

**Internship Training**

**At**

**PUNJAB HEALTH SYSTEMS CORPORATION**

**(Feb3-April30, 2014)**

**“GAP ANALYSIS for OPD,IPD,Emergency & Laboratory”  
Based on IPHS and ISO Standards  
of  
District Hospital,Gurdaspur**

**By**

**Dr.Sukhdeep Kaur**

**Under the guidance of**

**Ms.Anupama Sharma**

**Post Graduate Diploma in Hospital and Health Management  
Year 2012-2014**



**International Institute of Health Management Research**



## PUNJAB HEALTH SYSTEMS CORPORATION

State Institute of Health and Family Welfare Complex  
Phase-VI, Near Civil Hospital, Sahibzada Ajit Singh Nagar, Punjab.  
Phone : 0172-2262938, 2263938, Tele-Fax : 0172 - 2266938  
Visit us at : punjabhealth.co.in : E-mail: phschd@yahoo.com

No. PHSC/NABH/14/ .....<sup>29</sup>

Dated.....<sup>28.4.14</sup>

To whomsoever it may concern

### Certificate of Dissertation Completion

This is to certify that  
Dr. Sukhdeep Kaur....., student of  
Postgraduate Diploma in Hospital and Health Management  
of IIHMR Delhi, has successfully completed three months  
dissertation under Punjab Health Systems Corporation,  
Punjab, from 03.02.2014 to 30.04.2014

During the dissertation the student's  
performance was found to be satisfactory.

We wish him/her success in all his/her future  
endeavors.

  
**Hussan Lal I.A.S.**  
Managing Director

Punjab Health Systems Corporation  
-Cum-Secretary Health and Family Welfare, Pb.

**International Institute of Health Management Research  
New Delhi**

**TO WHOMSOEVER MAY CONCERN**

This is to certify that Dr.Sukhdeep Kaur student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at Punjab Health Systems Corporation from Feb 3,2014 to April 30,2014.

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical. The Internship is in fulfilment of the course requirements.

I wish her all success in all her future endeavours.



05/05/2014

Dr.A.K Agarwal  
Dean, Academics and Student Affairs Professor  
IIHMR, New Delhi



Ms.Anupama Sharma  
Assistant Professor  
IIHMR, New Delhi

## Certificate of Approval

The following dissertation titled **Gap Aanalysis for OPD,IPD,Emergency & Laboratory" Based on IPHS and ISO Standards of District Hospital,Gurdaspur(Punjab)** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a pre-requisite for the award of **Post- Graduate Diploma in Hospital and Health Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name

Dr. A.K. Agarwal

Dr. Ramteke

Ms. Anubhama Sharma

Signature

The block contains three handwritten signatures in blue ink, each written over a horizontal line. The top signature is the most legible and appears to be 'Dr. A.K. Agarwal'. The middle signature is less legible but appears to be 'Dr. Ramteke'. The bottom signature is also less legible but appears to be 'Ms. Anubhama Sharma'.

## Certificate from Dissertation Advisory Committee

This is to certify that Dr. Sukhdeep Kaur, a participant of the Post Graduate Diploma in Health and Hospital Management, has worked under our guidance and supervision. She is submitting this dissertation titled. "Gap Analysis for OPD, IPD, Emergency & Laboratory" Based on IPHS and ISO Standards of District Hospital, Gurdaspur in partial fulfilment of the requirements for the award of the Post-Graduate Diploma in Health and Hospital Management.

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report on book.

  
Dr. Sudhyr Kumar  
Senior Medical Officer  
I/c. Civil Hospital, Gurdaspur  
Senior Medical Officer  
District Hospital Gurdaspur

  
Ms. Anupama Sharma  
Assistant Professor  
IIHMR, New Delhi

**INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT  
RESEARCH, NEW DELHI**

**CERTIFICATE BY SCHOLAR**

This is to certify that the dissertation titled "Gap Aanalysis for OPD,IPD,Emergency & Laboratory" Based on IPHS and ISO Standards of District Hospital,Gurdaspur and submitted by (Name) Dr.Sukhdeep Kaur Enrollment No. PG/12/090 under the supervision of Ms.Anupama Sharma, for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from Feb 3, 2014 to April 30, 2014 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

  
Signature

## FEEDBACK FORM

Name of the Student: Dr. Sukhdeep Kaur

Dissertation Organisation: Punjab Health systems corporation (PHSC)

Area of Dissertation: Civil Hospital Gurdaspur

Attendance: 96%

Objectives achieved: Project on trap analysis for OPD, IPD, Emergency & Laboratory based on IPHS and ISO standards.

Deliverables: Trap Analysis

Strengths: Sharp understanding, Keen interest to learn new things, Ability to manage and organise things well.

Suggestions for Improvement: \_\_\_\_\_

  
Signature of the Officer-in-Charge/ Organisation Mentor (Dissertation)

Date: 24-04-2014  
Place: Gurdaspur

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I extend my gratitude to **DEAN Dr.AK Aggaarwal** and my college **IIHMR, New Delhi** for giving me this opportunity.

Any omission in this brief acknowledgement does not mean lack of gratitude.

### Thanking You

Dr.Sukhdeep Kaur

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## **ACRONYMS / ABBREVIATIONS**

ABG	Arterial Blood gas Analyzer
AIDS	Acquired Immuno Deficiency Syndrome
ANM	Auxiliary Nurse Midwife
BHT	Bed head Ticket
BMW	Bio-Medical Waste
CMO	Chief Medical Officer
CS	Civil Surgeon
CSSD	Central Sterile Supply Department
DHS	District Health Society
DMC	Deputy Medical Commissioner
ECG	Electro Cardiograph
EEG	Electroencephalograph
ER	Emergency
HR	Human Recourses
ICTC	Integrated Counseling and Testing Centre
ICU	Intensive Care Unit
IPD	Inpatient Department
IPHS	Indian Public Health Standard
ISO	International Organisation for Standardization
JBSY	Janani Bal Suraksha Yojana
MLC	Medico Legal Case

MO	Medical Officer
MOIC	Medical Officer In charge
MRD	Medical Record Department
NRHM	National Rural Health Mission
OPD	Out Patient Department
OT	Operation Theatre
PHSC	Punjab Health Systems Corporation
PT	Physiotherapy
RKS	Rogi Kalyan Samiti
RNTCP	Revised National Tuberculosis Program
SMO	Senior Medical Officer

**PART I:**  
**ORGANISATION REPORT**

## **1.1 PUNJAB HEALTH SYSTEMS CORPORATION (*PUNJAB GOVERNMENT*)**

The Punjab Health Systems Corporation was incorporated by the State Govt. in the year 1996 through enactment of Legislative Act, "The Punjab Health Systems Corporation Act, 1996" (Punjab Act No.6 of 1996), with the main objective of implementation of a World Bank assisted Health Systems Development Project for revamping of existing secondary level health care services. Under this project modernization and updation of 157 hospitals was envisaged through systems supports such as Computerization, HMIS, Disease Surveillance, Training of Personnel, Quality Assurance, Bio-waste Management, Strengthening of Physical Infrastructure (Buildings & Equipments) etc.

Now the Corporation has taken over 166 Institutions which includes District Hospitals, Sub-Divisional Hospitals and Community Health Centers. The 86 Medical Institutions are situated in rural areas and 80 are in Urban areas. In addition, two Training Institutes viz. State Institute of Health and Family Welfare, Mohali, Distt. Ropar and State Institute of Nursing and Paramedical Sciences, Badal, Distt. Mukatsar as well as the Institute of Mental Health Amritsar have also come under the control of the Corporation.

### **Brief History of the Punjab Health Systems Corporation -**

Hospital Services at the Secondary level play a vital and complementary role. After prevention, the cure is only remedy. The Government sector is mainly taking care of preventive measures and insignificant sum of the total is being spent on curative part. It was noticed that district Hospitals, Sub-Divisional Hospitals and Community Health Centres lack the basic medical equipment, and having critical gaps in buildings and unable to provide the required diagnostic services. To revamp the whole system, a proposal was drafted seeking aid from the World Bank. The TEAM visited Punjab in March 1995, held discussions with His Excellency the Governor, the then Chief Minister, the then Health Minister, the then Chief Secretary and the then Secretaries of the Finance & Planning Department and visited a number of medical institutions. As per recommendations, a workshop was held to ascertain kinds of improvement required for providing better health care facilities to the people of the State.

## Objectives of PHSC

- Formulate and implement the schemes for the comprehensive development of the dispensaries and hospitals.
- Construct and maintain dispensaries and hospitals and maintenance of cleanliness therein.
- Implement National Health Programmes as per the directions of the State. The State Government and Central Government shall make available funds for this purpose.
- Purchase, maintain and allocate quality equipment to various dispensaries and hospitals.
- Procure stock and distribute drugs, diet, linen and other consumables among the dispensaries and hospitals.
- Provide services of specialists and super specialists in various hospitals.
- Enter into collaboration for super specialties with health institutions both within the country or abroad to provide better medical care.
- Receive donations, funds and the like from the general public and institutions from both within and outside India and receive grants or contributions, this may be made by Government on such conditions as it may impose.
- Provide for construction of houses to the employees of the dispensaries and hospitals and the maintenance thereof by mobilizing resources for financing institutions.
- Plan, construct and maintain commercial complexes, paying wards and providing diagnostic services and treatment on payment basis and to utilize the receipts for the improvement of the hospitals and dispensaries.

## 1.2 DISTRICT/CIVIL HOSPITAL GURDASPUR (PUNJAB) – PLACE OF INTERNSHIP.



District Hospital Gurdaspur caters to the people living in urban and rural people in district. District hospital system is requires 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. This hospital is situated in Gurdaspur(Punjab).It is referral hospital for Primary Health Centre & Sub- centres. It covers 34 PHC and 48 CHC. It covers the population of 2,299,026 .The number of beds available in Hospital is 100. The Hospital compound is good and enough area for patients cares. Environment is good surrounding of the hospital. Available of all departments is the positive point of the hospital but not in good condition and need to properly maintain. Transporting facility is good and the road is very good in condition. Patient comes easily in the hospital.

