidemic Control and Disaster Preparedness

6.7 SERVICE MIX OF PROCEDURES IN MEDICAL AND SURGICAL SPECIALITIES

Following services mix of procedures in medical and surgical specialties would be available:

Sl. No	Name of the Procedure
MEDICAL	
1	Pleural Aspiration
2	Pleural Biopsy
3	Bronchoscopy
4	Lumbar Puncture
5	Pericardial tapping
6	Skin scraping for fungus / AFB
7	Skin Biopsies
8	Abdominal tapping
9	Liver Biopsy
10	Liver Aspiration
11	Fibroptic Endoscopy
12	Peritoneal dialysis
13	Hemodialysis
14	Bone Marrow Biopsy
OPD Procedures (Including IPD)	
1	Dressing (Small, Medium and Large)
2	Injection (I/M & I/V)
3	Catheterisation
4	Steam Inhalation
5	Cut down (Adult)
6	Enema
7	Stomach Wash
8	Douche
9	Sitz bath
10	CVP Line
11	Blood Transfusion
12	Hydrotherapy
13	Bowel Wash

Skin Procedures	
1	Chemical Cautery
2	Electro Cautery
3	Intra Lesional Injection
4	Biopsy
Paediatric Procedures	
1	Immunization (BCG, OPV, DPT, Measles, DT) / Children Ward / ORT centre
2	Services related to new borne care + All procedures as mentioned in IMNCI
2.1	- only cradle
2.2	- Incubator
2.3	- Radiant Heat Warmer
2.4	- Phototherapy
2.5	- Gases (oxygen)
2.6	- Pulse Oxemeter
2.7	- Lum bar Puncture
2.8	- Bone Marrow
2.9	- Exchange Transfusion
2.10	- Cut down
2.11	- Plural/Acrite Tap
2.12	- Ventilator
2.13	- Live Biopsy u/s guided
Cardiology Procedures and Diagnostic Tests	
1	ECG
2	T M T
3	Holter
4	Thrombolytic Therapy
5	C V P Line
6	Defibrillator Shock
7	NTG/Xylocard Infusion
8	ECHO Cardiography

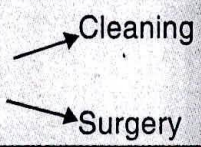
Endoscopic Specialised Procedures and Diagnostic	
1	Gastroscopy (Oesophagus, stomach, deudenum) (Diagnostic and Therapeutic)
2	Sigmoidoscopy and Colonoscopy
3	Bronchoscopy and Foreign Body Removal
4	Arthros copy (Diagnostic and Therapeutic)
5	Lapros copy (Diagnostic and Therapeutic)
6	Colposcopy
7	Hysteroscopy
Psychiatry Services	
1	Modified ECT
2	Narcoanalysis
Physiotherapy Services	
1	With Electrical Equipments
1.1	- Computerised Traction (Lumbar & Cervical)
1.2	- Short wave diathermy
1.3	- Electrical Stimulator with TENS
1.4	- Electrical Stimulator
1.5	- Ultra Sonic Therapy
1.6	- Paraffin Wax Bath
1.7	- Infra Red Lamp (Therapy)
1.8	- U V (Therapeutic)
1.9	- Electric Vibrator
1.10	- Vibrator Belt Massage
2	With Mechanical Gadgets/Exercises
2.1	- Mechanical Traction (Lumber & Cervical)
2.2	- Exercycle
2.3	- Shoulder Wheel
2.4	- Shoulder Pulley
2.5	- Supinator Pronator Bar
2.6	- Gripper
2.7	- Visco Weight Cuffs

2.8	- Walking Bars
2.9	- Post Polio Exercise
2.10	- Obesity Exercises
2.11	- Cerebral Palsy – Massage
2.12	- Breathing Exercises & Postural Drainage
Eye Specialist Services (Ophthalmology)	
1	OPD Procedures
1.1	- Refraction (by using snellen's chart)
1.2	- Refraction (by auto refrectro meter)
1.3	- Syringing and Probing
1.4	- Foreign Body Removal (conjunctival)
1.5	- Foreign Body Removal (Corneal)
1.6	- Epilation
1.7	- Suture Removal
1.8	- Subconj Injection
1.9	- Retrobular Injection (Alcohol etc.)
1.10	- Tonometry
1.11	- Biometry / Keratometry
1.12	- Automated Perimetry
1.13	- Pterygium Excision
1.14	- Syringing & Probing
1.15	- I & C of chalazion
1.16	- Wart Excision
1.17	- Stye
1.18	- Cauterization (Thermal)
1.19	- Conjunctival Resuturing
1.20	- Corneal Scarping
1.21	- I & D Lid Abscess
1.22	- Uncomplicated Lid Tear
1.23	- Indirect Ophthalmoscopy
1.24	- Retinoscopy

2	IPD Procedures
2.1	- Examination under GA
2.2	- Canthotomy
2.3	- Paracentesis
2.4	- Air Injection & Resuturing
2.5	- Enucleation with Implant
2.6	- Enucleation without Implant
2.7	- Perforating Coneo Scleral Injury Repair
2.8	- Cataract Extraction
2.9	- Glaucoma (Trabeculectomy)
2.10	- Cutting of Iris Prolapse
2.11	- Small Lid Turnour Excision
2.12	- Conjunctival Cyst
2.13	- Capsulotomy
2.14	- Ant. Chamber Wash
2.15	- Evisceration
ENT Services	
1	OPD Procedures
1.1	- Foreign Body Removal (Ear and Nose)
1.2	- Stitching of CLW's
1.3	- Dressings
1.4	- Syringing of Ear
1.5	- Chemical Cauterization (Nose & Ear)
1.6	- Eustachian Tube Function Test
1.7	- Vestibular Function Test/Caloric Test
2	Minor Procedures
2.1	- Therapeutic Removal of Granulations (Nasal, Aural, Oropharynx)
2.2	- Punch Biopsy (Oral Cavity & Oropharynx)
2.3	- Cautrization (Oral, Oropharynx, Aural & nasal)
3	Nose Surgery
3.1	- Nasal Endoscopy & Endoscopic Sinus Surgery

3.2	- Packing (Anterior & Posterior Nasal)
3.3	- Antral Punchure (Unilateral & Bilateral)
3.4	- Inter Nasal Antrostomy (nilateral & Bilateral)
3.5	- I & D Septal Abscess (Unilateral & Bilateral)
3.6	- S M R
3.7	- Septoplasty
3.8	- Fracture Reduction Nose
3.9	- Fracture Reduction Nose with Septal Correction
3.10	- Transantral Procedures (Biopsy, Excision of cyst and Angiofibroma Excision)
3.11	- Transantral Biopsy
3.12	- Rhinoplasty
3.13	- Septoplasty with reduction of terbinat (SMD)
4	Ear Surgery
4.1	- Mastoid Abscess I & D
4.2	- Mastoidectomy
4.3	- Stapedotomy
4.4	- Examination under Microscope
4.5	- Myringoplasty
4.6	- Tympanoplasty
4.7	- Myringotomy
4.8	- Ear Piercing
4.9	- Hearing Aid Analysis and Selection
5	Throat Surgery
5.1	- Adenoidectomy
5.2	- Tonsillectomy
5.3	- Adenoidectomy + Tonsillectomy
5.4	- Tongue Tie excision
6	Endoscopic ENT Procedures
6.1	- Direct Laryngoscopy
6.2	- Hypopharyngoscopy
6.3	- Direct Laryngoscopy & Biopsy

6.4	- Broncoscopic Diagnostic
6.5	- Broncoscopic & F B Removal
7	General ENT Surgery
7.1	- Sticking of LCW (Nose & Ear)
7.2	- Preauricular Sinus Excision
7.3	- Tracheostomy
8	Audiometry
8.1	- Audiogram (Pure tone and Impedence)
Obstetric & Gynecology Specialist Services	
1	Episiotomy
2	Forceps delivery
3	Craniotomy-Dead Fetus/Hydrocephalus
4	Caeserean section
5	Female Sterilisation (Mini Laparotomy & Laparoscopic)
6	D&C
7	MTP
8	Hysterectomy
9	Bartholin Cyst Excision
10	Suturing Perimeal Tears
11	Ovarian Cystectomy / Oophrectomy
12	Vaginal Hysterectomy
13	Haematocolpes Drainage Colpotomy
14	Casserian Hystrectomy
15	Assisted Breech Delivery
16	Cervical Biopsy
17	Cervical Cautery
18	Nomal Delivery
19	Casserian
20	E U A
21	Midtrimestor Abortion
22	Ectopic Pregnancy Ruptured

23	Retain Placenta
24	Suturing Cervical Tear
25	Assisted Twin Delivery
Dental Services	
1	Dental Caries/Dental Abcess/Gingivitis
2	Periodontitis <div style="margin-left: 100px;">  </div>
3	Minor Surgeries, Impaction, Flap
4	Malocclusion
5	Prosthodontia (Prosthetic Treatment)
6	Trauma including Vehicular Accidents
7	Maxillo Facial Surgeries
8	Neoplasms
9	Sub Mucus Fibrosis (SMF)
10	Scaling and Polishing
11	Root Canal Treatment
12	Extractions
13	Light Cure
14	Amalgum Filling (Silver)
15	Sub Luxation and Arthritis of Temporomandibular Joints
16	Pre Cancerous Lesions and Leukoplakias
17	Intra oral X-ray
18	Fracture wiring
19	Apiscectomy
20	Gingivectomy
21	Removal of Cyst
22	Complicated Extractions (including suturing of gums)
SURGICAL	
1	Abcess drainage including breast & perianal
2	Wound Debridement

3	Appendicectomy
4	Fissurotomy or fistulectomy
5	Hemorrhoidectomy
6	Circumcision
7	Hydrocele surgery
8	Herniorraphy
9	Suprapubic Cystostomy
10	Urethral Dilatation
11	Cystoscopy
12	Endoscopy
13	Esophagoscopy
14	Diagnostic Laparoscopy
15	Colonoscopy
16	Sigmoidoscopy
17	Colposcopy
18	Hysteroscopy
19	Arthroscopy
20	Tonsillectomy
21	Mastoidectomy
22	Stapedotomy
23	Craniotomy (Neurosurgical)
24	Episiotomy
25	Forceps delivery
26	Craniotomy-Dead Fetus/Hydrocephalus
27	Caeserean section
28	Female Sterilisation (Mini Laparotomy & Laparoscopic)
29	Vasectomy
30	D&C
31	MTP
32	Hysterectomy
33	FNAC

34	Total Parotidectomy
35	Intra-oral removal of submandibular duct Calculous
36	Excision Branchial Cyst or Fistula/sinus
37	Lingual Throid
38	Thyroid Adenoma Resection / Enucleation
39	Hemithyroidectomy (Sub total Thyroidectomy/Lobectomy)
40	Cysts and Benign Tumour of the Palate
41	Excision Submucous Cysts
Breast	
1	Excision fibroadenoma – Lump
2	Simple Mastectomy
3	Halstead's Radical, Mastectomy/Patey's Operation
4	Sectoral Mastectomy/Microdochection/Lumpectomy
5	Wadge Biopsy
6	Excision Mammary Fistula
Hernia	
1	Ingunial Hernia repair reinforcement
2	Ingunial Hernia repair with mesh
3	Femoral Hernia repair
4	Epigastric/Ventral Hernia repair
5	Recurrent Ingunial Hernia repair
6	Ventral Hernia repair with mesh
7	Strangulated Ventral or Incisional Hernia/Ingunial
8	Recurrent Incisional Hernia
9	Diaphargmatic Hernia
Abdomen	
1	Exploratory Laparotomy
2	Gastrostomy or Jejuncstomy
3	Simple Closure of Perforated Ulcer
4	Reamstedt's Operation
5	Gastro-Jejunostomy

6	Vagotomy & Drainage Procedure
7	Adhesonolysis or division of bands
8	Mesenteric Cyst
9	Retroperitoneal Tumour Excision
10	Intussuception (Simple Reduction)
11	Burst Abdomen Repair
Spleen and Portal Hypertension	
1	Splenectomy
Pancreas	
1	Drainage of Pseudopancreatic Cyst
2	Retroperitoneal Drainage of Abscess
Appendix	
1	Emergency Appendisectomy
2	Interval Appendisectomy
3	Appendicular Abscess Drainage
Small Intestine	
1	Resection and Anastomosis
2	Intussusception
3	Intestinal Fistula
4	Multiple Resection and Anaestomosis
5	Intestinal Perforation
Liver	
1	Open Drainage of liver abscess
2	Drainage of Subdia, Abscess/Perigastric Abscess
Biliary System	
1	Cholecystostomy
2	Cholecystectomy
3	Cholecystectomy and Choledocholithotomy
Colon, Rectum and Anus	
1	Fistula in a low level
2	Fistula in a high level

3	Catheters
4	IV Sets
5	Colostomy Bags
6	Perianal Abscess
7	Ischiorectal Abscess
8	Ileostomy or colostomy alone
9	Sigmoid Myotomy,
10	Right Hemicolectomy
11	Sigmoid & Descending Colectomy
12	Haemorrhoidectomy
13	Sphincterotomy of Fissurectomy
14	Tube Caecostomy
15	Closure of loop colostomy
16	Rectal Prolapse Repair
17	Anal Sphincter Repair after injury
18	Thiersch's operation
19	Volvulus of colon
20	Resection anastomosis
21	Imperforate anus with low opening
22	Pilonidal Sinus
Penis, Testes, Scrotum	
1	Circumcision
2	Partial amputation of Penis
3	Total amputation of Penis
4	Orchidopexy (Unilateral & Bilateral)
5	Orchidectomy (Unilateral & Bilateral)
6	Hydrocele (Unilateral & Bilateral)
7	Excision of Multiple sebaceous cyst of scrotal skin
8	Reduction of Paraphimosis
Other Procedures	
1	Suture of large laceration

2	Suturing of small wounds
3	Excision of sebaceous cyst
4	Small superficial tumour
5	Large superficial tumour
6	Repair torn ear lobule each
7	Incision and drainage of abscess
8	Lymph node biopsy
9	Excision Biopsy of superficial lumps
10	Excision Biopsy of large lumps
11	Injection Haemorrhoids/Ganglion/Keloids
12	Removal of foreign body (superficial)
13	Removal of foreign body (deep)
14	Excision Biopsy of Ulcer
15	Excision Multiple Cysts
16	Muscle Biopsy
17	Tongue Tie
18	Debridment of wounds
19	Excision carbuncle
20	Ingrowing Toe Nail
21	Excision Soft Tissue Tumour Muscle Group
22	Diabetic Foot Asnd carbuncle
Urology	
1	Pyelolithotomy
2	Nephrolithotomy
3	Simple Nephrostomy
4	Implantation of ureters Bilateral
5	Vesico-vaginal fistula
6	Nephrectomy
7	Uretrolithotomy
8	Open Prostectomy
9	Closure of Urethral Fistula

10	Cystolithotomy Superopubic
11	Dilatation of stricture urethra under GA
12	Dilatation of stricture urethra without anaesthesia
13	Meatotomy
14	Testicular Biopsy
15	Trocar Cystostomy
Plastic Surgery	
1	Burn Dressing Small, medium (10% to 30%), large 30% to 60%, extensive > 60%
2	Ear lobules repair one side (bilateral)
3	Simple wound
4	Complicated wound
5	Face Scar – Simple
6	Cleft Lip – One side
7	Small wound skin graft
8	Simple injury fingers
9	Finger injury with skin graft
10	Multiple finger injury
11	Crush injury hand
12	Full thickness graft
13	Congenital Deformity (Extra digit, Syndactyly, Constriction bands)
14	Reconstruction of Hand (Tendon)
15	Polio Surgery
16	Surgery concerning disability with Leprosy
17	Surgery concerning with TB
Paediatric Surgery	
1	Minor Surgery, I & D, Prepuceal Dilatation, Meatotomy
2	Gland Biopsy, Reduction Paraphimosis, small soft Tissue tumour (Benign)
3	Rectal Polyp removal, deep abscess
4	Big soft tissue tumour
5	Branchial cyst/fistula/sinus
6	Inguinal Herniotomy (Unilateral & Bilateral)

7	Orchidopexy 9Unilateral & Bilateral)
8	Pyoric Stenosis Ramsteadt operation
9	Exploratory Laprotomy
10	Neonatal Intestinal Obstruction / Resection / Atresia
11	Gastrostomy, colostomy
12	Umbilical Hernia / Epigastric Hernia
13	Sacroccygeal Teratoma
14	Torsion of Testis
15	Hypospadias single stage (first stage)
Orthopaedic Surgery	
1	Hip Surgery
2	Femoral Neck nailing with or without plating replacement prosthesis / Upper Femoral Osteotomy; Innominate Osteotomy/Open Reduction of Hip dislocation; DHS/Richard Screw Plate
3	Synovial or bone biopsy from HIP
4	Girdle stone Arthroplasty
5	Fractures
6	Open reductuin int, fixation or femur, tibia, B. Bone, Forarm Humerus inter-condylar fracture of humerus and femur and open reduction and int. Fixation bimaleolar fracture and fracture dialocation of ankle montaggia fracture dialocation
7	Medical concyle of humerus fracture lateral condyle of humerus Olecranen fracture, head of radius lower end of radius, medial malleolus patella fracture and fracture of calcaneum talus single forearm, bone fracture
8	External Fixation Appleication Pelvis femur, tibia humerus forearm
9	Ext. fixation of hand & foot bones
10	Tarsals, Metatarsals, Phalanges carpals, Metacarples, excision head fibula, lower and of Inia
11	Drainage of fracture
12	Interlocking nailing of long bones
13	Debridement & Secondary closure
14	Percutaneous Fixation (small and long bones)
15	Closed Reduction
16	Hand, Foot bone and cervicle
17	Forearm or Arm, Leg, Thigh, Wrist, Aknle

18	Dislocation elbow, shoulder, Hip, Knee
19	Closed Fixation of hand / foot bone
20	Open Reduction
21	Shoulder dislocation, knee dislocation
22	Acromioclavicular or sternoclavicular Jt. Clavicle
23	Ankle Bimalleolar Open reduction, Ankle Trimalleolar open reduction
24	Wrist dislocation on intercarpal joints
25	MP & IP Joints
26	Knee Synovectomy / Meniscectomy
27	Fasciotomy leg/forearm
28	High Tibial Osteotomy
29	Arthodesis (Shoulder/Knee Ankle, Triple/elbow, Wrist/Hip)
30	Arthodesis – MP & IP Joints
31	Excision Exostosis long bones, single / two
32	Currentage Bone Grafting of Bone Tumour of femur/tibia Humerus & forearm
33	Surgery tumours of small bone hand and foot
34	Debridement primary closure of compounds fracture of tibia, femur forearm without fixation
35	Debridement of hand/foot
36	Debridement primary closure of compound fractures of tibia, femur forearm with fixation
37	Tendon surgery soft tissue release in club foot
38	Internal fixation of small bone (Single, Two , More than two)
39	Tendon Surgery (Repair and Lengthening)
40	Surgery of chronic Osteomyelitis (Saucerization, Sequestrectomy of femur, Humerus, Tibia)
41	Fibula Radius Ulna (Clavicle) and Wrist, Ankle, Hand foot
42	Amputation (Thigh or arm, leg or forearm, feet or hand, digits)
43	Disarticulation of hip or shoulder (Disarticulation of knee elbow/wrist/ankle; Fore-quarter or hind-quarter)
44	POP Application (Hip Spica, Shoulder spica POP Jacket; A-K/A-E POP; B-K/B-E POP)
45	Corrective Osteotomy of long bones
46	Excision Arthroplasty of elbow & other major joints; Excision Arthroplasty of small joints
47	Operation of hallus valgus

48	Bone Surgery (Needle biopsy, Axial Skelton, Non-Axial)
49	Removal K Nail AO Plates
50	Removal Forearm Nail, Screw, Wires
51	Skeletal Traction Femur, Tibia, Calcaneum, Elbow
52	Bone Grafting (small grafting and long bone)
53	Ingrowing toe-nail
54	Soft tissue Biopsy
55	Skin Graft (small, medium and large)
56	Patellectomy
57	Olecranon fixation
58	Open Ligament repair of elbow, Ankle & Wrist
59	Arthrotomy of hip/shoulder/elbow
60	Carpal Tunnel Release
61	Dupuytren's contracture
62	Synovectomy of major joint shoulder/hip/ Elbow
63	Repair of ligaments of knee
64	Closed Nailing of long bones
65	External fixator readjustment dynamisation removal of external fixation/removal of implant
66	Excision of soft tissue tumour muscle group

RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS) FOR DIFFERENT ILLNESSES CONCERNING DIFFERENT SPECIALITIES:

OBSTETRIC & GYNEACOLOGY

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	Bleeding during first trimester	Treat
2	Bleeding during second trimester	Treat
3	Bleeding during third trimester	Treat
4	Normal Delivery	Yes
5	Abnormal labour (Mal presentation, prolonged labour, PROM, Obstructed labour)	Treat
6	PPH	Treat
7	Puerperal Sepsis	Treat
8	Ectopic Pregnancy	Treat
9	Hypertensive disorders	Treat
10	Septic abortion	Treat
11	Medical disorders complicating pregnancy (heart disease, diabetes, hepatitis)	Treat
12	Bronchial asthma	Treat
Gynaecology		
1	RTI / STI	Treat
2	DUB	Treat
3	Benign disorders (fibroid, prolapse, ovarian masses) Initial investigation at PHC / Gr III level	Treat
4	Breast Tumors	Investigate, treat and refer if necessary
5	Cancer Cervix screening Initial investigation at PHC / Grade III level	Collection of PAP SMEAR and biopsy Repairing Cytology & Histopathology
6	Cancer cervix / ovarian Initial investigation at PHC / Gr III level	Treat
7	Infertility	Treat
8	Prevention of MTCT	Pretest and post test and counselling and treatment
9	MTP / MVA services	Treat
10	Tubectomy	Yes

GENERAL MEDICINE

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	Fever -a) Short duration (<1 week)	Basic investigation and Treatment
	Fever -b) Long duration (>1 week)	Investigation and treatment
	c) Typhoid	Treat
	d) Malaria / Filaria	Treat
	e) Pulmonary Tuberculosis.	Treat
	f) Viral Hepatitis	Treat If HBs, Ag +ve refer to tertiary care
	g) Leptospirosis / Meningitis and Haemorrhagic fever	Confirm by MAT / CSF Analysis and treat
	h) Malignancy	Confirm diagnosis refer to tertiary care
2	COMMON RESPIRATORY ILLNESSES	
	Bronchial Asthma / Pleuraleffusion /	Diagnose and Treat Pneumonia / Allergic Bronchitis/COPD
3	COMMON CARDIAC PROBLEMS	
	a) Chest pain (IHD)	Treat and decide further management
	b) Giddiness (HT)	Diagnose and treat
4	G I TRACT	
a)	G I Bleed / Portal hypertension /	Investigate and treat
	Gallblader disorder	
b)	AGE / Dysentery / Diarrhoreas	Treat
5	NEUROLOGY	
a)	Chronic Hpeadache	Investigate, treat & decide further
b)	Chronic Vertigo/CVA/TIA/Hemiplegia/ Paraplegia	Treat
6	HAEMATOLOGY	
a)	Anaemia	Basic investigation and Treatment
b)	Bleeding disorder	Stabilise Ref. To tertiary
c)	Malignancy	Treat & decide further
7	Communicable Diseases	
	Cholera Measles Mumps Chickenpox	Treat
8	Psychological Disorders	
	Acute psychosis / Obsession / Anxiety neurosis	Treat

PAEDIATRICS

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	ARI/ Bronchitis Asthmatic	Investigate Diagnose Nebulizator Oxygen
2	Diarrohoeal Diseases	Diagnose Treat ORT Center
3	Protein Energy Malnutrition and Vitamin Deficiencies	Investigate, then refer & then supportive treatment in liaison with the specialized centre. Diagnose Treat with help of Dietician
4	Pyrexia of unknown origin	Diagnose Treat
5	Bleeding Disorders	Investigate Treat
6	Diseases of Bones and Joints	Investigate Treat
7	Childhood Malignancies	Investigate, then refer & then supportive treatment in liaison with the specialized centre. manage
8	Liver Disorders	Investigate Manage
9	Paediatric Surgical Emergencies	Investigate Manage
10	Poisoning, Sting, Bites	Treat

Step down & follow up care for patients being managed from tertiary care hospital in liaison with them for further management.

NEONATOLOGY

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	Attention at birth (to prevent illness)	5 cleans warm chain
2	Hypothermia	Warm chain
3	Birth asphyxia	Resuscitation And Treatment
4	Hypoglycemia	Investigate & Treat
5	Meconium aspiration syndrome	Treat
6	Convulsions (seizures)	Investigate & Treat
7	Neonatal Sepsis	Investigate & Treat

8	LBW	Investigate & Treat
9	Neonatal Jaundice	Treat
10	Preterm	Warm chain, feeding, kangaroo care, Treat
11	Congenital malformations	Manage
12	R.D.S, ARI	Manage, CPAP
13	Dangerously ill baby	Identify and manage & refer appropriately
14	Feeding Problems	Identify and manage
15	Neonatal diarrhoea	Diagnosis and manage
16	Birth injury	Manage
17	Neonatal Meningitis	Manage
18	Renal problems/Congenital heart disease/Surgical emergencies	Refer
19	HIV/AIDS	Exclusive breast feeding & manage
20	Hypocalcemia	Manage
21	Metabolic Disorders	manage
22	Hyaline Membrane diseases	Diagnose & treat with CPAP
23	Neonatal Malaria	Manage
24	Blood disorders	Manage
25	Developmental Delays	CBR
26	UTIs	Manage & refer
27	Failure to Thrive	Manage & Refer

DERMATOLOGY

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	Infections a) Viral - HIV - Verrucca Molluscum Contagiosa	Treat
	Pityriasis Rosea LGV HIV	Treat
	b) Bacteria Pyoderma Chancroid	Treat
	Gonorrhea Leprosy Tuberculosis	Treat

	c) Fungal Sup. Mycosis Subcut - Mycetoma	Treat
	d) Parasitic Infestation Scabies / Pediculosis/Larva Migrans	Treat
	e) Spirochaetes Syphilis	Diagnosis and Treat
2	Papulosquamous Psoriasis (classical)-uncomplicated/ Lichen Planus	Treat
3	Pigmentary Disorder Vitiligo	Treat
4	Keratinisation Disorder Ichthyosis/Traumatic Fissures	Treat
5	Autoimmune Collagen Vascular DLE, Morphea	Treat/Refer
6	Skin Tumors, Seb.Keratosis, Soft Fibroma, Benign Surface, Tumors / Cysts, Appendageal Tumors	Treat
7	Miscellaneous a) Acne Vulgaris, Miliaria, Alopecia, Nail disorder, Toxin induced	Treat
	b) Leprosy - Resistant/Complications/ reaction Allergy - EMF / SJS / TENPsoriasis/Collagen Vascular/ Auto immune Disorders	Treat
	c) Deep Mycosis, STD Complications	Treat
	d) Genetically Determined Disorders	Treat

CHEST DISEASES

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	Fever	Investigation and Treatment
2	Cough with Expectoration / Blood Stained	Treatment CT Scan if necessary
3	Hemoptysis	CT scan Bronchoscopy Treatment
4	Chest Pain	Investigation and Treatment
5	Wheezing	Treatment, PFT
6	Breathlessness	Investigation and Treatment Chest Physiotherapy

PSYCHIATRY

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	Schizophrenia	Treatment and Follow up IP Management
2	Depression	Treatment and Follow up IP Management
3	Mania	Treatment and Follow up IP Management
4	Anxiety Disorders	Treatment and Follow up IP Management
5	Mental Retardation	Treatment and Follow up IP Management
6	Other Childhood Disorders	Treatment and Follow up IP Management
7	Alcohol and Drug Abuse	Treatment and Follow up IP Management
8	Dementia	Treatment and Follow up IP Management

DIABETOLOGY

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	Screening for Diabetes	Diagnose and Treat
2	Gestational Diabetes/DM with Pregnancy	Diagnose and Treat
3	DM with HT	Diagnose and Treat
4	Nephropathy/Retinopathy	Diagnose and Treat
5	Neuropathy with Foot Care	Diagnose and Treat
6	Emergency :- i) Hypoglycemia ii) Ketosis iii) Coma	Diagnose and Treat

NEPHROLOGY

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	Uncomplicated UTI	Treat
2	Nephrotic Syndrome - Children/ Acute Nephritis	Treat
3	Nephrotic Syndrome - Adults	Refer to Tertiary follow up care
4	HT, DM	Treat
5	Asymptomatic Urinary Abnormalities	Treat
6	Nephrolithiasis	Treat
7	Acute renal Failure/ Chronic Renal Failure	Treat
8	Tumors	Refer to Tertiary

NEURO MEDICINE AND NEURO SURGERY

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	Epilepsy	Investigate and Treat
2	C.V.A.	Investigate and Treat
3	Infections	Investigate and Treat
4	Trauma	Investigate and Treat
5	Chronic headache	Investigate and Treat
6	Chronic Progressive Neurological disorder	Investigate and Treat