FACT SHEET OF CIVIL HOSPITAL, GURDASPUR:

<b>S. No</b>	<b>Area</b>	<b>Number</b>
1.	Total Population covered	2,299,029
2.	Total Area	6 acres
3.	Total beds	100
4.	Total functional bed	100
5.	Total doctors	25
6.	Total nurses	26
7.	Total pharmacist	3
8.	Total Indoor patient / month	1369
9.	Total Outdoor patient / month	19653
10.	Total user charges collection / Month	16,39,023
11.	Total emergency patient/month	811
12.	Total referred patient/month	15
13.	Total operation family planning	18
14.	N.S.V	0
15.	General Operation (Major) / Month	326
16.	General Operation (minor) / month	915
17.	Total still birth / month	250
18.	Total caesarean / month	127
19.	L.S.C.S death child /month	0
20.	Delivery normal / month	138
21.	Total delivery /month	256
22.	No. of X- Rays done	1719
23.	No. of ECGs done	456
24.	No.of Ultrasounds done	121

25.	No.of Lab –Tests	12,396
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## **The Departments and Services available in hospital are:**

### **Specialist services available in the hospital**

- General Medicine
- General Surgery
- Obstetrics & Gynecology: Family Planning, Antenatal checkup, Intra natal care 24 hour Delivery services and Post Natal Care
- Pediatrics including Neonatology
- Emergency (Accident & other emergency/ Casualty)
- Anesthesia
- Ophthalmology
- ENT
- Dermatology and Venerology (Skin & VD) RTI / STI
- Orthopedics
- Radiology
- Dental Care
- Public Health Management
- School Health Services

### **Para Clinical Services**

- Laboratory services
- Blood Bank
- Drugs and Pharmacy

### **Support Services**

- Medico-Legal/ Post -Mortem
- Ambulance Services
- Dietary Services
- Laundry Services
- Nursing Services
- Sterilization and Disinfection
- Telemedicine

### **National Health program**

- Universal Immunization Program
- Janani Bal Suraksha Yojana

- Revised National Tuberculosis Control Program
- National AIDS Control Program
- National Leprosy Eradication Program
- National Program for Control of Blindness
- Integrated Disease Surveillance Project (IDSP)
- National Vector Borne Disease Control Programme (NVBDCP)
- National Programme for Prevention and Control of Deafness (NPPCD)
- National Cancer Control Programme (NCCP)
- National Mental Health Programme (NMHP)
- National Programme on Prevention and Control of Diabetes, CVD and Stroke (NPDCS)
- National Iodine Deficiency Disorders Control Programme (NIDDCP)
- National Tobacco Control Programme (NTCP)
- National Program for Health Care of Elderly

### **1.3 OBSERVATION DURING INTERNSHIP PERIOD**

#### **Strengths**

- The hospital is located in the centre of the city and easily approachable. The hospital is in close proximity to railway station and bus stand.
- The hospital serves as a referral centre for the whole district and caters a large population.
- The hospital has all the major specialties and trained manpower to deliver the services.
- Involvement of private sector in the hospital functioning is working very efficiently and effectively.

#### **Weaknesses**

- The Physical infrastructure is in a bad shape and needs development and renovation.
- Doctors and nurses requirements are not filled as per Patient load and IPHS standard
- Weak peripheral health care system needs to increased patient load and hence departments have not been developed as per the district hospital standards.
- Centralized decision making at state level leads to delay in approval and implementation.

#### **Opportunities**

- Proper planning and coordination with PHSC, NRHM can lead to development of services and better delivery of health care in an integrated way.
- The centre can be developed to serve as a training centre for junior doctors and paramedical staff.
- Willingness of Government to Empower the Leadership.
- Devolution of powers at local level for smooth functioning.

#### **List of Perceived Challenges By Leadership Team**

- Decentralization of decision making at the Hospital level.
- Following all legal requirements such as AERB, BARC, etc.
- Adherence to Biomedical Waste Management rules 1998
- Following infection control practices.
- Upkeep and Sanitation of Hospital building and environment.
- Rearrangement of the various facilities as per the flow of the patient.
- Provision of lift services in the OT and Labour room.

**PART II:**  
**DISSERTATION REPORT**

## **CHAPTER 1: INTRODUCTION**

**Ministry of Health and Family Welfare, Government of India** in its bid to bring about a paradigm shift in healthcare delivery system across the country had undertaken initiative for quality improvement in the public health. Carrying forward the initiative for quality improvement Punjab Health Systems had started a project to enhance the service quality level at the District hospitals. It is time now to look at how evaluation of the hospital and subsequent improvement, go hand in hand leading to better access and quality service to all service seekers with focus on erstwhile deprived section of the society. To facilitate the above goals, comprehensive study of Civil Hospital, Gurdaspur was carried out on the current processes, practices and existing infrastructure with other available resources to identify the major gaps based on ISO 9001: 2008 quality management system and Indian public health standards as applicable to hospital.

The Gap Analysis Report includes documentation and review of manpower, equipment, infrastructure, processes including training and capacity building activities, services & facilities provided legal compliances etc against IPHS and ISO 9001:2008 Quality Management System. For this the format for “Facility Survey” available in IPHS guidelines was used to capture the data. This includes all support processes including nursing, housekeeping & laundry services, security services, dietary services, information support services, out-sourced services, etc.

The whole report is submitted as under:

1. Describes the process flow of all the departments in the Civil hospital, Gurdaspur, with the identification of process Owners, Input(s), Outputs (s) and process flow of each process occurring at each section of the hospital with the relevant records.
2. Identifies the significant gaps observed on all the processes in each section and explanation of the gap statement with document evidences and photographs. The gaps are analyzed based on IPHS and ISO 9001: 2008 standards.
3. The annexure which contains the details collected in the Civil hospital, Gurdaspur and people interviewed with reference to the analysis done.

## **CHAPTER 2: AIM AND OBJECTIVE OF THE STUDY**

**AIM-** The aim of study is to identify the areas of current and target quality management system for which provision has not been made in technical architecture. This is required in order to identify projects to be undertaken as part of the implementation of the target quality management system for achieving ISO certification.

### **OBJECTIVE -**

1. To describe the process flow of respective departments in the hospital with the identification of process Owners, Input(s), Output(s) and process flow of each process occurring at each section of hospital with relevant records.
2. To identify the significant gaps observed on all the processes in each section and explanation of the gap statement with document evidences and photographs. The gaps are analyzed based on IPHS and ISO 9001:2008 standards.
3. To prepare time bound action plan to fulfil the gaps, if any.

## **CHAPTER 3: RESEARCH METHODOLOGY**

**STUDY AREA** : Civil Hospital, Gurdaspur

**TOOLS** : IPHS Checklist, ISO guidelines, interview schedule, Observation notes.

**METHOD** :

### **STAGE I: SURVEY**

IPHS Checklist used for total survey of the hospital in terms of services provided, Manpower, Physical Infrastructure, Equipments, drugs and Lab Services.

### **STAGE II:**

**Observation and personal Interview** was used to map the various processes of hospital and to know the functioning of each department.

### **STAGE III:**

Extensive analysis based on data collected from stage I and Stage II.

## Area and Sections Analyzed in the study

AREA	SECTION
Administration	SMO Office
	Account Office
	Medical Record Department
Ward	Surgical Ward
	Medical Ward
	Maternity Ward
	Ortho Ward
	Pediatric Ward
	Labour Room
	General OT
	Emergency
	ICU
	Trauma Ward
Other Departments	Radiology
	Laboratory
	Pharmacy
	Hospital Store
	CSSD
	Blood Bank
OPD	Consultation Room
	Data Collection Room

**Table 2: Area and Sections Analyzed in the study**

## List of People Interviewed for study

<b>Designation</b>	<b>Department</b>
Doctor	Psychiatry
Doctor	Medicine
Doctor	ENT
Doctor	Dental
Doctor	Pathology
Pharmacist	Medical Record
Supervisor(Sweepers)	Housekeeping
Clerk	Administration
Store Keeper	MRD
Radiographer	Radiology
Matron	Nursing
Staff Nurse	Nursing
Lab Tech	Laboratory
Lab Tech	Laboratory

**Table 3: People Interviewed for Study**

## List of Document Reviewed During Survey

<b>DEPARTMENTS</b>	<b>DOCUMENTS</b>
<b>Hospital Statistics</b>	Monthly reports
<b>Wards</b>	Ward registers
	Doctor wise patient file
	Bed Head Tickets
<b>Emergency</b>	Emergency Registers
	MLC case register
<b>Attendance</b>	Nursing attendance sheet
	Employee attendance sheet
	Sweepers attendance sheet
<b>Manpower</b>	Total employee list
	Doctors roster department wise
	Doctors timing roster
	Nursing distribution ward basis
<b>OPD</b>	Patient registration register
	OPD tickets
	OPD statistics daily/monthly basis
	Fee collection register
<b>Store</b>	Drug register
	Furniture issuing register
<b>Operation Theater</b>	Operation Register
	Equipment Register
<b>Blood Bank</b>	Drugs Distribution register
	Total blood collection register

**Table 4:** Document Reviewed During Survey

## **CHAPTER 4: REVIEW OF LITERATURE**

### **1. Indian Public Health Standards (IPHS) Guidelines for District Hospitals (101 to 500 Bedded) Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India, Revised 2012.**

National Rural Health Mission (NHM) was launched in year 2005 to strengthen the Rural Public Health Systems and has since met many hopes and expectations. The Mission seeks to provide effective health care to the rural populace throughout the country with special focus on States AND union Territories (UTs), which have a weak public health indicator and/or weak infrastructure. Towards this end, the Indian Public Health Standards (IPHS) for Sub-centres, Primary Health Centres (PHCs), Community Health Centres (CHCs), Sub-District and District Hospitals were published in January/February, 2007 and have been used as the reference point for public health infrastructure planning and up-gradation in the States and UTs. IPHS are not set of uniform standards envisaged to improve the quality of health care delivery in the country. The IPHS are set of uniform standards envisaged to improve the quality of health care delivery in the country. The IPHS documents have been revised keeping in view of the changing protocols of the existing programmes and introduction of new programmes especially for Non – Communicable Diseases.