GENERAL SURGERY

S. No	NAME OF THE ILLNESS		RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	Basic Techniques	a. Minor Cases under LA Abscess I&D/Suturing, Biopsy / Excision of Lipoma / Ganglion / Lymph Node, Seb-Cyst / Dermoid / Ear Lobe Repair / Circumcision	Treat
		b. FNAC Thyroid, Breast Lumps, Lymphnodes, Swelling	Investigate / Diagnosis / Treatment
2	Elective Surgeries	a. Genitourinary tract Hydrocele, Hernia, Circumcision, Supra pubic cystostomy,	Treat
		b. Gastrointestinal disorder Appendicitis/Anorectal abscesses/Rectal prolapse/Liver abscess/Haemorrhoids/Fistula	Treat
3	Emergency surgeries	Assault injuries/Bowel injuries/Head injuries/Stab injuries/Multiple injuries/Perforation/Intestinal obstruction	Treat
4	Benign/ Malignant Diseases	Breast/Oral/GI tract/Genitourinary (Penis, Prostate, Testis)	Treat
5	Others	Thyroid, Varicose veins	Treat
6	Burns	Burns <15%	Treat
		>15%	Treat
7	Medico legal	a) Assault / RTA	AR Entry / Treat
		b) Poisonings	AR Entry / Treat
		c) Rape	AR Entry / Treat
		d) Postmortem	Done

OPHTHALMOLOGY

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	Superficial Infection	Treatment with drugs
2	Deep Infections	Treat
3	Refractive Error	Treat
4	Glaucoma	Treat
5	Eye problems following systemic disorders	Treat
6	Cataract	Treat
7	Foreign Body and Injuries	Treat
8	Squint and Amblyopia/Corneal Blindness(INF,INJ,Leucoma)/ Oculoplasty	Treat
9	Malignancy/Retina Disease	Treat
10	Paediatric Ophthalmology	Treat

EAR, NOSE, THROAT

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
EAR		
1	ASOM/SOM/CSOM	Treat/Surgical if needed
2	Otitis External / Wax Ears	Treat
3	Polyps	Surgical Treatment
4	Mastoiditis	Treatment Surgery if needed
5	Unsafe Ear	Surgery
THROAT		
1	Tonsillitis/Pharyngitis/Laryngitis	Treat
2	Quinsy	Surgery
3	Malignancy Larynx	Biopsy / Treat
4	Foreign Body Esophagus	Treat (removal)
5	Foreign Body Bronchus	Treat

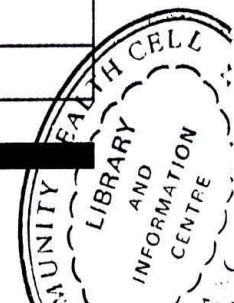
NOSE		
1	Epistaxis	Treat
2	Foreign Body	Treat
3	Polyps	Treat (Removal)
4	Sinusitis	Treat (surgery if needed)
5	Septal Deviation	Treat (surgery if needed)

ORTHOPADICS

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	Osteomyelitis	Surgery
2	Rickets /Nutritional Defeciencies	Manage with Physiotherapy
3	Poliomyelitis with residual Deformities/JRA/RA	Joint Replacement / Rehab for Polio
4	RTA/Polytrauma	Manage

UROLOGY

S. No	NAME OF THE ILLNESS	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
CHILDREN		
1	Hydronephrosis	Diagnose and refer
2	Urinary Tract Injuries	Diagnose and refer
3	PUV/ Posterior Urethral Valve	Diagnose and refer
4	Cystic Kidney	Diagnose and refer
5	Urinary Obstruction	Urethrral Catheter Insertion SPC and Referral
6	Undesended Testis	Diagnose and refer
7	Hypospadias and Epispadias	Diagnose and refer
8	Mega Ureter	Diagnose and refer
9	Extrophy	Diagnose and refer
10	Tumours - Urinary Tact	Diagnose and refer



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 PH-100 10205

ADULT		
	All above and	
1	Stricture Urethra	Treatment
2	Stone Diseases	Treatment/ Referral
3	Cancer - Urinary and Genital Tract	Treatment/ Referral
4	Trauma Urinary Tact	Treatment/ Referral
5	GUTB	Treatment/Referral/ Follow up
OLD AGE		
1	Prostate Enlargement and Urinary Retention	Treatment / Referral
2	Stricture Urethra	Treatment
3	Stone	Treatment/Referral
4	Cancer (Kidney, Bladder, Prostate, Testis, Penis and Urethra)	Treatment/Referral
5	Trauma Urinary Tract	Treatment/Referral

DENTAL SURGERY

Sl. No	Name of the Illness	RECOMMENDED SERVICE MIX (SUGGESTED ACTIONS)
1	Dental Caries/Dental Abcess/Gingivitis	Treat
2	Periodontitis → Cleaning → Surgery	Treat
3	Minor Surgeries, Impaction, Flap	Treat
4	Malocclusion	Treat with appliances
5	Prosthodontia (Prosthetic Treatment)	Treat with appliances
6	Trauma	Treat (wiring and plating)
7	Maxillo Facial Surgeries	Treat and refer
8	Neoplasms	Treat and Refer if necessary

7. PHYSICAL INFRASTRUCTURE

7.1. Size of the hospital

The size of a district hospital is a function of the hospital bed requirement which in turn is a function of the size of the population served. In India the population size of a district varies from 50,000 to 15,00,000. For the purpose of convenience the average size of the district is taken in this document as one million populations. Based on the assumptions of the annual rate of admission as 1 per 50 populations. And average length of stay in a hospital as 5 days. The number of beds required for a district having a population of 10 lakhs will be as follows:

The total number of admissions per year = $10,00,000 \times 1/50 = 20,000$

Bed days per year = $20,000 \times 5 = 1,00,000$

Total number of beds required when occupancy is 100% = $1,00,000/365 = 275$

Total number of beds required when occupancy is 80% = $1,00,000/365 \times 80/100$

7.2. Area of the hospital

An area of 65-85 m² per bed has been considered to be reasonable. The area will include the service areas such as waiting space, entrance hall, registration counter, etc. In case of specific requirement of a hospital, flexibility in altering the area be kept.

7.3. Site information

Physical description of the area which should include bearings, boundaries, topography, surface area, land used in adjoining areas, limitation of the site that would affect planning, maps of vicinity and landmarks or centers, existing utilities, nearest city, port, airport, railway station, major bus stand, rain fall and data on weather and climate. Hospital Management Policy should emphasize on quake proof, fire proof and flood proof buildings. Infrastructure should be eco-friendly and disabled (physically and visually handicapped) friendly. Provision should be made for water harvesting, generating back-up, solar energy / power back-up,

and horticulture services including herbal garden. Local agency Guidelines and By-laws should strictly be followed. A room for horticulture to store garden implements, seeds etc will be made available.

7.4. Factors to be considered in locating a district hospital

- ◆ The location may be near the residential area.
- ◆ Too old building may be demolished and new construction done in its place.
- ◆ It should be free from dangers of flooding; it must not, therefore, be sited at the lowest point of the district.
- ◆ It should be in an area free of pollution of any kind, including air, noise, water and land pollution.
- ◆ It must be serviced by public utilities: water, sewage and storm-water disposal, electricity, gas and telephone. In areas where such utilities are not available, substitutes must be found, such as a deep well for water, generators for electricity and radio communication for telephone.
- ◆ Necessary environmental clearance will be taken.
- ◆ Disability Act will be followed.

7.5. Site selection criteria

A rational, step-by-step process of site selection occurs only in ideal circumstances. In some cases, the availability of a site outweighs other rational reasons for its selection, and planners and architects are confronted with the job of assessing whether a piece of land is suitable for building a hospital. In the case of either site selection or evaluation of adaptability, the following items must be considered: size, topography, drainage, soil conditions, utilities available, natural features and limitations.

7.6. In the already existing structures of a district hospital

- ◆ It should be examined whether they fit into

the design of the recommended structure and if the existing parts can be converted into functional spaces to fit in to the recommended standards.

- ◆ If the existing structures are too old to become part of the new hospital, could they be converted to a motor pool, laundry, store or workshop or for any other use of the district hospital.
- ◆ If they are too old and dilapidated then they must be demolished. And new construction should be put in place.

7.7. Building and Space Requirements

Administrative Block:

Administrative block attached to main hospital along with provision of MS Office and other staff will be provided.

Circulation Areas

Circulation areas like corridors, toilets, lifts, ramps, staircase and other common spaces etc. in the hospital should not be more than 55% of the total floor area of the building.

Floor Height

The room height should not be less than approximately 3.6 m measured at any point from floor to floor height.

Entrance Area

Physical Facilities

Ambulatory Care Area (OPD)

Waiting Spaces

Registration, assistance and enquiry counter facility be made available in all the clinics.

Main entrance, general waiting and subsidiary waiting spaces are required adjacent to each consultation and treatment room in all the clinics.

Clinics

The clinics should include general, medical, surgical, ophthalmic, ENT, dental, obstetric and gynaecology, paediatrics, dermatology

and venereology, psychiatry, neonatology, orthopaedic and social service department. The clinics for infectious and communicable diseases should be located in isolation, preferably, in remote corner, provided with independent access. For National Health Programme, adequate space be made available.

Nursing Services

Various clinics under Ambulatory Care Area require nursing facilities in common which include dressing room, side laboratory, injection room, social service and treatment rooms, etc.

Nursing Station

On an average, one nursing station per ward will be provided. However, it should be ensured that nursing station caters to about 40-45 beds. Out of these half will be for acute and chronic patients.

Diagnostic Services

Imaging

Role of imaging department should be radio-diagnosis and ultrasound along with hire facilities depending on the bed strength. The department should be located at a place which is accessible to both OPD and wards and also to operation theatre department. The size of the room should depend on the type of instrument installed. The room should have a sub-waiting area with toilet facility and a change room facility, if required. Film developing and processing (dark room) shall be provided in the department for loading, unloading, developing and processing of X-ray films. Separate Reporting Room for doctors should be there.

Clinical Laboratory

For quick diagnosis of blood, urine, etc., a small sample collection room facility shall be provided.

Separate Reporting Room for doctors should be there.

Blood Bank

Blood bank shall be in close proximity to pathology department and at an accessible distance to operation theatre department, intensive care units and emergency and accident department.

Blood Bank should follow all existing guidelines and fulfill all requirements as per the various Acts pertaining to setting up of the Blood Bank.

Separate Reporting Room for doctors should be there.

Intermediate Care Area (Inpatient Nursing Units)

General

Nursing care should fall under following categories:

General Wards – Male / Female

Private Wards:

Wards for Specialities

Depending upon the requirement of the hospital and catchment area, appropriate beds may be allowed for private facility. 10% of the total bed strength is recommended as private wards beds.

Location

Location of the ward should be such to ensure quietness and to control number of visitors.

Ward Unit

The basic aim in planning a ward unit should be to minimize the work of the nursing staff and provide basic amenities to the patients within the unit. The distances to be traveled by a nurse from bed areas to treatment room, pantry etc. should be kept to the minimum. Ward unit will include nursing station, doctors' duty room, pantry, isolation

room, treatment room, nursing store along with wards and toilets as per the norms. On an average one nursing station per ward will be provided. It should be ensure that nursing station caters to above 40-45 beds, out of which half will be for acute and chronic patients.

Private ward: Depending upon the requirement of the hospital and catchment area appropriate beds may be allocated for private facilities. However, 10% of the total bed strength is recommended as private wards beds.

Pharmacy (Dispensary)

The pharmacy should be located in an area conveniently accessible from all clinics. The size should be adequate to contain 5 percent of the total clinical visits to the OPD in one session.

Pharmacy should have component of medical store facility for indoor patients and separate pharmacy with accessibility for OPD patients.

Intensive Care Unit and High Dependency Wards

General

In this unit, critically ill patients requiring highly skilled life saving medical aid and nursing care are concentrated. These should include major surgical and medical cases, head injuries, severe haemorrhage, acute coronary occlusion, kidney and respiratory catastrophe, poisoning etc. It should be the ultimate medicare the hospital can provide with highly specialized staff and equipment. The number of patients requiring intensive care may be about 2 to 5 percent total medical and surgical patients in a hospital. The unit shall not have less than 4 beds nor more than 12 beds. Number of beds will be restricted to 5% of the total bed strength. Out of these, they can be equally divided among ICU and High Dependency

Wards. For example, in a 500-bedded hospital, total of 25 beds will be for Critical Care. Out of these, 13 may be ICU beds and 12 will be allocated for High Dependency Wards. Changing room should be provided for.

Location

This unit should be located close to operation theatre department and other essential departments, such as, X-ray and pathology so that the staff and ancillaries could be shared. Easy and convenient access from emergency and accident department is also essential. This unit will also need all the specialized services, such as, piped suction and medical gases, uninterrupted electric supply, heating, ventilation, central air conditioning and efficient life services. A good natural light and pleasant environment would also be of great help to the patients and staff as well.

Number of beds for both the units will be restricted to 5% of the total bed strength. Out of these, they can be equally divided among ICU and High Dependency Wards. For example, in a 500 bedded hospital, total of 25 beds will be for critical care. Out of these 13 may be ICU beds and 12 will be allocated for high dependency wards.

Facilities

Nurses Station

Clean Utility Area

Equipment Room

Critical Care Area (Emergency Services)

It should preferably have a distinct entry independent of OPD main entry so that a very minimum time is lost in giving immediate treatment to casualties arriving in the hospital. There should be an easy ambulance approach with adequate space for free passage of vehicles and covered area for alighting patients.

Therapeutic Services

Operation Theatre

Operation theatre usually have a team of surgeons anesthetists, nurses and sometime pathologist and radiologist operate upon or care for the patients. The location of Operation theatre should be in a quite environment, free from noise and other disturbances, free from contamination and possible cross infection, maximum protection from solar radiation and convenient relationship with surgical ward, intensive care unit, radiology, pathology, blood bank and CSSD. This unit also need constant specialized services, such as, piped suction and medical gases, electric supply, heating, air-conditioning, ventilation and efficient life service, if the theatres are located on upper floors. Zoning should be done to keep the theatres free from micro organisms. There may be four well defined zones of varying degree of cleanliness namely, Protective Zone, Clean Zone, Aseptic or Sterile Zone and Disposal or Dirty Zone. Normally there are three types of traffic flow, namely, patients, staff and supplies. All these should be properly channelized. An Operation Theatre should also have Preparation Room, Pre-operative Room and Post Operative Resting Room. Operating room should be made dust-proof and moisture proof. There should also be a Scrub-up room where operating team washes and scrub-up their hands and arms, put on their sterile gown, gloves and other covers before entering the operation theatre. The theatre should have sink / photo sensors for water facility. Laminar flow of air be maintained in operation theatre. It should have a central air conditioning facility. It should have a single leaf door with self closing device and viewing window to communicate with the operation theatre. A

pair of surgeon's sinks and elbow or knee operated taps are essential. Operation Theatre should also have a Sub-Sterilizing unit attached to the operation theatre limiting its role to operating instruments on an emergency basis only.

Theatre refuse, such as, dirty linen, used instruments and other disposable / non disposable items should be removed to a room after each operation. Non-disposable instruments after initial wash are given back to instrument sterilization and rest of the disposable items are disposed off and destroyed. Dirty linen is sent to laundry through a separate exit. The room should be provided with sink, slop sink, work bench and draining boards.

Delivery Suite Unit

The delivery suit unit be located near to operation theatre.

The delivery Suit Unit should include the facilities of accommodation for various facilities as given below:

- Reception and admission
- Examination and Preparation Room
- Labour Room (clean and a septic room)
- Delivery Room
- Neo-natal Room
- Sterilizing Rooms
- Sterile Store Room
- Scrubbing Room
- Dirty Utility

Physiotherapy

The physiotherapy department provides treatment facilities to patients suffering from crippling diseases and disabilities. The department is more frequently visited by out-patients but should be located at a place which may be at convenient access to both outdoor and indoor patients with privacy. It should also have a physical and electro-therapy rooms, gymnasium, office, store and

toilets separate for male and female. Normative standards will be followed.

Hospital Services

Hospital Kitchen (Dietary Service)

The dietary service of a hospital is an important therapeutic tool. It should easily be accessible from outside along with vehicular accessibility and separate room for dietician and special diet. It should be located such that the noise and cooking odours emanating from the department do not cause any inconvenience to the other departments. At the same time location should involve the shortest possible time in delivering food to the wards.

Central Sterile and Supply Department (CSSD)

As the operation theatre department is the major consumer of this service, it is recommended to locate the department at a position of easy access to operation theatre department. It should have a provision of hot water supply.

Hospital Laundry

It should be provided with necessary facilities for drying, pressing and storage of soiled and cleaned linens.

Medical and General Stores

There are of medical and general store should have vehicular accessibility and ventilation, security and fire fighting arrangements.

Mortuary

It provides facilities for keeping of dead bodies and conducting autopsy. It should be so located that the dead bodies can be transported unnoticed by the general public and patients.

Engineering Services

Electric Engineering

Sub Station and Generation

Electric sub station and standby generator room should be provided.

Illumination

The illumination and lightning in the hospital should be done as per the prescribed standards.

Emergency Lighting

Shadow less light in operation theatre and delivery rooms should be provided. Emergency portable light units should be provided in the wards and departments.

Call Bells

Call bells with switches for all beds should be provided in all types of wards with indicator lights and location indicator situated in the nurses duty room of the wards.

Ventilation

The ventilation in the hospital may be achieved by either natural supply or by mechanical exhaust of air.

Mechanical Engineering

Air-conditioning and Room Heating in operation theatre and neo-natal units should be provided. Air coolers or hot air convectors may be provided for the comfort of patients and staff depending on the local needs.

Hospital should be provided with water coolers and refrigerator in wards and departments depending upon the local needs.

Public Health Engineering

Water Supply

Arrangement should be made for round the clock piped water supply along with an overhead water storage tank with pumping and boosting arrangements. Approximately 10000 litres of potable water per day is required for a 100 bedded hospital.

Separate provision for fire fighting and water softening plants be made available.

Drainage and Sanitation

The construction and maintenance of drainage and sanitation system for waste water, surface water, sub-soil water and sewerage shall be in accordance with the prescribed standards. Prescribed standards and local guidelines shall be followed.

Waste Disposal System

National Guidelines on Bio-Medical Waste Management and a Notification of Environment and Forests are at Annexure - I

Trauma Centre

Guidelines to be followed

Fire Protection

Telephone and Intercom

Medical Gas

Cooking Gas: Liquefied petroleum gas (LPG)

Laboratory Gas: Liquefied petroleum gas (LPG) and other specified gases.

Building Maintenance: Provision for building maintenance staff and an office-cum store will be provided to handle day to day maintenance work

Parking: Sufficient parking place as per the norms will be provided

Administrative Services: Two sections (i) General section to deal with overall upkeep of the hospital and welfare of its staff and patients (ii) Medical Records section.

Committee Room: A meeting or a committee room for conferences, trainings with associated furniture.

Residential Quarters

All the essential medical and para-medical staff will be provided with residential accommodation.

8. MANPOWER REQUIREMENTS

8.1. MAN POWER – DOCTORS

S. No	Staff	District Headquarters Hospital 301-500 Bedded
1	Chief Medical Superintendent	1
2	Medical Specialist	4
3	Surgery Specialists	3
4	O&G specialist	8
5	Psychiatrist	1
6	Dermatologist / Venereologist	2
7	Paediatrician	4
8	Anesthetist (Regular / trained)	8
9	ENT Surgeon	2
10	Ophthalmologist	2
11	Orthopedician	2
12	Radiologist	5
13	Microbiologist	1 Recruited in Integrated Disease Surveillance Programme
14	Pathologist and Blood Bank In-charge	1
15	Casualty Doctors / General Duty Doctors	24 (at least 10 lady doctors of allopathy)
16	Dental Surgeon	1
17	Forensic Specialist	1
18	Public Health Manager ¹	1
19	AYUSH Physician ²	4 (2 specialists and 2 GDMOs)
20	Environmental Officer	1
21	Waste Management Officer	1
	Total	77

¹ May be a Public Health Specialist or Management Specialist trained in public health.

² Provided there is no AYUSH Hospital/dispensary in the District Headquarter.

8.2. MAN POWER – PARA MEDICAL

S. No	Staff	District Headquarters Hospital 301-500 Bedded
1	Staff Nurse	200-250
2	Infection Control Nurse	2
3	Hospital worker (OP/ward +OT+ blood bank)	50
4	Sanitary Worker	30
5	Ophthalmic Assistant / Refractionist	2
6	Social Worker / Counsellor	2
7	Dermatology/STD/Leprosy Technician – Lab	1
8	AIDS/STD Counselor cum field Support	2 Dedicated
9	Cytotechnician	1
10	ECG Technician	1
11	ECHO Technician	1
12	Audiometrician	1
13	Laboratory Technician (Lab + Blood Bank)	6+3
14	Laboratory Attendant (Hospital Worker)	2+1
15	Dietician	2
16	PFT Technician	1
17	Maternity assistant (ANM)	4
18	Radiographer	12
19	Dark Room Assistant	8
20	Pharmacist ¹	10
21	Matron	9
22	Physiotherapist	2
23	Statistical Assistant	1
24	Medical Records Officer / Technician	2
25	Electrician	2
26	Plumber	2

¹ Two from AYUSH.

8.3. MANPOWER- ADMINISTRATIVE STAFF

S. No	Staff	District Headquarters Hospital plus JD-HS office 301-500 Bedded
1	Hospital Superintendent	1
2	Manager (Administration & Procurement)	1
3	Manager (Finance)	1
4	Manager (HR)	1
5	Account Officer	1
6	Accountant	4
7	Assistant cum Computer Operator	6
8	Driver	4
9	Peon	2
10	Security Staff*	2
	Total	23

* The number would vary as per requirement and to be outsourced.

8.4. MAN POWER – OPERATION THEATRE

Sl. No	Category	District Headquarters Hospital 301-500 Bedded			
		Emergency / FW OT	OPHTH / ENT	A&E	Elective
1	Staff Nurse	5	2	1	3
2	OT Assistant	4	2	2	2
3	Sweeper	2	1	1	1
	Total	11	5	4	6

8.5. MAN POWER – BLOOD BANK

S. No	Staff	Blood Bank
1	Blood Bank In-charge (Doctor – Pathologist)	1
2	Staff Nurse	3
3	MNA / FNA	1
4	Blood Bank Technician	1
5	Sweeper	1

9. EQUIPMENT NORMS

Equipment norms are worked out keeping in mind the assured service recommended for various grades of the district hospitals. The equipments required are worked out under the following headings

1. Imaging equipments
2. X Ray Room Accessories
3. Cardiac Equipments
4. Labour ward & Neo Natal Equipments
5. Ear Nose Throat Equipments
6. Eye Equipments
7. Dental Equipments
8. Operation Theatre Equipment
9. Laboratory Equipments
10. Surgical Equipment Sets
11. Physio Therapy Equipments
12. Endoscopy Equipments
13. Anaesthesia Equipments
14. Furniture & Hospital Accessories
15. PM equipments
16. Linen
17. Teaching Equipments
18. Administration
19. Refrigeration & AC
20. Hospital Plants
21. Hospital Fittings & Necessities
22. Transport

I. IMAGING EQUIPMENT

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	500 M.A. X-ray machine*	1
2	300 M.A. X-ray machine	1
3	100 M.A. X-ray machine	1
4	60 M.A. X-ray machine (Mobile)	1
5	C arm with accessories *	1
6	Dental X ray machine	1
7	Ultra Sonogram (Obs & Gyne. department should be having a separate ultra-sound machine of its own)	2 + 1
8	C.T. Scan	1
9	Mammography Unit *	1
10	Echocardiogram*	1

* To be provided as per need.

II. X-RAY ROOM ACCESSORIES

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	X-ray developing tank	3
2	Safe light X-ray dark room	4
3	Cassettes X-ray	20
4	X-ray lobby single	10
5	X-ray lobby Multiple	1
6	Lead Apron	3
7	Intensifying screen X-ray	3

III. CARDIAC EQUIPMENTS

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	ECG machine computerized	1
2	ECG machine ordinary	2
3	12 Channel stress ECG test equipments Tread Mill *	1
4	Cardiac Monitor	6
5	Cardiac Monitor with defibrillator	2
6	Ventilators (Adult)	2
7	Ventilators (Paediatrics)	1
8	Pulse Oximeter	6
9	Pulse Oximeter with NIB.P*	1
10	Infusion pump	2
11	B.P.apparatus table model	20
12	B.P.apparatus stand model	20
13	Stethoscope	30

* To be provided as per need.

IV. LABOUR WARD & NEO NATAL EQUIPMENTS

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Baby Incubators	2
2	Phototherapy Unit	4
3	Emergency Resuscitation Kit-Baby	4
4	Radiant Warmer	5
5	Room Warmer	2
6	Foetal Doppler	2
7	CTG Monitor	3
8	Delivery Kit	20
9	Episiotomy kit	10
10	Forceps Delivery Kit	3
11	Crainotomy	1
12	Vacuum extractor metal	2
13	Silastic vacuum extractor	3
14	Pulse Oximeter baby & adult	2 each
15	Cardiac monitor baby &	2 each
16	Nebulizer baby	2
17	Weighing machine adult	4
18	Weighing machine infant	4
19	CPAP Machine	1
20	Head box for oxygen	8

V. EAR NOSE THROAT EQUIPMENT

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Audiometer	2
2	Operating Microscope (ENT)	2
3	Head light (ordinary) (Boyle Davis)	3
4	ENT Operation set including headlight, Tonsils	2
5	Mastoid Set	2
6	Micro Ear Set myringoplasty	2
7	Stapedotomy Set	1
8	ENT Nasal Set (SMR, Septoplasty, Nasal Endoscopic Set (0° & 30°) Polypetomy, DNS, Rhinoplasty)	2
9	Laryngoscope fibreoptic ENT	1
10	Laryngoscope direct	2
11	Otoscope	4
12	Oesophagoscope Adult	1
13	Oesophagoscope Child	1
14	Head Light (cold light)	2
15	Tracheostomy Set	2
16	Tuning fork	4
17	Bronchoscope Adult & Child	2
18	Examination instruments set (speculums, tongue depressors, mirrors, Bull's lamp)	4

VI. EYE EQUIPMENTS

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Cryo Surgery Unit	2 dedicated to dermatology OPD
2	Ophthalmoscope - Direct	3
3	Slit Lamp	2
4	Retino scope	1
5	Perimeter	2
6	IOL Operation set	3
7	Laser Photocoagulometer*	1

* - to be supplied by Blindness Control Society

VII. DENTAL EQUIPMENTS

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Air Rotor	1
2	Dental Unit with motor for dental OP	1
3	Dental Chair	1
4	Dental Lab	
5	Dental Kit	4

VIII. OPERATION THEATRE EQUIPMENT

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Auto Clave HP Horizontal	1
2	Auto Clave HP Vertical (2 bin)	4
3	Operation Table Ordinary Paediatric*	
4	Operation Table Hydraulic Major	4
5	Operation table Hydraulic Minor	4
6	Operating table non-hydraulic field type	2
7	Operating table Orthopedic *	1
8	Autoclave with Burners 2 bin*	
9	Autoclave vertical single bin	3
10	Shadowless lamp ceiling type major*	3
11	Shadowless lamp ceiling type minor*	2
12	Shadowless Lamp stand model	3
13	Focus lamp Ordinary	4
14	Sterilizer big (Instrument)	4
15	Sterilizer Medium (Instrument) -	6
16	Steriliser Small (Instruments)	6
17	Bowl Steriliser - big*	4
18	Bowl steriliser - Medium*	1
19	Diathermy Machine (Electric Cautery)	2
20	Suction Apparatus - Electrical	6
21	Suction Apparatus - Foot operated	5
22	Dehumidifier*	1
23	Dosimetered Narrow band UV-B lamp - machine for urb photo therapy	
24	Ultra violet lamp philips model 4 feet	8
25	Ethylene Oxide sterilizer*	1
26	Microwave sterilizer*	1
27	Intense Pulse Light Machine	1

* To be provided as per need.

IX. LABORATORY EQUIPMENTS

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Binocular Microscope	10
2	Chemical Balances	2
3	Simple balances	2
4	Electric Colorimeter	2
5	Auto analyser *	1
6	Semi auto analyser	1
7	Micro pipettes of different volume range	10
8	Water bath	2
9	Hot Air oven*	2
10	Lab Incubator*	3
11	Distilled water plant	2
12	Electri centrifuge table top	3
13	Cell Counter Electronic*	1
14	Hot plates	6
15	Rotor / Shaker	2
16	Counting chamber	4
17	PH meter	3
18	Paediatric Glucometer / Bilirubinometer*	1
19	Glucometer	2
20	Haemoglobinometer	3
21	TCDC count apparatus	2
22	ESR stand with tubes	6
23	Test tube stands *	10 – 20
24	Test tube rack *	10 – 20
25	Test tube holders*	10 - 20
26	Spirit lamps*	10
27	Microtome*	1
28	Oven (Wax embedding)*	1
29	Tissue processor*	1
30	Timer stop watch	2
31	Alarm clock	2
32	Elisa Reader cum washer	2
33	Blood gas analyser*	1
34	Blood Component Separator	1
35	Biosafety Cabinet	1

36	Refrigerators	4
37	Platelet Agetator	1
38	Platelet Thawing Machine	1
39	Laboratory Autoclaves	4
40	Laminar Flow	1

* To be provided as per need.