IPHS guideline focus on each and every area of the hospital showing the infrastructure requirements, Instruments and equipments required, drugs required in hospital, quality assurance and quality control processes and services, statutory compliances.

### **2. ISO 9001:2008 Quality Management System – Requirements (Third Revision)**

The **International Organization for Standardization** known as **ISO** is an international standard-setting body composed of representatives from various national organizations.

Founded on 23 February 1947, the organization promotes worldwide proprietary, industrial and commercial standards. It is headquartered in Geneva, Switzerland

ISO 9001:2008 sets out the criteria for a quality management system and is the only standard in the family of ISO 9000 that can be certified to (although this is not a requirement).

## **CHAPTER 5: FINDINGS**

### **5.1 OPD**

#### **The major findings in OPD:**

- OPD patient's registration takes place from 9:00 am to 2:00 pm in winters and 8:00am to 1.00 pm in summers.
- There are two registration counters for both female and male patients, but mostly single window is open.
- Cool Drinking Water facilities is not available inside the OPD block, There is no water cooler in OPD block, patient and visitor used to go to Civil Surgeon Office block which is inside the hospital premises.
- No Ramps and Hand rails for Disabled patients.
- There are no adequate chairs in waiting area.
- No availability of Wheel chairs & trolley.
- Too many patients and its relative enter the consultation chamber at a time.
- Computerized slips not used
- No person is present on help desk

### **5.2 IPD**

#### **The major findings in IPD:**

- Nursing station is not located centrally or on one corner of ward for the direct observation and monitoring. Beds are cluttered together.
- Bed railings are not available in the wards.
- Bed side lockers are not provided to keep medicines.
- IV stands are not available in adequate number.
- Color coded bins for BMW segregation is not provided in all the wards.
- Bed sheets and pillows not present on each bed.
- Dust buckets not present with each bed.
- No disinfectant used for cleaning of wards and washrooms.
- Less number of labour rooms as per the requirement.

### **5.3 EMERGENCY**

#### **The major findings in Emergency:**

- There is no one In-charge of ambulance for smooth coordination.

- The patient has to call 108 ambulance service himself to avail the service. 108 services provide both ACLS and BLS ambulance.
- Hospitals own ambulances are also in working condition. There are two BLS ambulance of hospital.
- Limited number of stretchers.
- Empty oxygen cylinders kept in hallway
- Proper sanitation of minor OT is not practiced.

## **5.4 LABORATORY**

- All Laboratories re not present.
- Segregation of Biomedical Waste not practiced every time.
- External Quality checks not done.
- Modern equipments not present so most of tests are done manually.
- Shortage of staff.
- No fire safety equipments present in the laboratory.

## **CHAPTER 6: DISCUSSION**

### **6.1. OUTPATIENT DEPARTMENT**



The OPD department is situated in the new building of OPD which provide facilities like Medicine, Surgery, Paediatrics, Obstetrics and Gynaecology, Orthopaedics, Dental, Ophthalmology, Skin and VD, Psychiatry, ENT. Total no. of OPD Room is 11 rooms and additional in this OPD building is ECG room, X-ray room, IPCTC room, Physiotherapy room, Laboratory and Plaster room is there. The total no. of Medical officers is 22. The OPD attendants are 24 in the OPD department. Every department have their own OPD register where they record the patients name, age, sex, registration no. and diagnosis and medicines prescribed to the patients.

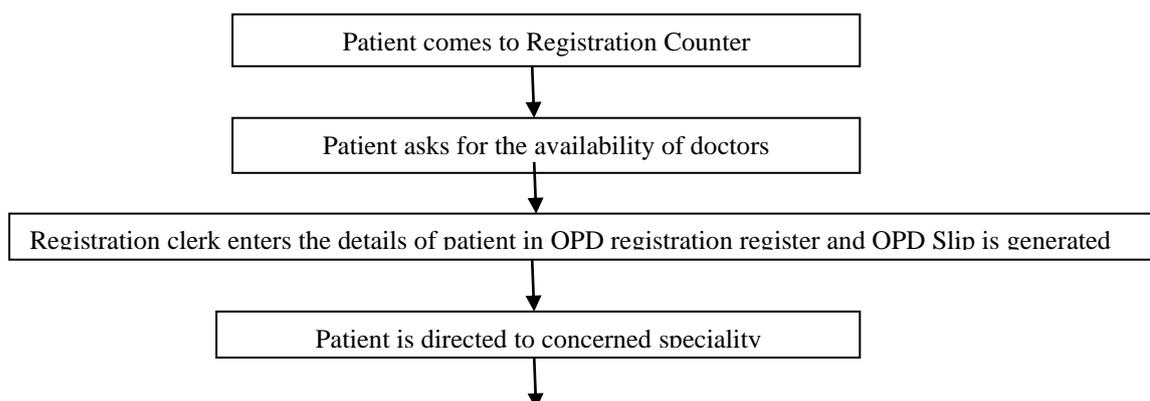
Functionalities of OPD: It covers the patients who visit the OPD facility for new and follow up visits.

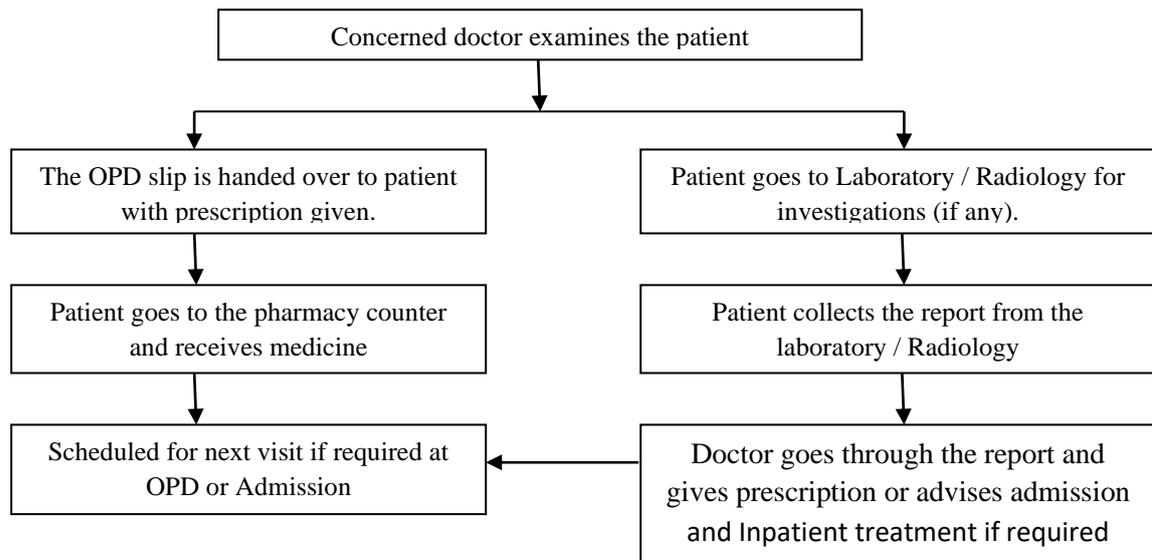
- Registration
- Consultation
- Examination
- Prescription
- Investigation Requisition
- Pharmacy Requisition
- Admission to IPD
- Referral

Responsibility

- The **Registration Clerk** is responsible for issuing Registration slip and providing consultation appointments.
- **Doctors** responsible for examination of the patients and for determining the line of management of the ailment / case thereof.

### Registration Process and OPD consultation





*Figure : Process Flow chart for OPD*



*OPD Block entrance*



*Registration Counters*

**For Process Flow:**

<b>Process Group</b>	OPD	<b>Sub-Process</b>	Registration
<b>Process Location</b>	Registration Counter	<b>Process Owner</b>	Registration Clerk
<b>Input(s)</b>	Patient	<b>Output(s)</b>	No. of OPD registration per day
<ul style="list-style-type: none"> <li>● <b>Process Flow / Process Description</b></li> <li>● OPD patient's registration takes place from 8:00 am to 1:00 pm.</li> <li>● There are two registration counters for both female and male patients.</li> <li>● The registration clerk at the Registration counter writes the patients name, age, sex, guardians name and address in a register and collects Rs 2 from the patients and allocates OPD Registration number on first cum first serve basis.</li> <li>● After registration the patient waits for consultation with medical officer.</li> </ul>			
<b>Patient Records</b>		OPD ticket.	

**THE PUNJAB HEALTH SYSTEMS CORPORATION**  
OPD SLIP

Department \_\_\_\_\_ Date of visit \_\_\_\_\_  
 OPD/CR No. \_\_\_\_\_ Date \_\_\_\_\_  
 Name: Sandeep Singh  
 Father's/Husband Name: Harjinder Singh  
 Age: 25 Sex: M  
 Patient/Relative Card Holder/Govt. Employee/Freedom Fighter/Other \_\_\_\_\_  
 House No./Dali \_\_\_\_\_  
 Village/Town \_\_\_\_\_ Distt. \_\_\_\_\_  
 Diagnosis \_\_\_\_\_

Date/Reports	Notes & Treatment

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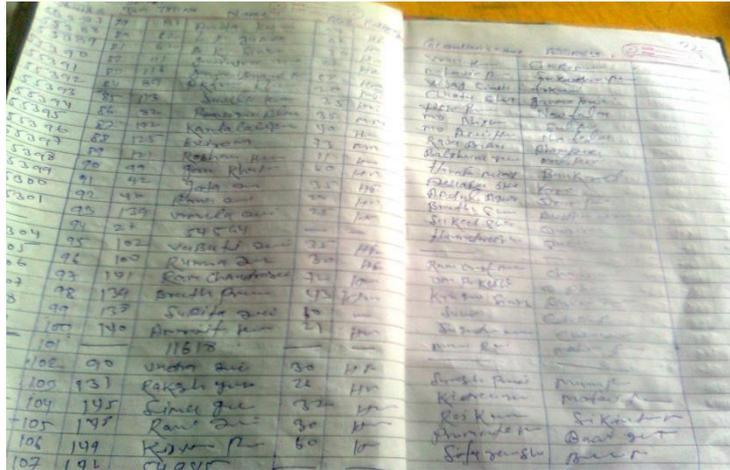
*OPD Slip/Registration slip*



The image shows a page from the OPD Register with handwritten entries. The entries are organized in columns, likely representing patient name, date, and treatment. The handwriting is in black ink on lined paper.

No.	Name	Date	Treatment
725	Harjinder Singh	16/11/16	...
726	(M) Harjinder Singh	16/11/16	...
727	Harjinder Singh	16/11/16	...
728	Harjinder Singh	16/11/16	...
729	Harjinder Singh	16/11/16	...
730	Harjinder Singh	16/11/16	...
731	Harjinder Singh	16/11/16	...
732	Harjinder Singh	16/11/16	...
733	Harjinder Singh	16/11/16	...
734	Harjinder Singh	16/11/16	...
735	Harjinder Singh	16/11/16	...
736	(M) Harjinder Singh	16/11/16	...
737	Harjinder Singh	16/11/16	...
738	Harjinder Singh	16/11/16	...
739	Harjinder Singh	16/11/16	...
740	Harjinder Singh	16/11/16	...
741	Harjinder Singh	16/11/16	...
742	Harjinder Singh	16/11/16	...
743	Harjinder Singh	16/11/16	...
744	Harjinder Singh	16/11/16	...
745	Harjinder Singh	16/11/16	...
746	Harjinder Singh	16/11/16	...
747	Harjinder Singh	16/11/16	...
748	Harjinder Singh	16/11/16	...
749	Harjinder Singh	16/11/16	...
750	Harjinder Singh	16/11/16	...

*OPD Registration Register*

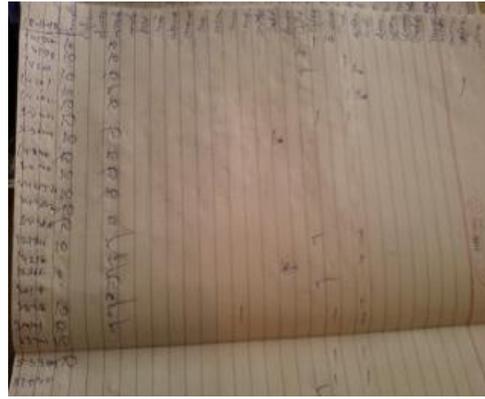


Doctors OPD Register

Process Group	OPD	Sub-Process	Consultation
Process Location	Consultation Chamber	Process Owner	Medical Officer
Input(s)	OPD Ticket	Output(s)	<ul style="list-style-type: none"> <li>No. of OPD Consultations.</li> <li>No. of investigation prescribed.</li> <li>No. of medicine prescribed</li> <li>No. of patients advised for follow up</li> <li>No. of patients referred.</li> </ul>
<p><b>Process Flow / Process Description:</b></p> <ul style="list-style-type: none"> <li>Medical Officer examines the patient as per their turn.</li> <li>After examination, the details are noted in the OPD ticket, and medicines/ dressing / investigations / admission / refer to higher centres/follow up is advised on OPD ticket.</li> <li>The Medical Officer enters the details of the patient in OPD diagnosis and Treatment Register.</li> </ul>			
Patient Records		<ul style="list-style-type: none"> <li>OPD Ticket</li> <li>OPD diagnosis and Treatment Register</li> </ul>	



*Drug Distribution Counter at OPD*



*OPD pharmacy Dispensing Register*

<b>Process Group</b>	OPD	<b>Sub-Process</b>	Dispensing of Medicines
<b>Process Location</b>	Pharmacy OPD	<b>Process Owner</b>	Pharmacist
<b>Input(s)</b>	OPD Ticket	<b>Output(s)</b>	<ul style="list-style-type: none"> <li>• No. of Medicines dispensed per day.</li> <li>• No. of Medicines out of stock per day</li> </ul>
<b>Process Flow / Process Description:</b>			
<ul style="list-style-type: none"> <li>• Patient is directed to the drug distribution counter to collect the medicines.</li> <li>• Patient stands in a queue at the drug distribution counter with his OPD ticket.</li> <li>• Patients give their prescription to the pharmacist.</li> <li>• Pharmacist read it.</li> <li>• Pharmacist searches that particular medicine in OPD pharmacy.</li> <li>• Pharmacist gives medicine to the patient which is available in pharmacy/advice for purchase from outside which is not available in pharmacy.</li> <li>• Patients are described briefly about the intake of medicines.</li> <li>• Pharmacist enters the name of medicine in medicine dispensing register.</li> </ul>			
<b>Patient Records</b>	OPD Ticket, Pharmacy Drug Dispensing Register		

## For Gap Analysis:

<b>Gap ID No</b>		<b>OP001</b>
<b>Gap Statement:</b> Basic facilities are not available in the OPD waiting area for public conveniences.		
<b>Rationale / Explanation:</b> The following are not available		
<ul style="list-style-type: none"> <li>• Help Desk without any staff.</li> <li>• Drinking Water facilities is not available inside the hospital premises, There is no water cooler in OPD Block, patient and visitor used to go for water near Civil Surgeon building which is inside the hospital premises.</li> <li>• There is no adequate chairs in waiting area</li> <li>• No availability of Wheel chairs &amp; trolley</li> <li>• No availability of toilets for disabled persons</li> </ul>		
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>
Structure		High
<b>Gap Reference</b>	<b>IPHS Physical Infrastructure/Departmental Lay Out/Clinical Services(I),a,b,c ,ISO 9001: 2008 6.3.(a), 7.2.1 (b)</b>	



*Drinking water facility without water cooler*



*Male toilet*



*Female toilet*

<b>Gap ID No</b>		<b>OP002</b>	
<b>Gap Statement:</b> Information displays provided at the Waiting area / other public areas are inadequate			
<b>Rationale / Explanation:</b>			
<ul style="list-style-type: none"> <li>• Rights of the patients / Patients Charter are not displayed.</li> <li>• Posters imparting health education</li> <li>• Information is not available in bi-lingual format at various locations.</li> </ul>			
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>	
Structure		Medium	
<b>Gap Reference</b>	<b>IPHS Physical Infrastructure /Departemental Lay Out/Clinical Services(I),a, ISO 9001: 2008 7.2.3 (a)</b>		

<b>Gap ID No</b>		<b>OP003</b>	
<b>Gap Statement:</b> Patient privacy not maintained during the consultation			
<b>Rationale / Explanation:</b>			
<ul style="list-style-type: none"> <li>• To many patient and its relative enter the consultation chamber at a time</li> <li>• Curtain is not available in each chamber during the examination of the patient.</li> </ul>			
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>	
Structure		Medium	
<b>Gap Reference</b>	<b>IPHS Physical Infrastructure/Departemental Lay Out/Clinical Services (I). e, ISO 9001: 2008 6.3(a), 7.2.1(a)</b>		

## 6.2. IN PATIENT DEPARTMENT



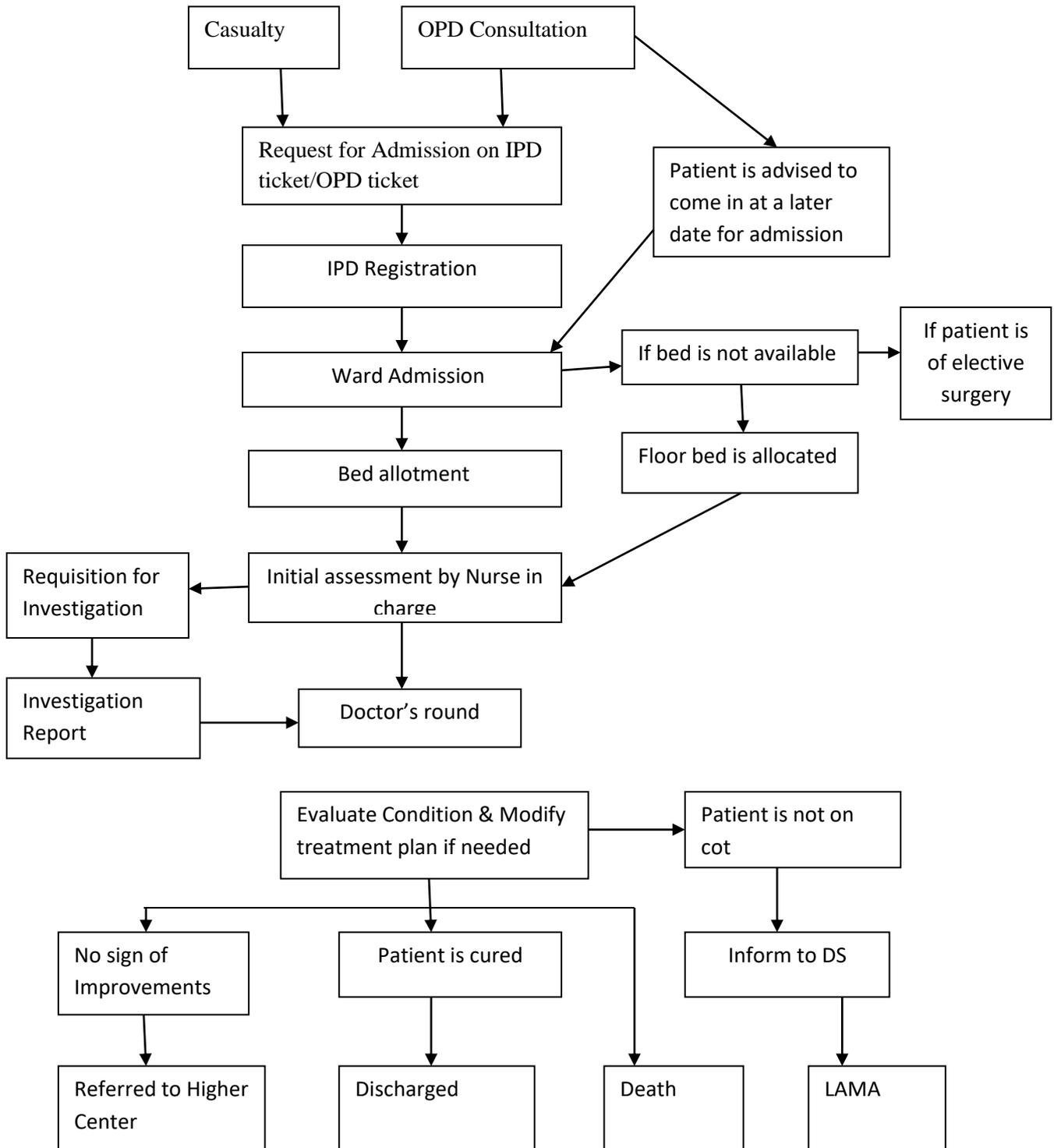
The Inpatient department of the hospital has two stories building. On ground floor there is Maternity ward, first floor consists of surgical ward and ortho ward, second floor consists of medical ward and children ward. The total no. of IPD beds is 100 which are functional. Total no. of nurses present in the hospital is 20. The nursing stations at all the floors are situated at the one end of department. The registers present in the IPD are report book, diet register, admission register, injection expenditure and medicine expenditure register and dhobi book register.