X: SURGICAL EQUIPMENT SETS

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	P.S.set	2
2	MTP Set	5
3	Biopsy Cervical Set*	2
4	D & C Set	5
5	I.U.C.D. Kit	2
6	LSCS set	5
7	MVA Kit	3
8	Vaginal Hysterectomy	2
9	Proctoscopy Set*	3
10	P.V. Tray*	3
11	Abdominal Hysterectomy set	2
12	Laparotomy Set	5
13	Formaline dispenser	5
14	Kick Bucket	15
15	General Surgical Instrument Set Piles, Fistula, Fissure*	2
16	Knee hammer	5
17	Hernia, Hydrocele*	2
18	Varicosevein etc*	2
19	Gynaec Electric Cautery	1
20	Vaginal Examination set*	20
21	Suturing Set*	10
22	MTP suction apparatus	2
23	Thoracotomy set	1
24	Neuro Surgery Craniotomy Set	1

25	I M Nailing Kit	2
26	SP Nailing	2
27	Compression Plating Kit*	2
28	AM Prosthesis*	1
29	Dislocation Hip Screw Fixation*	1
30	Fixation Fracture Hip	1
31	Spinal Column Back Operation Set	1
32	Thomas Splint	10
33	Paediatric Surgery Set	2
34	Mini Surgery Set*	2
35	Urology Kit	2
36	Surgical Package for Cholecystectomy*	1
37	Surgical package for Thyroid	1
38	GI Operation Set*	4
39	Appendicectomy set *	2
40	L.P.Tray*	7
41	Urethral Dilator Set	6
42	TURP resectoscope *	1
43	Haemodialysis Machine *	2
44	Amputation set	2
45	Universal Bone Drill	2
46	Crammer wire splints	12
47	Heamo dialysis machine	2
48	Skin Priopsy Sets	5

* To be provided as per need.

XI. PHYSIOTHERAPY EQUIPMENTS

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Skeleton traction set	3
2	Interferential therapy unit	2
3	Short Wave Diathermy	1

XII. ENDOSCOPY EQUIPMENTS

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Endoscope fibre Optic (OGD) *	1
2	Arthroscope	1
3	Laparoscope operating major with accessories *	1
4	Laparoscope diagnostic and for sterilisation *	2
5	Colonoscope and sigmoidoscope*	1
6	Hysteroscope *	1
7	Colposcope *	1

* - to be provided as per need

XIII. ANAESTHESIA EQUIPMENTS

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Anaesthetic - laryngoscope magills with four blades	8
2	Endo tracheal tubes sets	3
3	Magills forceps (two sizes)	10
4	Connector set of six for E.T.T	10
5	Tubes connecting for ETT	10
6	Air way female*	10
7	Air way male*	20
8	Mouth prop*	10
9	Tongue depressors*	15
10	O2 cylinder for Boyles	16
11	N2O Cylinder for Boyles	16
12	CO2 cylinder for laparoscope*	10
13	PFT machine	1
14	Boyles Apparatus with Fluotec and circle absorber	2
15	Exchange Transfusion Sets*	

* - to be provided as per need



XIV. FURNITURE & HOSPITAL ACCESSORIES

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Doctor's chair for OP Ward, Blood Bank, Lab etc.	60
2	Doctor's Table	40
3	Duty Table for Nurses	20
4	Table for Sterilisation use (medium)	20
5	Long Benches(6 1/2' x 1 1/2')	50
6	Stool Wooden	50
7	Stools Revolving	20
8	Steel Cup-board	40
9	Wooden Cup Board	20
10	Racks -Steel – Wooden	15
11	Patients Waiting Chairs (Moulded) *	50
12	Attendants Cots *	20
13	Office Chairs	15
14	Office Table	15
15	Foot Stools *	40
16	Filing Cabinets (for records) *	12
17	M.R.D.Requirements (record room use) *	1
18	Paediatric cots with railings	10
19	Cradle*	7
20	Fowler's cot	3
21	Ortho Fracture Table*	1
22	Hospital Cots (ISI Model)	480
23	Hospital Cots Paediatric (ISI Model)	40
24	Wooden Blocks (Set)*	7
25	Back rest*	10
26	Dressing Trolley (SS)	10
27	Medicine Almairah	5
28	Bin racks (wooden or steel)*	15
29	ICCU Cots	8
30	Bed Side Screen (SS-Godrej Model)^	As per requirement
31	Medicine Trolley(SS)	10
32	Case Sheet Holders with clip(S.S.)*	150

33	Bed Side Lockers (SS)*	0
34	Examination Couch (SS)	7
35	Instrument Trolley (SS)	15
36	Instrument Trolley Mayos (SS)	8
37	Surgical Bin Assorted	50
38	Wheel Chair (SS)	15
39	Stretcher / Patience Trolley (SS)	15
40	Instrument Tray (SS) Assorted	75
41	Kidney Tray (SS) - Assorted	75
42	Basin Assorted (SS)	75
43	Basin Stand Assorted (SS) (2 basin type) (1 basin type)	15 20
44	Delivery Table (SS Full)	12
45	Blood Donar Table*	2
46	O2 Cylinder Trolley(SS)	15
47	Saline Stand (SS)	60
48	Waste Bucket (SS)*	100
49	Dispensing Table Wooden	2
50	Bed Pan (SS)*	50
51	Urinal Male and Female	50
52	Name Board for cubicals*	1
53	Kitchen Utensils*	
54	Containers for kitchen*	
55	Plate, Tumblers*	
56	Waste Disposal - Bin / drums	20
57	Waste Disposal - Trolley (SS)	3
58	Linen Almirah	5
59	Stores Almirah	5
60	Arm Board Adult*	20
61	Arm Board Child*	20
62	SS Bucket with Lid	15
63	Bucket Plastic*	20
64	Ambu bags	10
65	O2 Cylinder with spanner ward type	50
66	Diet trolley - stainless steel	2

67	Needle cutter and melter	25
68	Thermometer clinical *	40
69	Thermometer Rectal*	5
70	Torch light*	12
71	Cheatles forceps assorted*	15
72	Stomach wash equipment*	6
73	Infra Red lamp*	7
74	Wax bath*	2
75	Emergency Resuscitation Kit-Adult*	2
76	Enema Set*	10

* - to be provided as per need

^ - At least one screen per five beds except female wards

XV. POST MORTEM EQUIPMENTS

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Mortuary table (Stainless steel) *	2
2	P.M.equipments (list)	6
3	Weighing machines (Organs)	2
4	Measuring glasses(liquids)	4
5	Aprons*	10
6	PM gloves (Pairs)*	20
7	Rubber sheets*	
8	Lens	2
9	Spot lights	4

* - to be provided as per need

XVI. LINEN

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Bedsheets	2000
2	Bedspreads	3000
3	Blankets Red and blue	125
4	Patna towels	1500
5	Table cloth	100
6	Draw sheet	200
7	Doctor's overcoat	150
8	Hospital worker OT coat	500
9	Patients house coat (for female)	1500
10	Patients Pyjama (for male) Shirt	600
11	Over shoes pairs	150
12	Pillows	600
13	Pillows covers	1500
14	Mattress (foam) Adult	500
15	Paediatric Mattress	55
16	Abdominal sheets for OT	250
17	Pereneal sheets for OT	250
18	Leggings	200
19	Curtain cloth windows and doors	
20	Uniform / Apron	
21	Mortuary sheet	100
22	Mats (Nylon)	300
23	Mackintosh sheet (in meters)	500
24	Apron for cook	

XVII. TEACHING EQUIPMENT

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Furniture for class room, committee/meeting room	As per requirement
2	O.H.P	1
3	Screen	1
4	White / colour boards	2
5	Television colour	2
6	Tape Recorder* (2 in 1)	1
7	VCD Player	1
8	Radio	1
9	LCD Projectors	1
10	Computer	1

* - to be provided as per need

XVIII. ADMINISTRATION

Sl. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Computer with Modem with UPS, Printer with Internet Connection**	6
2	Xerox Machine	1
3	Typewriter (Electronic)*	1
4	Intercom (15 lines)*	
5	Intercom (40 lines)*	1
6	Fax Machine	1
7	Telephone	2
8	Paging System*	
9	Public Address System*	1
10	Library facility*	

* - to be provided as per need

** At least one for Medical Records and one for IDSP

XIX. REFRIGERATION & AC

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Refrigerator 165 litres	5
2	Blood Bank Refrigerator	2
3	ILR	2
4	Deep Freezer	2
5	Coolers*	As per requirement
6	Air conditioners	16
7	Central A/C for OT	1

* One cooler per 8 beds in the wards.

XX. HOSPITAL PLANTS

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Generator 40 / 50 KV	
2	Generator 75 KV	
3	Generator 125 KV	1
4	Portable, 2.5 KV	2
5	Solar Water heater *	
6	Incinerator*	
7	Central supply of O ₂ , N ₂ O, Vacuum *	
8	Cold storage for mortuary *	

* - to be provided as per need

XXI. HOSPITAL FITTINGS & NECESSITIES

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Ceiling Fans*	120
2	Exhaust Fan*	24
3	Pedestal Fan*	4
4	Wall Fan*	6
5	Hotwater geiser*	3
6	Fire extinguishers*	
7	Sewing Machine*	2
8	Lawn Mover*	2
9	Vaccum cleaner*	4
10	Aqua guard*	
11	Solar water heater *	
12	Neon sign for hospital*	
13	Garden equipment*	
14	Borewell motor OHT *	
15	Water dispenser / Water cooler*	
16	Laundry (steam) *	
17	Emergency lamp	
18	Emergency trauma set*	3
19	Tube lights*	200
20	Drinking Water Fountain*	5

* To be provided as per need

XXII. TRANSPORT

S. No.	Name of the Equipment	District Headquarters Hospital 301-500 Bedded
1	Ambulance	4
2	Van (Family Welfare)*	
3	Pickup vehicles Maruti (Omni) / RTV	
4	Mortuary Van*	1
5	Administrative vehicle (Car)*	
6	Minidor 3 wheeler / Tates ace*	
7	Bicycle*	
8	Camp Bus*	
9	Progamme vehicle*	
10	Motorcycle*	

* To be provided as per need

XXIII. RADIOTHERAPY

1. Brachytherapy System.
2. Rotational Cobalt Machine
3. Radiotherapy Simulator
4. Energy Linear Accelerator
5. Treatment Planning System
6. High Energy Linear Accelerator
7. Copy of Specification for Major Equipment
8. Copy of Specification for Major Equipment 1
9. High Dose Linear Accelerator 1
10. Linear Accelerator

10. **LABORATORY SERVICES AT DISTRICT HOSPITAL:** Following services will be ensured, for advanced diagnostic tests, a list of National Reference Laboratories has been provided as annexure:

Sl. No.	Speciality	Diagnostic Services / Tests
I.	CLINICAL PATHOLOGY	
	a. Haematology	Haemoglobin estimation
		Total Leucocyte count
		Differential Leucocyte count
		Absolute Eosinophil count
		Reticulocyte count
		Total RBC count
		E.S.R.
	- Immunoglobulin Profile (IGM, IGG, IGE, IGA)	Bleeding time
	- Filoram Degradation Product	Clotting time
		Prothrombin time
		Peripheral Blood Smear
		Malaria/Filaria Parasite
		Platelet count
		Packed Cell volume
		Blood grouping
		Rh typing
		Blood Cross matching
		ELISA for HIV, HCV, HBs Ag
		APTT
		ANA/ANF, Rheumatoid Factor
	b. Urine Analysis	Urine for Albumin, Sugar, Deposits, bile salts, bile pigments, acetone, specific gravity, Reaction (pH)
	c. Stool Analysis	Stool for Ovacyst (Eh)
		Hanging drop for V.Cholera
		Occult blood
		Bacterial culture and sensitivity
	d. Semen Analysis	Morphology, count
	e. CSF Analysis	Analysis, Cell count etc
	f. Aspirated fluids	Cell count cytology

II.	PATHOLOGY	
	a. PAP smear	Cytology
	b. Sputum	Sputum cytology
	c. Haematology	Bone Marrow Aspiration
		Immuno haematology
		Coagulation disorders
		Sickle cell anaemia
		Thalassemia
	d. Histopathology	All types of specimens, Biopsies

S. No.	Speciality	Diagnostic Services / Tests
III.	MICROBIOLOGY	
		KOH study for fungus
		Smear for AFB, KLB (Diphtheria)
		Culture and sensitivity for blood, sputum, pus, urine etc.
		Bacteriological analysis of water by H ₂ S based test
		Stool culture for Vibrio Cholera and other bacterial enteropathogens
		Supply of different media* for peripheral Laboratories
		Grams Stain for Throat swab, sputum etc.
IV.	SEROLOGY	RPR Card test for syphilis
		Pregnancy test (Urine gravindex)
		Lepto spirosis, Brucellosis
		WIDAL test
		Elisa test for HIV, HBsAg, HCV
		RA factor
V	Blood Bank	
		Services as per norms for the blood bank including services for self component separation

* Specimen collection and transport media only.

Sl. No.	Speciality	Diagnostic Services / Tests
VI.	BIOCHEMISTRY	Blood Sugar
		Glucose Tolerance Test
		Glycosylated Hemoglobin
		Blood urea, blood cholesterol
		Serum bilirubin
		Icteric index
		Liver function tests
		Kidney function tests
		Lipid Profile
		Blood uric acid
		Serum calcium
		Serum Phosphorous
		Serum Magnesium
		CSF for protein, sugar
		Blood gas analysis
		Estimation of residual chlorine in water
		Thyroid T3 T4 TSH
		CPK
		Iodometry Titration
VII.	CARDIAC INVESTIGATIONS	a) ECG
		b) Stress tests
		c) ECHO
VIII.	OPHTHALMOLOGY	a) Refraction by using Snellen's chart
		b) Retinoscopy
		c) Ophthalmoscopy
IX.	ENT	Audiometry
		Endoscopy for ENT
X.	RADIOLOGY	a) X-ray for Chest, Skull, Spine, Abdomen, bones
		b) Barium swallow, Barium meal, Barium enema, IVP
		c) MMR (chest)
		d) HSG
		e) Dental X-ray
		f) Ultrasonography
		g) CT scan
		h) MRI 0.5 TESSLA

Sl. No.	Speciality	Diagnostic Services / Tests
XI.	ENDOSCOPY	Oesophagus
		Stomach
		Colonoscopy
		Bronchoscopy
		Arthroscopy
		Laparoscopy (Diagnostic)
		Colposcopy
		Hysteroscopy
XII.	PHYSIOLOGY	Pulmonary function tests

11. RECOMMENDED ALLOCATION OF BED STRENGTH AT VARIOUS LEVELS

RECOMMENDED ALLOCATION OF BED STRENGTH

S. No	Item	Type	District Headquarters Hospital @ 500 Bedded
1	General Medicine	Beds (M+F)	40+40
2	New born ward	Beds	10
3	Mothers room with dining and toilets	Beds	10
4	Paediatrics ward	Beds	40
5	Critical care ward – IMCU	Beds	10
6	Isolation Ward	Beds	5
7	Dialysis unit (as per specifications)	Beds	3
8	Thoracic medicine ward with room for pulmonary function test	Beds (M+F)	10+10
9	Blood bank		Yes
10	General surgery ward (incl. Urology, ENT)	Beds (M+F)	35+35
11	Post – Operative Ward	Beds (M+F)	15+15
12	Accident and Trauma ward	Beds	15
13	Labour room	Boards	8
14	Labour room (Eclampsia)	Beds	3
15	Septic Labour room	Boards	2
16	Ante-natal ward	Beds	30

17	Post-natal ward	Beds	30
18	Postpartum ward	Beds	50
19	Post operative ward	Beds	40
20	Ophthalmology ward	Beds	20
21	Burns Ward	Beds	10

* including ophthalmic ward. \$ including post – caesarean patients # including paediatric beds

@ 10% Paying Wards

REQUIREMENTS FOR OPERATION THEATRE:

S. No	Item	District Headquarters Hospital 301-500 bedded
1	Elective OT-Major	1
2	Emergency OT/FW OT	1
3	Ophthalmology /ENT OT	1

12. LIST OF MEDICINES / INSTRUMENTS / EQUIPMENTS /LAB REAGENTS / OTHER CONSUMABLES AND DISPOSABLES FOR DISTRICT HOSPITALS

Sr. No	Name of the item
A)	Analgesics/Antipyretics/Anti Inflammatory
1	Tab. Aspirin 300mg
2	Tab. Paracetamol 500mg
3	Inj. Diclofenac sodium
4	Tab.Diclofenac sod
5	Tab. Dolonex DT 20mg
6	Tab. Ibuprofen
B)	Chemotherapeutics
7	Inj.Crystalline penicillin 5 lac unit
8	Inj.Fortified procaine pen 4 lac
9	Inj.Ampicillin 500mg
10	Inj.Gentamycin 40mg/2ml vial
11	Inj.crystalline penicillin 10 lac unit
12	Cap.Ampicillin 250mg
13	Cap.Tetracycline 250mg
14	Tab.Trimethoprim+Sulphamethazol ss

15	Tab.Ciprofloxacin 250mg
16	Tab.Ciprofloxacin 500mg
17	Inj.Ciprofloxacin 100ml
18	Tab. Roxithromycin 50 mg & 150 mg
19	Tab.Erythromycin 500mg
20	Syrup Cotrimoxazole 50ml
21	Syrup Ampicillin 125mg/5ml 60ml
22	Inj. Cefoperazone 1Gm
23	Inj. cefotaxime 500mg
24	Tab. Norfloxacin 200mg
25	Tab. Norfloxacin 400mg
26	Tab. Ofloxacin 200mg
27	Inj. Vionocef(Ceffixime)250mg
28	Inj. Amikacin sulphate 500mg
29	Inj. Amikacin sulphate 100mg
30	Tab. Cefadroxyl 250mg
31	Cap. Amoxycillin 500mg & 250 mg
32	Tab. Acyclovir 200 mg / 400 mg
33	Syrup Anthromycin
34	Inj. Amoxycillin 500mg
C)	Anti Diarrhoeal
35	Tab.Metronidazole 200mg
36	Tab.Metronidazole 400mg
37	Syrup.Metronidazole
38	Tab.Furazolidone 100mg
39	Tab.Diolaxanide Fuzate
40	Inj. Ceftinaxone
41	Tab. Azilthomycin
42	Tab Thconazole 150 mg
43	Tab Chloroquinne / Hydry Chloriquinne
44	Tab.Tinidazole 300mg
D)	Dressing Material/Antiseptic lotion
45	Povidone Iodine solution 500ml
46	Phenyl 5ltr jar(Black Phenyl)
47	Benzalkonium chloride 500ml bottle

48	Rolled Bandage a) 6cm
	b)10cm
	c)15cm
49	Bandage cloth(100cmx20mm) in Than
50	Surgical Guaze(50cmx18m) in Than
51	Adhesive plaster 7.5cm x 5mtr
52	Absorbent cotton I.P 500gm Net
53	P.O.P Bandage a) 10cm
	b)15cm
54	Framycetin skin oint 100 G tube
55	Silver Sulphadiazene Oint 500gm jar
56	Antiseptic lotion containing :
	a)Dichlorometxylenol 100ml bot
	b)Haffkinol 5litre jar
57	Sterilium lotion
58	Bacilloid lotion
E)	Infusion fluids
59	Inj.dextrose 5% 500ml
60	Inj.Dextrose 10% 500ml bottle
61	Inj.Dextrose in Normal saline 500ml bt
62	Inj.Normal saline (Sod chloride) 500ml
63	Inj.Ringer lactate 500ml
64	Inj.Mannitol 20% 300ml
65	Inj.Water for 5ml amp
66	Inj. Water for 10ml amp
67	Inj. Dextrose 25%100ml bot
68	I.V. Metronidazole 100ml
69	Inj. Plasma Substitute 500ml bot
70	Inj. Lomodex
F)	Other Drugs & Material
71	All Glass Syringes 2ml
	5ml
	10ml
	20ml
72	Hypodermic Needle (Pkt of 10 needle)
	a) No.19

	b) No.20
	c) No.21
	d) No.22
	e) No.23
	f) No.24
	g) No.25
	h) No.26
73	Scalp vein sets no a) 19
	b) 20
	c) 21
	d) 22
	e) 23
	f) 24
	g) 25
	h) 26
74	Gelco all numbers
75	Tab.B.Complex NFI Therapeutic
76	Tab.Polyvitamin NFI Therapeutic
77	Inj.Dexamethasone 2mg/ml vial
78	Inj.Vitamin B Complex 10ml
79	Inj.B12 Folic acid
80	Surgical Gloves a) 6 "
	b) 6.1/2"
	c) 7"
	d) 7.5"
81	Catgut Chromic a) 1 No.
	b) 2 No.
	c) 1-0 No
	d) 2-0 NO
	e) 8-0
82	Vicryl No.1
83	Sutupak 1,1/0,2,2/0, 3/0
84	Prolene, 3/0, 4/0
85	X Ray film 50 film packet(in Pkt) size
	a) 6.1/2x8.1/2"
	b) 8"x10"

	c) 10"x12'
	d) 12"x15"
86	Fixer
87	Developer
88	CT Scan film
89	Ultrasound scan film
90	Dental film
91	Oral Rehydration powder 27.5g
92	Ether Anaesthetic 500ml
93	IV Sets
94	Catheters
95	Urine Bags
96	Venflous
97	Halothane
G)	Eye Drops
98	Sulphacetamide eye drops 10% 5ml
99	Framycetin with steroid eye drops 5ml
100	Framycetin eye drops 5ml
101	Ciprofloxacin eye drops
102	Gentamycin eye drops
H)	Other Material
103	Rubber Mackintosh Sheet in mtr
104	Sterile Infusion sets(Plastic)
105	Antisera I) A 5ml
	II)B 5ml
	III)D 5ml
	IV)AB 5ml
106	Inj.MethylErgometrine 0.2mg/amp
107	Inj.Streptokinase 7.5lac vial
108	Inj.Streptokinase 15lac vial
109	Inj.PAM
110	Tab.Antacid
111	ARS
112	Syp.Antacid
113	Inj.Rabipur
114	Inj.Ranitidine 2ML

115	Tab.Ranitidine
116	Tab.Omeprazole
117	Cough syrup 5litre Jar
118	Cough syrup with Noscapine 100ml
119	Coir Mattress
120	Inj.Lignocaine 1%
121	Inj.lignocaine 2%
122	Inj.Lignocaine 5%
123	Inj.Maraine
124	Inj.Diazepam
125	Inj. Benzathene Penicilline for Syphilis
126	Inj.Salbactum+Cefoperazone 2Gm
127	Inj.Amoxycillin with clavulanate acid 600mg
128	Cap.Amoxycillin250+cloxacillin 250
129	Inj.Cefuroxime 250/750
130	Tab.Pefloxacin 400mg
131	Tab.Gatifloxacin 400mg
132	Tab.Valdecoxib 20mg
133	Tab.Atrovastatin 10mg
134	Sy.Himalt-X
135	Sy.Protein(Provita)
I)	Antibiotics and Chemotherapeutics
1	Tab.Chloroquine phosphate 250mg
2	Inj.Chloroquine phosphate
3	Inj.Quinine
4	Tab.Erythromycine Estearate 250mg
5	Syp.Erythromycine
6	Tab.Phenoxyethyl Penicillin125mg
7	Cap.Rifampicin
8	Tab.Isoniazid 100mg
9	Tab.Ethambutol 400mg
10	Cap.Neomycin
11	Inj.Benzathine penicillin 12lac
J)	Antihistaminics/anti-allergic
12	Inj.Pheniramine maleate
13	Tab. Diphenhydramine (eqv.Benadryl)

14	Tab. Desloratedine
15	Tab. Levocentirime 5 mg.
16	Tab.Chlorpheniramine maleate 4mg
17	Tab.Diethylcarbamazin
K)	Drugs acting on Digestive system
18	Tab.Cyclopam
19	Inj.Cyclopam
20	Tab.Bisacodyl
21	Tab.Perinorm
22	Inj.Perinorm
23	Syrup. Furazolidone
24	Inj.Prochlorperazine(Stemetil)
25	Tab. Albendazole 400 mg.
26	Tab.Mebendazole 100mg
27	Syp.Mebendazole
28	Tab. Ivermedine 6 mg
29	Sy.Pyrantel Pamoate
30	Tab.Belladona
L)	Drugs related to Hoemopoetic system
31	Tab.Ferrous sulphate200mg
32	Inj.Iron Dextran/Iron sorbitol
M)	Eye ointment
33	Chloramphenicol eye ointment & applicaps
34	Chloramphenicol + Dexamethsone ointment
35	Gentamycin eye/ear drops
36	Dexamethasone eye drops
37	Drosyn eye drops
38	Atropine eye ointment
N)	Drugs acting on Cardiac vascular system
39	Inj.adrenaline
40	Inj.atropine sulphate
41	Inj.Digoxine
42	Tab.Digoxine
43	Inj.Mephentine
44	Tab.Atenolol
45	Tab.Isoxuprine

46	Inj.Duvadilan
47	Tab.Methyldopa
48	Tab.Isosorbide Dinitrate(Sorbitrate)
49	Tab.Propranolol
50	Tab.Verapamil(Isoptin)
51	tab.Enalapril2.5/5mg
O)	Drugs acting on Central/peripheral Nervous system
52	Inj.Pentazocine (Fortwin)
53	Inj.Pavlon 2ml amp
54	Inj.Chlorpromazine 25mg(like Largactil)
55	Inj.Promethazine Hcl Phenergan
56	inj.Pethidine
57	Inj.Diazepam 5mg
58	Tab.Haloperidol
59	Inj.Haloperidol
60	Tab.Diazepam 5mg
61	Tab.Phenobarbitone 30mg
62	Tab.Phenobarbitone 60mg
63	Tab.Largactil 25mg
64	Tab.Pacitane
65	Tab.Surmontil
66	Syrup.Phenergan
67	Syrup Paracetamol
68	Ethyl chloride spray
69	Lignocaine oint / Gel 2 %
70	Gentamycin eye/ear drops
71	Betnesol-N/Eforlin Nasal drops
P)	Drugs acting on Respiratory system
72	Inj.Aminophylline
73	Tab.Aminophylline
74	Inj.Deriphylline
75	Tab.Deriphylline
76	Tab.Salbutamol 2mg
77	Syrup Tedral
78	Syrup.Salbutamol

Q)	Antiseptic Ointment
79	Betadine, Chlorhexidime
80	Framycetin skin oint
R)	Drugs acting on UroGenital system
81	Tab.Frusemide 40mg
82	Inj.KCL
83	Liquid KCL
84	Tab.Pyridicil
85	Inj.Frusemide
S)	Drugs acting on Uterus and Female Genital Tracts
86	Inj.Pitocin
87	Inj.Prostodin
88	Inj. Mesoprostol
89	Tab. Duvadilan
90	Inj. Duvadilan
91	Tab.Methyl Ergometrine
92	Inj Methyl Eosomel
93	Tab.Primolut-N
94	Inj. Magnesium Sulphate
95	Haymycin vaginal tab
96	Inj Dilantin Sodium
97	Inj.Ethacredin lact(Emcredyl)
T)	Hormonal Preparation
98	Inj.Insulin Rapid
99	Insulin lente Besal
100	Tab Thyroxme
101	Inj.Cry Insulin
102	Inj.Mixtard
103	Inj.Testosterone plain 25mg
104	Testosterone Depot 50mg
105	Tab.Biguanide
106	Tab.Chlorpropamide 100mg
107	Tab.Prednisolone 5mg / 20 mg
108	Tab.Tolbutamide 500mg
109	Tab.Glibenclamide
110	Tab.Betamethasone 0.5 mg

U)	Vitamins
111	Inj.Vit "A"
112	Inj.Cholcalciferol16lac
113	Inj.Ascorbic acid
114	Inj.Pyridoxin 50mg
115	Inj.Vit K
116	Tab.Vit "A" & "D"
117	Tab.Ascorbic acid 100mg / 250 mg
V)	Other drugs
118	Inj.Antirabies vaccine
119	Inj.Antisnake venom
120	Inj.AntiDiphtheria Serum
121	Inj.Cyclophosphamide
122	Inj.Sodabcarb
123	Inj.Calcium Gluconate
124	Tab.Calcium lactate
125	Tr.Iodine
126	Tr.Benzoin
127	Glcial acetic caid
128	Benedict solution
129	Caster oil
130	Liquid paraffin
131	Glycerine
132	Glycerine Suppositories
133	Turpentine oil
134	Potassium Permangnate
135	Formaldehyde
136	Dextrose Powder
137	Methylated spirit
138	Cotrimazole lotion
139	Tab.Theophylline
140	ECG Roll
141	Calamme Lotion BPC
142	Coat Tan / Salicyhic Acid Ointment
143	Salicyte Acid Ointment
144	Berzoyl Peroxide Gel 2.5/5%