Functionalities of IPD: It covers all indoor patients admitted and receiving treatment at the Hospital. This includes:

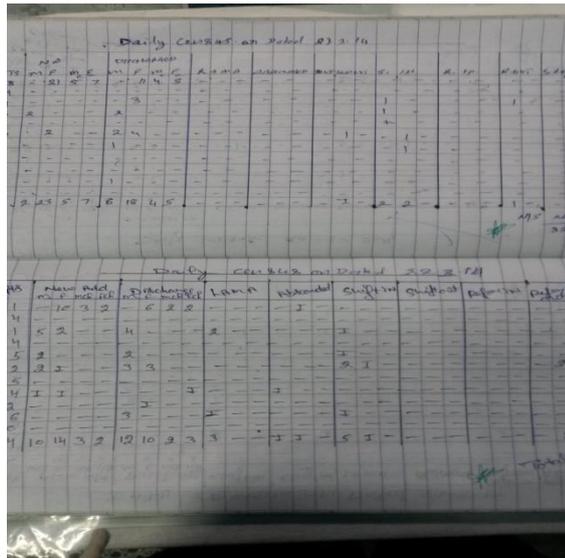
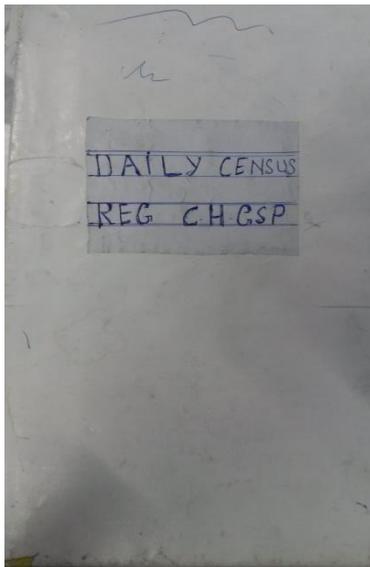
- Admission of the patient
- Assessment of patient by doctors/ nurses
- Medication by doctors
- Administration of drugs
- Monitoring of patient's condition
- General hygiene and upkeep of ward
- Consent for procedures
- Complaint handling
- Discharge of patients
- Death of patients

Responsibility: Doctor, Matron, Nursing In-charge and Housekeeping supervisor.

## Process Flow for IPD



**Figure : Process Flow chart for IPD**



*IPD Register*

**For Process Flow:**

<b>Process Group</b>	IPD	<b>Sub-Process</b>	Admission
<b>Process Location</b>	Wards	<b>Process Owner</b>	Admission clerk
<b>Input(s)</b>	OPD ticket with Doctors advice	<b>Output(s)</b>	No. of Admission
<b>Process Flow / Process Description:</b>			
<ul style="list-style-type: none"> <li>• The doctor advises the patient for admission after examination and writes it on the OPD ticket.</li> <li>• The patient is admitted by the supportive staff of the concern OPD.</li> <li>• The supporting staff admits the patient and enters the detail In Indoor register and generates IPD no. and allots the bed.</li> <li>• The patient is escorted to the particular ward and handed over to the ward In-charge nurses along with Bed head ticket.</li> </ul>			
<b>Patient Records</b>		Bed head ticket and Admission Register	

<b>Process Group</b>	IPD	<b>Sub-Process</b>	Patient Care
<b>Process Location</b>	Wards	<b>Process Owner</b>	Staff Nurse, Medical officer
<b>Input(s)</b>	Patients	<b>Output(s)</b>	Patients care
<b>Process Flow / Process Description:</b>			
<ul style="list-style-type: none"> <li>• Nursing staff check the vitals of the patient and monitor the condition of patient during a fix interval according to condition of patient.</li> <li>• Nursing staff administrate medication of the patients.</li> <li>• Medical officer make sure the condition of the patient by communicating with nursing staff and patient.</li> <li>• If required, Medical officer changes the medication according the condition of patient.</li> <li>• If any investigation required according to the condition of the patient nursing staff call the technician.</li> <li>• If there is no improvement in the health condition of the patient, then the medical officer referred the patients to the higher centre.</li> <li>• If the patient condition is satisfactory, the medical officer gives the discharge order.</li> </ul>			
<b>Patient Records</b>		<b>Bed Head Ticket,</b>	

<b>Process Group</b>	IPD	<b>Sub-Process</b>	Drugs / IV fluid Administration
<b>Process Location</b>	Wards	<b>Process Owner</b>	Staff Nurse, Medical officer
<b>Input(s)</b>	Bed head ticket with doctors advice	<b>Output(s)</b>	IV fluid administration
<b>Process Flow / Process Description:</b>			
<ul style="list-style-type: none"> <li>• Nursing staff administer drugs as per the direction in Bed Head ticket by Doctor</li> <li>• Medical Officer evaluates and examines the patient.</li> <li>• Nursing staff maintain the details of drug administration in IP medication register.</li> </ul>			
<b>Patient Records</b>		<b>IP medication register</b>	

<b>Process Group</b>	IPD	<b>Sub-Process</b>	Discharge
<b>Process Location</b>	All department	<b>Process Owner</b>	Nursing In charge
<b>Input(s)</b>	Bed head ticket with Doctors advice for discharge	<b>Output(s)</b>	Nos. of patient discharge per day,
<b>Process Flow / Process Description:</b>			
<ul style="list-style-type: none"> <li>• Doctors makes the patient round in the morning</li> <li>• Patients who are fit to get discharge, the doctor advices for discharge on the bed head ticket.</li> <li>• The Nursing In-charge collects the all the patient records and gives the discharge slip to the patient prepared by doctor and advices accordingly.</li> </ul>			
<b>Patient Records</b>		Nursing register and Discharge slip  Discharge register.	

### For Gap Analysis:

<b>Gap ID No</b>	IP001
<b>Gap Statement:</b> Hospital does not have disabled friendly infrastructure.	
<b>Rationale / Explanation:</b>	
The following are not available	
<ul style="list-style-type: none"> <li>• Lifts</li> <li>• Handrails in various patient care areas, bathrooms to avoid patient fall.</li> <li>• Disabled friendly toilet is not available.</li> </ul>	
<b>Gap Classification</b>	<b>*Gap Severity Rating</b>
Structural	High
<b>Gap Reference</b>	IPHS /Physical Infrastructure/Departmental Layout/Hospital Administrative and support (VII), ISO 9001:2008 6.3, 7.2.1

<b>Gap ID No</b>		<b>IP002</b>
<b>Gap Statement:</b> Ward are not well equipped for patient care		
<b>Rationale / Explanation:</b>		
<ul style="list-style-type: none"> <li>• Beds are cluttered together.</li> <li>• Bed railings are not available in the wards..</li> <li>• IV stands are not available in adequate number.</li> <li>• Wheel chairs and trolleys not available in each ward.</li> <li>• Crash cart, ECG machine, Suction machine are not available in the ward.</li> <li>• Colour coded bins for BMW segregation is not provided in the wards</li> <li>• Dirty Utility room not provided in each ward.</li> </ul>		
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>
<b>Structure</b>		<b>High</b>
<b>Gap Reference</b>	<b>IPHS Physical Infrastructure/Departmental Layout/Clinical Services (V), ISO 9001:2008 6.3</b>	



*Male ward*



*Male Ward*



*Female Ward*



*Female Ward*

<b>Gap ID No</b>	<b>IP003</b>
<b>Gap Statement:</b> Nursing stations are not located properly for patient monitoring	
<p><b>Rationale / Explanation:</b></p> <ul style="list-style-type: none"> <li>• In all wards nursing station is located at the one corner of the ward.</li> <li>• Basic requirements such as storage place for inventory, linen, drugs has not been provided</li> <li>• There is no janitors closet for Housekeeping materials</li> <li>• No washing areas are designated for washing of badly soiled linen.</li> <li>• No staff change room provided.</li> </ul>	
<b>Gap Classification</b>	<b>*Gap Severity Rating</b>
<b>Structure</b>	<b>High</b>
<b>Gap Reference</b>	<b>IPHS Physical infrastructure/Departmental Layout/ Clinical Services (V), ISO 9001:2008 6.3 (a)</b>

<b>Gap ID No</b>		<b>IP004</b>	
<b>Gap Statement:</b> Infection control not being practiced in the wards.			
<b>Rationale / Explanation:</b>			
<ul style="list-style-type: none"> <li>Standardized Colour coded dust bins are not provided in the wards for segregation.</li> <li>Use of personal protective equipments like glove, mask etc not being used by the nursing staff.</li> <li>There is no pest control in the ward or in the hospital for flies, rodents and mosquitoes.</li> </ul>			
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>	
<b>Process</b>		<b>High</b>	
<b>Gap Reference</b>	<b>IPHS Services/Health Care Workers Safety(5),Services/Patient Safety and Infection Control(4),ISO 9001:2008 7.2.1.(c)</b>		
<b>Supporting Annexure</b>			

<b>Gap ID No</b>		<b>IP005</b>	
<b>Gap Statement:</b> Overcrowding of the patient care areas			
<b>Rationale / Explanation:</b>			
<ul style="list-style-type: none"> <li>There in no particular timing for visitors to see the patients.</li> <li>Security personnel are not posted in hospital to control the traffic.</li> <li>There is no policy regarding the no. of attendants who can stay with patients.</li> </ul>			
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>	
<b>Process</b>		<b>Medium</b>	
<b>Gap Reference</b>	<b>IPHS Physical infrastructure/Departmental Layout/ Clinical Services (V), ISO 9001:2008 7.2.1.(b)</b>		

<b>Gap ID No</b>		IP006
<b>Gap Statement:</b> Internal transfer of patient is not effective.		
<b>Rationale / Explanation:</b>		
<ul style="list-style-type: none"> <li>• There is no clear policy with regard to transfer of patients within the hospital.</li> <li>• Internal transfer is most of the time is done by their own relatives.</li> <li>• Inadequate no. of wheel chair and trolleys.</li> </ul>		
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>
Process		Medium
<b>Gap Reference</b>	IPHS Physical infrastructure/Departmental Layout/ Clinical Services (VI), ISO 9001:2008 7.2.1(b)	
<b>Supporting Annexure</b>		

<b>Gap ID No</b>		IP007
<b>Gap Statement:</b> Facilities for collection and storage of linen are inadequate		
<b>Rationale / Explanation:</b>		
<ul style="list-style-type: none"> <li>• There is no soiled linen collection trolley</li> <li>• Storage cabinets for clean linen are not available</li> <li>• No sluicing room has been provided in the wards.</li> </ul>		
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>
Structure		High
<b>Gap Reference</b>	IPHS Physical Infrastructure/Departmental Layout/Hospital Services(IV), ISO 9001:2008 6.3, 7.2.1	

## 6.3 EMERGENCY DEPARTMENT



The Emergency department is working round the clock. The Emergency department physical infrastructure needs some maintenance. The emergency department has one entrance zone and one exit zone and one consultation chamber area with waiting area of the patients. In emergency department one medical officer present all the time. Emergency Department also includes Trauma Ward/ICU And Blood Bank.

Functionalities of Emergency: Scope of services of the Emergency range from providing Episodic, Primary, Acute (comprehensive) care to referrals.

This includes:

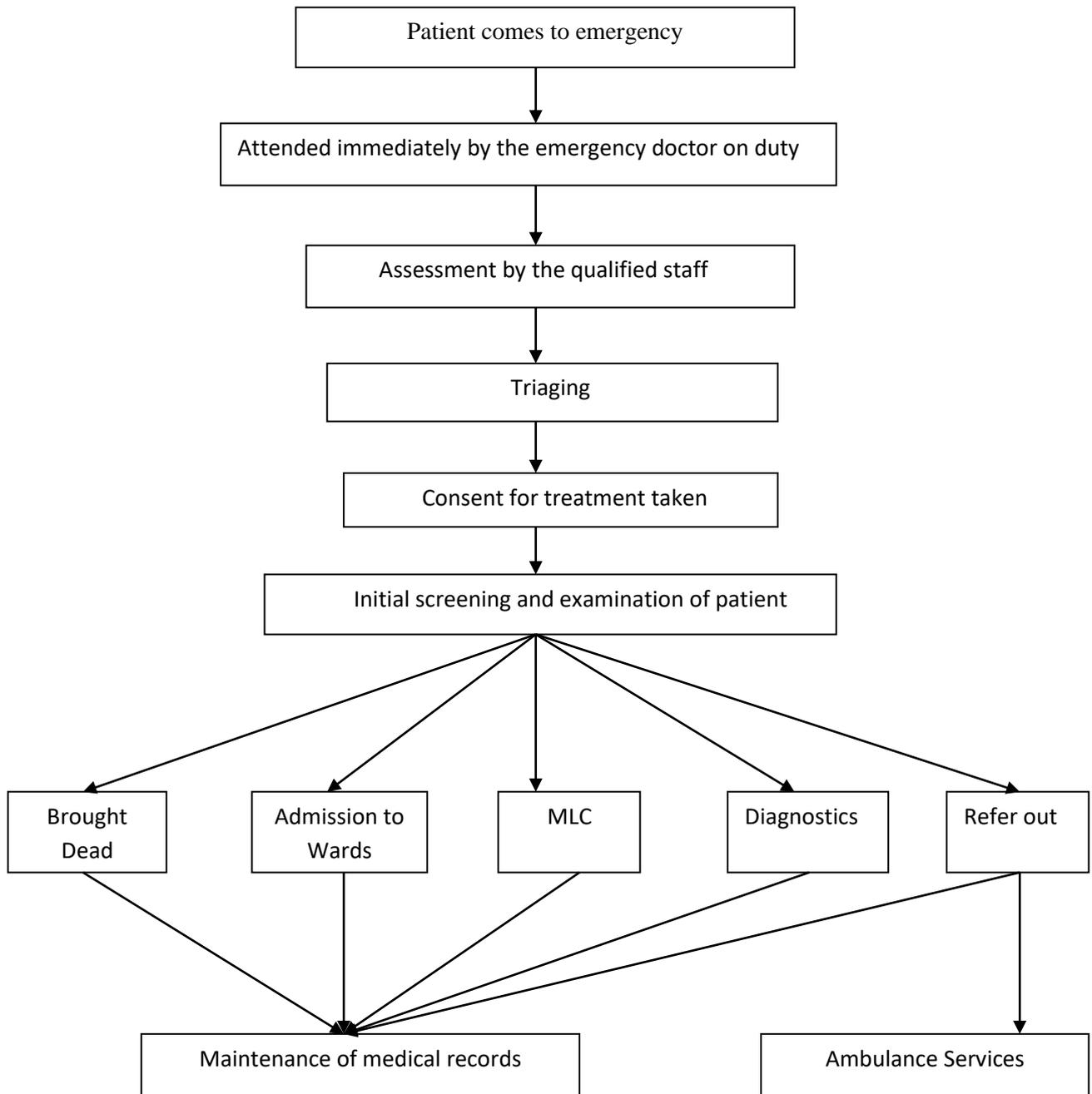
- Providing immediate care and stabilizing the patient
- Admission to IPD
- Referral of patients to higher medical Institutions
- Accepting referred patients from other hospitals
- Providing immediate medical and surgical intervention.

Overall Responsibility:

Emergency: Emergency

Disaster: CS/DMC/Senior Medical Officer, supported by all hospital staff and doctors

## Process Flow for Emergency



*Figure : Process Flow chart for Emergency*

### For Process Flow:

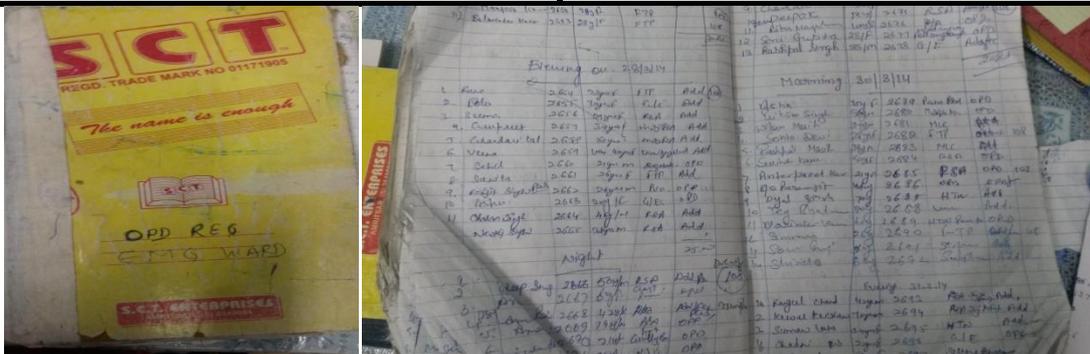
<b>Process Group</b>	Emergency	<b>Sub-Process</b>	Registration
<b>Process Location</b>	Registration counter	<b>Process Owner</b>	Nrse/Clerk
<b>Input(s)</b>	Patient	<b>Output(s)</b>	<ol style="list-style-type: none"> <li>1. Total no. of patients seen in emergency per day.</li> <li>2. Total no. of MLC cases</li> <li>3. Total no. of patient admitted through emergency.</li> <li>4. Total no. of patient referred.</li> <li>5. Total no. of deaths in emergency.</li> </ol>

### Process Flow / Process Description

- Emergency patient comes directly to emergency.
- According to the nature of emergency cases doctors are called by staff that is looking after the emergency patient.
- Doctors examine the patient and as per the condition of patient they either admit the patient or discharge it.
- On duty staff registers the patient and inform the doctor.

### Patient Records

### Emergency register



Emergency Register

<b>Process Group</b>	Emergency	<b>Sub-Process</b>	Consultation
<b>Process Location</b>	Emergency room	<b>Process Owner</b>	Consultant
<b>Input(s)</b>	Patient slip	<b>Output(s)</b>	No of patients, Prescription, Investigation slips, free coupons for Investigation
<b>Process Flow / Process Description:</b>			
<ul style="list-style-type: none"> <li>• After registration patient is examined by the doctor in emergency room.</li> <li>• After examination doctor writes down the treatment and investigation as required.</li> <li>• On duty staff/ dresser Starts the treatment as advised by the doctor.</li> <li>• Nursing staff is not deputed in the emergency.</li> <li>• Nursing activity is done by dresser or pharmacist on duty in emergency.</li> <li>• The patient is shifted toward / OT / referred as per the needs.</li> </ul>			
<b>Patient Records</b>	Prescription, Investigation slip, referral slip, Admission register, Bed Head Ticket		



*Emergency duty chart*



*Emergency Room*

## For Gap Analysis:

<b>Gap ID No</b>		<b>EMER001</b>
<b>Gap Statement:</b> Non availability of Ambulance control room for effective patient transport.		
<b>Rationale / Explanation:</b>		
<ul style="list-style-type: none"> <li>• There is no one In-charge of ambulance for smooth coordination.</li> <li>• The patient has to call 108 ambulance service himself to avail the service. 108 services provide both ACLS and BLS ambulance.</li> <li>• Hospitals own ambulance is not in working condition. .</li> </ul>		
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>
<b>Structure</b>		<b>Medium</b>
<b>Gap Reference</b>	<b>IPHS Physical Infrastructure/Departmental Layout/Clinical Services (IX), ISO 9001: 2008 6.3 (c)</b>	