145	Retmoic Acid 0.025% Cream / Gel
146	Burnilo Oint
147	Flemigel APC Ointment
148	Syp.Himobin
149	APDYL Cough &Noscopin
150	Tab. Septilin
151	Tab. Cystone
152	Tab. Gasex
153	Syp. Mentat
154	Oint. Pilex
155	Rumalaya Gel
156	Pinku Pedratic Cough Syp.
(W)	Others
1	Tab.Liv52
2	Syrup Liv52
3	Cap.Doxycycline 100mg
4	Inj.Heparin sod.1000IU
5	Tab.Dipyridamol
6	Tab. Clofridogel
7	Inj.Dopamine
8	Tab.Glyceryl Trinitrate
9	Tab.Amitryptilline
10	Tab.trifluoperazine(1mg)
11	Tab.Nitrofurantine
12	Inj.Valethemide Bromide(Epidosyn)
13	Inj.Isolyte-M
14	Inj.Isolyte-P
15	Inj.Isolyte-G
16	Cap.Cephalexin 250mg
17	Tab.Taxim
18	Inj.Metaclopramide
19	Tab.Folic acid
20	Inj.Lignocaine Hcl 2%
21	Inj.Nor adrenaline
22	Betadine lotion
23	Tab.stilboesteral

24	Inj.Pyridoxine
25	Hydrogen peroxide
26	Inj.magnesium sulphate
27	Inj. Triaminolone Acetonide 40 mg/ml 1 ml Ampuok
28	Tab Pentoxifylhine 40 mg
29	Inj.Tetglobe
30	Inj.Paracetamol
31	Pilocarpine eye drops 1%
32	Sy.Orciprenaline
33	Suturing needles (RB,Cutting)
34	Inj.Calcium pantothenate
35	Inj.Xylocaine 4% 30 ml
36	Halothane
37	Mixture Alkaline
38	Inj. Phenobarbitone 200mg
39	Inj. B12 (Cynacobalamine)
40	Neosporin, Nebasuef , Soframycin Powder
41	Magnesium Sulphate Powder
42	Nadiflexam Cream
43	Xylocaine jelly
44	Formaldehyde Lotion
45	Cetrimide 100ml bott 3.5%, 1.5% 1
46	Bacitrim powder 10mg botts
47	Bleaching Powder 5 Kg Pkts(ISI Mark)
48	Ether Solvent
49	Sodium Hypochloride Sod. 5 ltrs/1 ltrs
50	Inj. Diphtheria antitoxin ADS)10000I.U
51	Inj. Gas gangrene Antitoxin(AGGS)10000
52	Inj. Hydroxy Progesterone500mg/2ml
53	Inj. Methyl Prednisolon 500mg vial
54	Inj.Multivitamin I.V
55	Inj.Potassium chloride
56	Inj.Quinine Dihydrochloride
57	Tetanus Antitoxin 10000 I.U
58	Inj.Tetanus Toxoid 5ml vial
59	Inj.Theophylline Etophylline

60	Inj.Vitamin A
61	Tab.Ferrous sulphate 200mg+Folic acid
62	Tab.Ferrous sulphate 300mg
63	Tab.Griseofulvin 250mg/scored (ultramminomind)
64	Tab.Phenobarbitone 30mg
65	Tab.Phenobarbitone 60mg
66	Tab.Pyridoxin 10mg
67	Tab.Thyroxine sod 0.1mg
68	Warfarin sod 5mg
69	Tab.Alprazolam 0.25mg
70	Tab.Amlodipine 5mg
71	Chlorhexidine mouthwash
72	Glycerol Tannic Acid Paint (oral)
73	Betadine mouthwash
74	Triamcinolone Acetonide in orabase paste
75	Imiquimod cream (Topical-application)
76	Comp. Podophyllotoxin in Timolol Benzoin
77	Tab.Amlodipine 10mg
78	Tab.Nifedipine 20mg
79	Tab.Nifedipine 30mg
80	Tab.Riboflavin 10mg
81	Syp.Ferrous Gluconate 100ml bottle
82	Cream Fluconazole 15gm tube
83	Sus.Furazolidone
84	Oint.Hydrocortisone acetate
85	Tab. Isoniazid 100mg/5ml 100ml bot
86	Liquid paraffin
86A	Linctus codein 500ml bot
87	Cream Miconazole 2% 15gm tube
88	Syp.Nalidixic acid
89	syp.Norfloxacin
90	Phenylephrine eye drops
91	Pilocarpine eye drops 2%
92	Syp.Potassium chloride 400ml bot
93	Syp.Primaquine
94	Suspension Pyrantel pamoate

95	Sus Rifampicin
96	Syp.Salbutamol 100ml bot
97	Syp.Theophylline 100ml
98	Syp.Vitamin B.Complex
99	Vit D-3 Granules
100	Ophthalmic & ear drops
101	Glycerine Mag sulphate ear drops
102	Pilocarpine eye drops 4%
103	Oint Acyclovir 3% 5gm tube
104	Benzyl Benzoate emulsion 50ml bot
105	Oint.Betamethasone
106	Cream Clotrimazole skin 1% 15gm
107	Oint Dexamethasone 1%+ Framycetin
108	oint contain clotrimazole+Genta+Flucon
109	Oint Flucanazole 10 mg
110	Cream Framyctin 1% 20gm tube/100gm
111	Lot.Gamabenzene hexachloride1% bt
112	Glycerine Suppository USP 3gm bott/10
113	Cream Nitrofurazone 0.2% jar of 500g
114	Oint Silversulpadiazene 1% 25g
115	AIDS Protective kit
116	Tab. Methotroxate 5 mg./10 mg
117	Tab cyclophosphamide
118	Tab. Azattnopssine
119	EAR DROP
120	Wax Solvent Ear Drops
121	Antifungal + Antiliotic ear drops – plain (clotrimazole + polymyxin B)
122	Steroid + Antibiotec ear drops (OTEK Ae plus ear drops)

13. Capacity Building

At the time of entry into service, induction training of at least six months duration must be made mandatory for all categories of health care workers. This must be a comprehensive training and must have components of requisite skill enhancement, management and knowledge about the drugs/equipments and services offered at all levels of health care.

Secondly, at a duration of every two years, on the job training must be provided to all categories of health care personnel to upgrade their knowledge and skills in technical and management fields.

14. Quality Assurance in Service Delivery

Quality of service should be maintained at all levels. Standard treatment protocols for locally common diseases and diseases covered under all national programmes should be made available at all district hospitals. All the efforts that are being made to improve hardware i.e. infrastructure and software i.e. human resources are necessary but not sufficient. These need to be guided by standard treatment protocols and Quality Assurance in Service Delivery

Quality Control

Internal Monitoring

Social audit through Rogi Kalyan Samities / Panchayati Raj Institutions

Medical Audit, Technical Audit, Financial Audit, Disaster Preparedness Audit, Monitoring of Accessibility and equity issues, information exchange. These audits shall be carried out by Rogi Kalyan Samiti of the hospital.

External Monitoring

Monitoring by PRI / Rogi Kalyan Samities
Service / performance evaluation by independent agencies

District Monitoring Committees formed under NRHM shall monitor the upgradation of Hospitals to IPHS. Annual Jansamvad may also be held as a mechanism of monitoring.

Monitoring of laboratory

Internal Quality Assessment Scheme
External Quality Assessment Scheme

Record Maintenance

Computers have to be used for accurate record maintenance and with connectivity to the District Health Systems, State and National Level.

15. Rogi Kalyan Samities (RKS) / Hospital Management Committee (HMC)

Each district hospital should have a Rogi Kalyan Samiti / Hospital Management Committee with involvement of PRIs and other stakeholders as per the guidelines issued by the Government of India. These RKS should be registered bodies with an account for itself in the local bank. The RKS / HMC will have authority to raise their own resources by charging user fees and by any other means and utilized the same for the improvement of service rendered by the District Hospital.

16. Citizen's Charter

Each District hospital should display a citizen's charter for the district hospital indicating

the services available, user fees charged, if any, and a grievance redressal system. A modal citizen's charter is given as under.

OUR MOTTO - SERVICE WITH SMILE

CITIZENS CHARTER

This charter seeks to provide a framework which enables our users to know:

- What services are available in this hospital;
- The quality of services they are entitled to;
- The means through which complaints regarding denial or poor quality of services will be redressed.

Standards of Service:

- This is a District, Sub-district/divisional hospital;
- It provides medical care to all patients who come to the hospital;
- Standards are influenced by patients load and availability of resources;
- Yet we insist that all our users receive courteous and prompt attention.

Locations:

It is located on road in front of

This hospital has-

Doctors: (including residents).

Nurses: (including supervisory staff).

Beds:

Doctors wear white aprons and nurses are in uniform.

All Staff member wear identity cards.

General Information

Enquiry, Reception and Registration Services:

This counter is functioning round the clock.

Location guide maps have been put up at various places in this hospital.

Colour coded guidelines and directional signboards are fixed at strategic points for guidance.

Telephone enquiries can be made over telephone numbers:

....., &, Fax:

Casualty & Emergency Services:

All Casualty Services are available round the clock.

- Duty Doctor is available round the clock.
- Specialist doctors are available on call from resident doctors.
- Emergency services are available for all specialities as listed in the OPD Services.
- Emergency Operations are done in-

OT located on floor of building.

Maternity OT
Orthopaedic Emergency OT
Burns and plastic OT

Main OT for Neurosurgery cases

Emergency Operation Theatre is functioned round the clock.

In serious cases, treatment/management gets priority over paper work like registration and medico-legal requirements. The decision rests with the treating doctor.

OPD Services:

Various outpatient services available in the hospital are detailed below (as available):

OPD	Place	Time of Registration	Time of OPD
General Medicine			
Paediatrics			
General Surgery			
Paediatric Surgery			
Neuro Surgery			
Cardiac Surgery			
Obstetric & Gynec.			
Eye			
ENT			
Skin			
Urology			
Cardiology			
Psychiatry			
Radiotherapy			
Neurology			
Orthopaedics			
Burns & plastics			
Dental OPD			
ISM Services:			
Homeopathic			
Ayurvedic			
Any other			

In OPDs specialists are available for consultation.

OPD services are available on all working days excluding Sundays and Gazetted Holidays.

On Saturdays, the hospital functions from AM to PM.

Medical Facilities Not Available:

Organ Transplantation

.....

.....

.....

Some specialities do not have indoor patients services:

Psychiatry

D-addiction

Dental

Nuclear Medicine

Genetic Counselling

Endochronology

Geriatrics

Laboratory Services:

Routine: Laboratory Services are provided in the field of (as available):

- Bio-chemistry
- Microbiology
- Haematology
- Cytology
- Histopathology including FNAC
- Clinical Pathology

There is a Central Collection Centre for receiving and collecting various specimens for testing. The timings for receiving specimens are 9:00 AM to 11:30 AM.

Emergency: Emergency Laboratory Services are available 24 hours for limited tests relating to clinical pathology and bio-chemistry.

Radio Diagnostic Services:

Routine: These services include:

X-Rays

Ultrasound and

CAT Scan

Routine X-Rays are done from 9:00 AM to 1:00 PM. Registration is done from 9:00 AM to 11:30 AM.

Ultrasound examination is done from 9:00 AM to 4:00 PM.

Emergency: Emergency X-Ray services are also available round the clock. CAT Scan services are also available round the clock.

Indoor Patient Services:

There are total of Wards providing free indoor patient care.

Emergency ward A admits emergency cases for medical problems.

Emergency ward B admits emergency cases for surgical problems.

There is a _____ bedded Intensive Care Unit for care of seriously ill patients.

A _____ bedded Intensive Coronary Care Unit takes care of heart patients requiring intensive treatment.

In the Burns Department, there are _____ bedded Intensive Care Unit to treat seriously injured burns patients.

There are _____ labour rooms for conducting deliveries round the clock.

_____ nurseries provide necessary care to the newborns – normal as well those born with disease.

All indoor patients receive treatment under the guidance and supervision during office hours i.e. 9:00 AM to 4:00 PM.

Outside office hours, treatment is given by doctor on duty and specialists are available on call.

Free diet is provided to all patients in the General Wards.

Every patient is given one attendant pass.

Visitors are allowed only between 5:00 PM to 7:00 PM.

Investigations like CAT Scan, Ultra Sound, Barium-meal, ECHO, TMT etc. are charged for as per Government approved rates.

For poor patients, these charges can be waived partially or fully on the recommendation of the H.O.D. by the Additional Medical Superintendent. In case of emergency CMO (on duty) may waive off these charges.

A Staff Nurse is on duty round the clock in the ward.

Admitted patients should contact the Staff Nurse for any medical assistance they need.

Other Facilities:

Other facilities available include:

Cold Drinking Water

Wheel chairs and trolleys are available in the OPD and casualty.

_____ Ambulances are available to pick up patients from their places (on payment of nominal charges) and also for discharged patients.

Mortuary Van is available on payment between 9:00 AM to 4:00 PM.

Public Telephone Booths are provided at various locations.

Stand-by Electricity Generators have been provided. Chemist Shops are available outside the hospital. Canteen for patients and their attendants is available.

Lifts are available for access to higher floors.

Adequate toilet Facilities for use of patients and their attendants are available.

The cleaning staff, in-house or on contract done through local tender mechanism.

Cleaning supplies such as brooms, phynile, harpic, disinfectants, formalin, soaps etc. shall be there in sufficient quantity.

Complaints & Grievances:

There will be occasions when our services will not be upto your expectations.

Please do not hesitate to register your complaints. It will only help us serve you better.

Every grievance will be duly acknowledged.

We aim to settle your genuine complaints within 10 working days of its receipt.

Suggestions/Complaint boxes are also provided at various locations in the hospital.

If we cannot, we will explain the reasons and the time we will take to resolve.

Name, designation and telephone number of the nodal officer concerned is duly displayed at the Reception.

Dr.

Designation.....

Tele (O)..... (R).....

(M).....

Meeting Hours..... to

Responsibilities of the Users:

The success of this charter depends on the support we receive from our users.

Please try to appreciate the various constraints under which the hospital is functioning.

On an average more than _____ lacs patients attend the OPD annually and more than _____ lacs patients are attended annually in the casualty and emergency wards.

Please do not inconvenience other patients.

Please help us in keeping the hospital and its surroundings neat and clean.

Please use the facilities of this hospital with care. Beware of Touts.