*Hospital Ambulance*



*108 Ambulance*



*108 ambulance with equipments and facilities*

<b>Gap ID No</b>	<b>EMER002</b>
<b>Gap Statement:</b> Emergency department is not fully Equipped.	
<ul style="list-style-type: none"> <li>• Emergency Crash cart with defibrillator is not available in the department.</li> <li>• Only emergency tray is available in the department</li> <li>• Disaster cupboard is not available in the department.</li> <li>• There is no resuscitation room in the emergency department.</li> <li>• Multi Para Monitor/ Oxygen Saturation probe is not available in the casualty.</li> </ul>	
<b>Gap Classification</b>	<b>*Gap Severity Rating</b>
Process	High
<b>Gap Reference</b>	<b>IPHS Physical Infrastructure/Departmental Layout/Clinical Services (IX), ISO 9001: 2008 6.3 (b)</b>



*Bed condition in emergency*



*Equipments in emergency*

<b>Gap ID No</b>	EMER003
<b>Gap Statement:</b> Department is not designed as per requirements of the department.	
<b>Rationale / Explanation:</b>	
<ul style="list-style-type: none"> <li>• The department is not organized as per the workflow.</li> <li>• Area for triaging in case of disaster is not provided for.</li> <li>• Dirty Utility has not been provided.</li> </ul>	
<b>Gap Classification</b>	<b>*Gap Severity Rating</b>
Structure	High
<b>Gap Reference</b>	<b>IPHS Physical Infrastructure/Departmental Layout/Clinical Services (IX), ISO 9001: 2008 6.3 (a), 7.2.1</b>

## 6.4 LABORATORY



NAME OF TEST	RATE	NAME OF TEST	RATE
1. HB -	10/-	12. URINE C/E -	20/-
2. TLC, -	10/-	13. HBSAG -	15/-
3. BLOOD GROUP -	30/-	14. HCV -	150/-
4. B/SUGAR -	20/-	15. HIV -	FREE
5. B/UREA -	20/-	16. S. CHOLESTROL -	25/-
6. S. CREATININE -	20/-	17. S. TRIGLYCERIDES -	25/-
7. S. URIC ACID -	20/-	18. PREGNANCY TEST -	30/-
8. S. BILIRUBIN -	20/-	19. VDRL -	30/-
9. SGOT -	20/-	20. WIDAL -	30/-
10. SGPT -	20/-	21. CBC -	50/-
11. BT, CT -	20/-	22. DENGUE TEST -	300/-

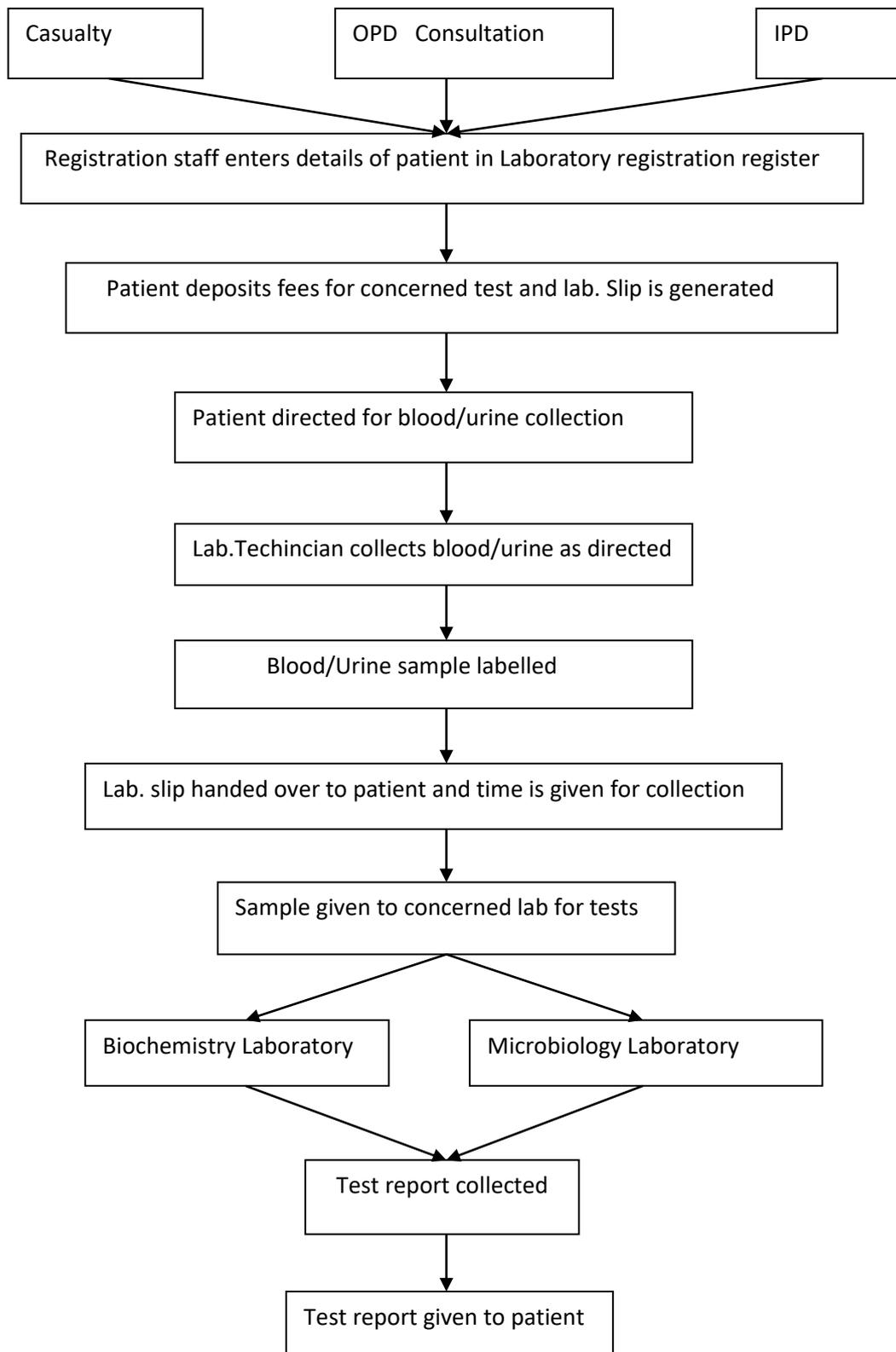
CIVIL HOSPITAL GURDASPUR

The laboratory is situated in OPD block of hospital. This Department comprises of Biochemistry Laboratory and Microbiology Laboratory. It has one pathologist, one microbiologist, 7 Laboratory technicians and one Laboratory attendant.

Investigations Performed in hospital Laboratory are:

1. Hb Test
2. TLC
3. Blood Group
4. Blood Sugar
5. Blood Urea
6. Serum Creatinine
7. Serum Uric Acid
8. Serum Bilirubin
9. SGOT
10. SGPT
11. BT,CT
12. Urine
13. HBSAG
14. HCV
15. HIV
16. S.Cholestrol
17. S.Triglycerides
18. Pregnancy Test
19. VDRL
20. WIDAL
21. CBC
22. Dengue Test

## Process Flow for Laboratory



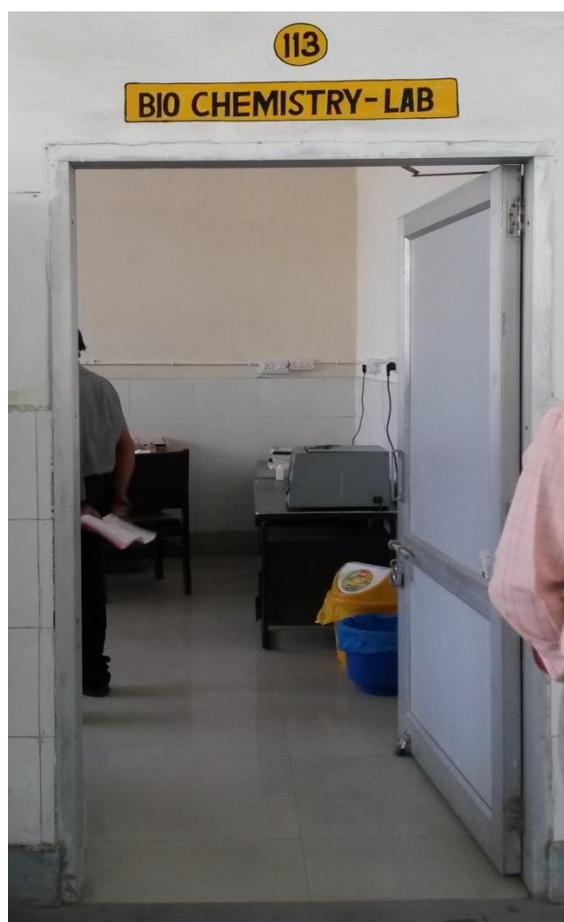
## For process flow

<b>Process Group</b>	Investigations and diagnosis	<b>Sub-Process</b>	Sample collection
<b>Process Location</b>	Lab	<b>Process Owner</b>	Technician
<b>Input(s)</b>	Doctors prescription	<b>Output(s)</b>	Sample collected
<b>Process Flow / Process Description.</b>			
<ul style="list-style-type: none"> <li>• After counseling patients are send to sample collection area for sample collection</li> <li>• The technician enters the details in Master Lab register</li> <li>• Specific number is generated for each patient</li> <li>• Sample is collected from the patient</li> <li>• In case of Inpatients the nursing staff enters the requisition in the laboratory register of ward.</li> <li>• The register is sent to the Laboratory and after entering the details in the work register the technician counter signs the register.</li> <li>• The technician comes to the ward and collects the sample.</li> <li>• Collected sample is kept along with the slip with details of Patient Name, Reg. no. and nature of test.</li> <li>• Collected sample is kept along with the slip with details of Patient Name, Reg. no. and nature of test.</li> </ul>			
<b>Patient Records</b>			