The Hospital is a "No Smoking Zone" and smoking is a Punishable Offence.

Please refrain from demanding undue favours from the staff and officials as it encourages corruption.

Please provide useful feedback & constructed suggestions. These may be addressed to the Medical Superintendent of the Hospital.

- ◆ "No Smoking Please"
- ◆ Don't spit here & there
- ◆ Use Dustbin
- ◆ Keep Hospital Clean
- ◆ Give regards to Ladies and Senior Citizens

Guidelines for the Project providing financial support to the selected Government Hospitals for Hospital Waste Management.

The Ministry of Environment & Forests notified the "Bio-Medical Waste (Management & Handling) Rules, 1998" in July, 1998.

In accordance with the rules (Rule 4), it is the duty of every "Occupier", i.e. a person who has the control over the institution and/or its premises, to take all steps to ensure that the waste generated is handled without any adverse effect to human health and environment. The Rules further state that every Occupier, where required, shall set up requisite bio-medical waste treatment facilities like incinerator, autoclave, microwave system for the treatment of waste, or ensure requisite treatment of waste at a common treatment facility or any other treatment facility. No untreated bio-medical waste shall be kept stored beyond a period of 48 hours (Rules 5 & 6).

The hospitals, nursing homes, clinic, dispensary, animal house, pathological lab, etc. are, therefore, required to set in place the biological waste treatment facilities. It is, however, not incumbent that every institution has to have its own waste treatment facilities. The rules also envisage that common facility or any other facilities can be used for waste treatment. However, it is incumbent on the occupier to ensure that the waste is treated within a period of 48 hours. Schedule VI of the rules also provides the time limits by which the waste treatment facilities are required to be in place.

In connection with the implementation of the Rules, it has been decided to take up pilot projects in selected Government hospitals – Central and State.

AIM: The aim of the scheme is to implement pilot projects to have a demonstration effect by providing financial assistance to identified hospitals/

institutions under Central/State Governments for:

1. Purchase of equipments such as:
 - a) Incinerator
 - b) Microwave
 - c) Autoclave
 - d) Shredder
2. Other equipments including colour coded bags and puncture proof containers, protective gears, etc.
3. Civil and electrical works to house and operate the waste treatment facilities.
4. Training
5. IEC activities.

Hospital Waste Management System must be established in accordance with the Bio-Medical Waste (Management & Handling) Rules, 1998 (Annexure).

Segregation must be done at the source of generation of waste. As 80-85% of waste generated in hospitals is non-hazardous or general waste, segregation will reduce the quantum of waste that needs special treatment to only 15-20% of the total waste. The categories for segregation of waste and colour coding and type of container should be as in Schedule 1 and 2 of the Bio-Medical Waste (Management & Handling) Rules, 1998.

The various options for treatment of waste can be selected according to feasibility and type of waste as given in the Schedule – I. The correct colour bag should be used for the particular treatment option.

The various options are:

1. **Incineration:** The incinerator installed must meet the specification and emission standards as given in the Bio-Medical Waste (Management & Handling) Rules, 1998 and must meet the guidelines developed by Central Pollution Control Board for design and construction of bio-medical waste incinerator (circulated to all States/UTs vide letter no. Z.28015/50/2003-H, dated 18.11.2003) – a certificate may be taken from the State Pollution Control Board. Waste category, 1, 2, 3, 5, & 6 as stated in the Schedule – I of the bio-Medical Waste (Management & Handling) Rules, 1998. Wherever common facilities for treatment and disposal of bio-medical waste are available, installation of incinerators by individual hospitals may not be encouraged and such waste should be transported to the common facility for proper treatment.

2. **Autoclaving/Microwaving:** Standards for autoclaving and microwaving are provided in the Bio-Medical Waste (Management & Handling) Rules, 1998. The equipment for autoclaving or microwaving waste should conform to these standards. These options can be selected for waste categories 3, 4, 6, 7 of Schedule – I of the Bio-Medical Waste (Management & Handling) Rules, 1998.

3. **Shredder:** Shredding will cause a reduction in the volume of waste and will also effectively prevent its re-use. It is required for waste category 4 and 7 of the Schedule – I of the Bio-Medical Waste (Management & Handling) Rules, 1998. It should be ensured that waste is disinfected by chemicals/microwaving/autoclaving before shredding.

4. **Needle and Syringe Destroyer:** These units can be used for needles and syringes at the point of use. These will destroy the

used needles reducing it to ashes and cut the syringe effectively preventing the re-use.

5. **Transportation of Waste:** Within the hospital in dedicated wheeled containers, trolleys or carts should be used to transport the bins or plastic bags to the site of storage/treatment. The wheeled container should be designed so that waste can be easily loaded, remain secure during transportation, does not have sharp edges and is easy to clean and disinfect.

The assistance will be given direct to the hospital/institute for purchase of equipments for waste treatment facilities/installation of equipment and civil/electrical works to house the waste treatment facilities, training, IEC activities including preparation and publication of literature, posters, pamphlets, etc. The financial assistance will be limited to Rs.85 lakhs per hospital or Rs.1.50 crore per State/UT. The estimated costs are as under:-

1. **Incinerator or Microwave** = Rs.35.00 lakhs
2. **Shredder (Approx. 100 kg to 360 kg./hour)**
= Rs.10.00 lakhs
3. **Autoclave (Approx. Cap. Vol. 1015 litres)**
= Rs.30.00 lakhs
4. **Waste transportation: Onsite-wheel barrow/wheeled container or similar carriage**
= Upto max. of Rs.50,000.00
5. **Civil and Electrical works** = Rs.2.50 lakhs
6. **Literature/IEC/Training of Staff**
= Rs.2.00 lakhs
7. **Procurement of equipments like needle shredder/puncture proof containers for sharps, colour coded bags, trolleys, protective gears for staff etc. for Disposal of hospital wastes** = Rs.5.00 lakhs

The following eligibility conditions have to be fulfilled for availing of financial assistance:

- i. The application for financial assistance should be forwarded to this Ministry through

the State Government/UT Administration concerned.

- ii. The State Government/UT Administration should ensure that the existing facilities are inspected by a responsible officer and deficiencies pointed out. The proposal for additionalities, if any, in the form of equipment should be, as far as possible, by way of complementary equipments supported by estimates of concerned authorities.
- iii. The cost of equipments to be purchased should be indicated. The equipments will be purchased as per prescribed procedure. These will be entered into an Assets Register to be maintained by the hospital.
- iv. The grant will be subject to the condition that the State Government / UT Administration will give an undertaking that adequate arrangements for running the equipments and their maintenance for disposal of hospital waste shall be made.
- v. The grant will be subject to the condition that the State Government/UT Administration/Hospital will give an undertaking that they will provide the required trained manpower for running of the equipments and their maintenance for proper treatment and disposal for the bio-medical waste.
- vi. The funds sanctioned will be utilized for the purpose for which it is sanctioned.
- vii. The accounts of the hospital about purchase of equipment/maintenance of the equipments/transportation of thw waste/ expenditure incurred on civil/electrical works will be audited by the Accountant General of the State Government / UT Administration and its utilization certificate will be forwarded to the Ministry of Health & Family Welfare within a period of six months after the expiry

of the financial year during which the grants is sanctioned.

The financial assistance will be limited to Rs.85 lakhs per hospital or Rs.1.5 crore per State/UT. The State/UTs will have the option to choose any equipment (s) from the list above to cover as many hospitals as possible. However, the financial assistance per State will be provided upto a maximum amount of Rs.1.5 crore.

Scrutiny of Applications:

The applications received from the State Government/UT Administrations for setting up of facilities for disposal of hospital waste in the hospitals under their administrative control will be considered in the Ministry in a Committee headed by Additional Secretary and proposals cleared for giving financial assistance. The proposals then will be processed for sanction of financial assistance to the Government Hospitals/institutes. In the case of Central Government Hospitals/Institutions, the Head of the Institutions may send their proposal through Dte.GHS.

The Joint Secretary (Hospital), DDG level officer in the Dte.GHS concerned with hospitals matters will be the Nodal Officer for implementation of the scheme. The proposals will be examined through a Committee consisting of Additional Secretary, Chairman, the Joint Secretary dealing with hospital matters, Joint Secretary (FA) or his representative, DDG level officer dealing with hospitals in Dte.GHS and one representative of Central Pollution Control Board/Ministry of Environment & Forests as members. The Member Secretary of the Committee will be Director/Deputy Secretary dealing with hospital matters. The funds for setting up facilities for disposal of hospital waste will be sanctioned to the State Government/UT Administration/Occupier and it will be implemented by the concerned Government and to the concerned Head of the Hospital in case of Central Government Hospitals/Institutions.

Annexure - II

REFERRAL LABORATORY NETWORKS

Referral Laboratory Network for Advanced diagnostic facilities

	IDSP Level - 4 Labs					IDSP Level - 5 Labs
	Central Zone	South Zone	North Zone	East Zone	South Zone	

Advance Diagnostic Facilities

Bacterial diagnosis Enteric bacteria: <i>Vibrio cholerae</i> , <i>Shigella</i> , <i>Salmonella</i>		CMC Vellore Trivandrum Medical College	PGIMER Chandigarh AIIMS Delhi CRI Kasauli	RMRC Dibrugarh, Cuttack Medical College	KEM Mumbai, AFMC Pune	NICED & NICD
<i>Streptococcus pyogenes</i> and <i>S pneumoniae</i>	Indore Medical College	St. John Medical College, Bangalore	VP. Chest University of Delhi	-	BJ MC	CMC Vellore
<i>C. diphtheriae</i>	BHU	CMC, Vellore	NICD, Delhi	STM, Kolkata	AFMC, Pune	VP Chest Institute, Delhi
<i>Neisseria meningitidis</i> and <i>N. gonorrhoeae</i>	SN Medical College, Agra	State PH Lab Trivandrum	PGIMER Chandigarh	-	Surat Medical College	CMC Vellore & PGIMER Chandigarh
<i>Staphylococcus</i>	BHU	MGR Medical University	Maulana Azad Medical College, Delhi	STM, Kolkata	AFMC, Pune	NICD, Delhi
Leptospirosis	DRDE	Virology Institute, Allepey Tamil Nadu University, Chennai VCRC, Pondicherry	AIIMS IVRI	RMRC, Bubaneswar & Dibrugarh	BJMC	RMRC Port Blair

Viral Diagnosis

Enteric viruses	DRDE	CMC, Vellore	AIIMS & Villupuram Chest Institute	NICED Kolkata	-	EVRC, Mumbai, NIV & NICD
Arboviruses	DRDE	CMC, Vellore	AIIMS & NICD Delhi Chest Institute	NICED Kolkata	-	NIV
Myxoviruses	DRDE	CMC, Vellore	AIIMS & NICD Delhi Chest Institute	NICED Kolkata	-	NIV, HSADL Bhopal
Hepatitis viruses	DRDE	CMC, Vellore	AIIMS ICGB, Delhi	NICED Kolkata	-	NIV
Neurotropic viruses	DRDE	CMC, Vellore	AIIMS & NICD Delhi	-	-	NIV NIMHANS
HIV	DRDE	CMC, Vellore	AIIMS	-	-	NARI, NICD & NACO ICGB, Delhi

Parasitic Diagnosis

Malaria	All State Public Health Laboratories			MRC, Delhi ICGB, Delhi
Filaria	All State Public Health Laboratories			NVBDCP, Delhi VCRC Pondicherry

Zoonoses

Dengue	DRDE	VCRC, Pondicherry Institute of Virology, Aleppey	AIIMS	NICED	NIV	NIV ICGB, Delhi
JE	DRDE	CRME, Madurai & NIMHANS VCRC, Pondicherry	AIIMS	NICED	NIV	NIV /NICD

Plague	DRDE	NICD Bangalore	NICD, Delhi	-	Haffikins Institute	NICD, Delhi
Rickettsial diseases	DRDE	CMC, Vellore	-	-	AFMC	NICD IVRI

Others of Public Health Importance

Anthrax	DRDE	CMC, Vellore	IGIB	NICED, Calcutta	BJMC	NICD IVRI
Microbial water quality monitoring	NEERI, Nagpur	CMC Vellore, Trivandrum Medical College	PGIMER Chandigarh AIIMS Delhi CRI Kasauli	RMRC, Dibrugarh, Cuttack Medical College	KEM Mumbai, HAFFKIN's, Mumbai AFMC Pune	NICED & NICD

Unknown pathogens	Other laboratories to perform support functions			NIV, NICD, HSADL		
Outbreak investigation support	Medical Colleges and state public health laboratories as L3/ L4			NICD, NIV, NICED, VCRC		
Laboratory data management	Medical Colleges, state public health laboratories and all the L4 & L5 laboratories (in their area of expertise)			NIV, NICD, NIV, NICD		
Capacity building	All the L4 & L5 laboratories (in their area of expertise)			NIV, NICD		
Quality assurance	All the L4 & L5 laboratories (in their area of expertise)			CMC, TRC, NTI, AFMC, NARI, RMRC, Port Blair NIV, NICD		
Quality control of reagents & kits evaluation	All the L4 & L5 laboratories (in their area of expertise)			CMC, TRC, NARI, RMRC, Port Blair NIV, NICD, BJMC, NICED		
Production & supply of reagents/ kits/ biological/ standard reference materials	-			DRDE, NIV, IVRI, NICED, NICD, MRC, Delhi AFMC, Pune NARI TRC, Chennai RMRC, Port Blair		
Biosafety & bio-containment	Other laboratories to perform support function			HSADL, NIV/MCC, DRDE, NICD		

List of Abbreviations

BJMC	BJ Medical College
CHC	Community Health Centre
CME	Continuing Medical Education
CSSD	Central Sterile and Supply Department
CRI	Central Research Institute
CRME	Centre for Research in Medical Entomology
DRDE	Defense Research and Development Establishment
ICGEB	International Centre for Genetic Engineering and Bio-technology
EVRC	Enterovirus Research Centre
FRU	First Referral Unit
HSADL	High Security Animal Diseases Laboratory
IGIB	Institute of Genomics and Integrative Biology
IPHS	Indian Public Health Standards
IVRI	Indian Veterinary Research Institute
KEM	King Edmund Memorial Hospital
MRC	Malaria Research Centre
NARI	National AIDS Research Institute
NEERI	National Environmental Engineering Institute
NICED	National Institute of Cholera and Endemic Diseases
NIV	National Institute of Virology
NRHM	National Rural Health Mission
PRI	Panchayati Raj Institution
RKS/HMC	Rogi Kalyan Samiti / Hospital Management Committee
RMRC	Regional Medical Research Centre
STM	School of Tropical Medicines
VCRC	Vector Control Research Centre

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