*Laboratory registration counter*

<b>Process Group</b>	Lab Investigations	<b>Sub-Process</b>	Processing
<b>Process Location</b>	Lab	<b>Process Owner</b>	Doctor/ technician
<b>Input(s)</b>	Collected samples	<b>Output(s)</b>	Total number of samples processed /day
<b>Process Flow / Process Description</b>			
<ul style="list-style-type: none"> <li>• Samples are segregated as per the prescription</li> <li>• Samples are forwarded to different areas such as Bio-chem, Hematology, Microbiology</li> <li>• Samples are processed by the technician</li> </ul>			
<b>Patient Records</b>			

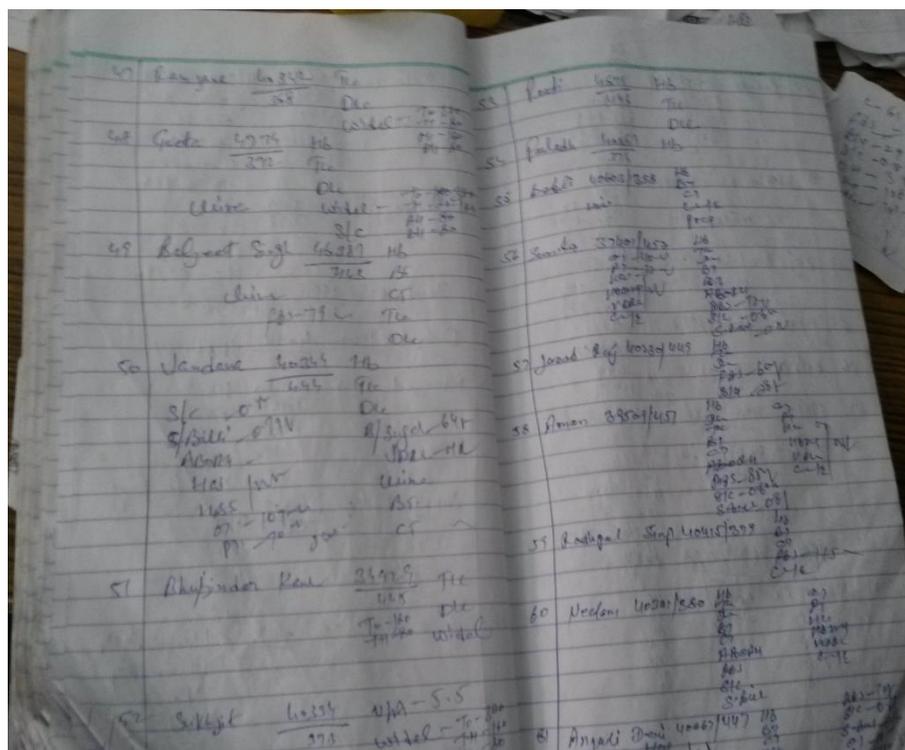


*Biochemistry Laboratory*



*Microbiology Laboratory*

<b>Process Group</b>	Lab investigation	<b>Sub-Process</b>	Reporting
<b>Process Location</b>	Lab	<b>Process Owner</b>	Pathologist
<b>Input(s)</b>	Processed sample	<b>Output(s)</b>	Total number investigation per day
<b>Process Flow / Process Description.</b>			
<ul style="list-style-type: none"> <li>• After processing the results are checked by the pathologist</li> <li>• The technician makes entries in the register</li> <li>• A hand written report is prepared by the technician and signed by pathologist.</li> <li>• Patients come to the department to collect their lab reports.</li> </ul>			
<b>Patient Records</b>			



*Laboratory Register*

**For gap analysis**



*Equipment Washing Area*



*Non Functional Autoclave*

<b>Gap ID No</b>		<b>LAB 001</b>	
<b>Gap Statement:</b> Space in the laboratory is not sufficient as per the requirements of district hospital.			
<b>Rationale / Explanation:</b>			
In hospitals laboratory area.			
<ul style="list-style-type: none"> <li>• The Laboratory area is inadequate for the requirements of the laboratory.</li> <li>• There is no separate haematology lab.</li> <li>• Proper space for washing and autoclaving of the sample collection vials is not available.</li> </ul>			
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>	
<b>Structure</b>		<b>High</b>	
<b>Gap Reference</b>	<b>IPHS Physical Infrastructure/Departmental Lay Out/Clinical Services(III), ISO 9001:2008 6.3 (a)</b>		

<b>Gap ID No</b>		<b>LAB 002</b>
<b>Gap Statement:</b> Equipments are not available as the work load		
<b>Rationale / Explanation:</b>		
<ul style="list-style-type: none"> <li>• Most of the tests are done manually.</li> <li>• Modern Lab equipments are not available and hence most of the tests are outsourced.</li> </ul>		
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>
Structure		High
<b>Gap Reference</b>	IPHS Physical Infrastructure/Departmental Lay Out/Clinical Services(III), ISO 9001:2008 6.3 (b)	

<b>Gap ID No</b>		<b>LAB 003</b>
<b>Gap Statement:</b> No designated sample collection area in the lab.		
<b>Rationale / Explanation:</b>		
<ul style="list-style-type: none"> <li>• The sample collection is done in the reception area.</li> <li>• The entire OPD patient come to the testing room for giving samples.</li> <li>• There is no separate sample collection room in the OPD.</li> </ul>		
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>
Structure		Medium
<b>Gap Reference</b>	IPHS Physical Infrastructure/Departmental Lay Out/Clinical Services(III), ISO 9001:2008 6.3 (a)	

<b>Gap ID No</b>		<b>LAB 004</b>
<b>Gap Statement:</b> Standard safety precautions are not been followed.		
<b>Rationale / Explanation:</b>		
<ul style="list-style-type: none"> <li>• Personal protective devices such as Gloves, Apron, and Mask are not used by the technician while drawing samples and during processing and washing of test tubes.</li> <li>• No needle cutter available in the department.</li> </ul>		
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>
Process		Medium
<b>Gap Reference</b>	IPHS Services/Patient Safety and Infection Control(5), ISO 9001:2008 6.3.(b), 7.2.1 (b)	

<b>Gap ID No</b>		<b>LAB 005</b>
<b>Gap Statement:</b> Maintenance of the lab equipment is not carried out.		
<b>Rationale / Explanation:</b>		
<ul style="list-style-type: none"> <li>• There is no record of preventive maintenance of the equipment</li> <li>• Equipments are not calibrated.</li> <li>• There is no record of calibration.</li> </ul>		
<b>Gap Classification</b>		<b>*Gap Severity Rating</b>
Process		High
<b>Gap Reference</b>	IPHS Physical Infrastructure/Departmental Lay Out/Clinical Services III), ISO 9001:2008 6.3(b)	

## **CHAPTER 7: CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

The study revealed and found out the gaps which need to be full filled for the quality improvement of the district hospital, Gurdaspur. By achieving the quality care services District Hospital is able get ISO 9001:2008 certification and also achieve IPHS Standards

Gaps of all the departments are mainly process gaps, some of those gaps are infrastructure, equipment and manpower gaps. Study also revealed that what specific and general action to be taken for full filling those gaps. What kind of trainings is required and will be given to the staff including nurses, housekeepers, ward boys and medical officers. Special consideration on gaps of the department is given and action plan is prepared and need to be monitored by internal experts who include Matron, Senior Medical Officer and Civil surgeon.

### **Recommendations**

#### **Action Plan suggested for OPD:**

- Drinking water facility/water cooler to be installed near OPD waiting area.
- Ramp with side rails, Disable friendly toilets to be provided in the Hospital.
- Sitting arrangements to be made for waiting patients. No of chairs to be increased.
- Trash bins to be installed in proper places in adequate quantity. Also near water cooler and in toilets.
- Arrangements of Wheel Chairs, stretcher and trolleys.
- Arrangement of BP apparatus in the OPD chamber.
- Arrangement of weighing machine in the OPD.
- Patient privacy should be maintained in the OPD chambers.
- All patient care equipments and instruments to be provided in all patient care areas as per IPHS guidelines
- Adequate number of Tube lights to be provided.
- Uniform signage system to be developed and displayed throughout the hospital
- Rights of the patients / Patients Charter to be displayed in area where it is fully visible and readable by public.
- Posters imparting health education and awareness to be posted in prominent places in vicinity.
- Bilingual format for information dispersal to be implemented.
- Suggestion box should be available in the OPD and IPD area.
- Curtains to be provided for doors of consultation rooms and in all patient care areas.
- Security personnel have to be employed to help in control crowd.

### **Action Plan suggested for IPD:**

- Lifts, Handrails in various patient care areas, bathrooms has to be installed to avoid patient fall.
- Disabled friendly toilet has to be made available.
- The wards to be rearranged so as to provide adequate space for smooth movement.
- Crash Cart in IPD.(emergency medicine tray)
- Proper locker for keeping the medicines in the IPD.
- Water Supply to be made available in the IPD.
- Phototherapy, baby warmer has to be available in the post delivery ward.
- Visiting time to be fixed for patient's attendants.
- The ward need to be provided with adequate equipments, Instruments, patient furniture for proper patient care activities such as IV Stands, Crash carts, Lockers.
- Equipment such as ECG machine, Suction machine has to be made available in the ward.
- Wheel chair and trolleys to be provided for each patient care area
- Repair work of doors and windows has to be done at the earliest.
- Bed railings to be made available in the wards.
- Color coded bins for BMW segregation has to be provided in the wards.
- Nursing station has to be located centrally for the direct observation and monitoring.
- Nursing station has to be equipped with essential patient care equipments such as Crash carts, Dressing trolleys, sets, BP apparatus, Stethoscope, Suction apparatus, oxygen cylinders, Medicines etc.
- Basic requirements such as storage place for inventory, linen, and drugs have to be provided.
- Washing areas to be earmarked for washing of badly soiled linen.
- Hand washing facility to be provided in all patient care areas.
- Documents related to patient care have to be complete.
- The department to be integrated with Registration and Admission & Discharge units.
- Training of staff in BMW handling will be done.
- Proper channel of waste disposal to be ensured.
- Periodical pest control measures to be taken in the ward or in the hospital.
- Timing for visitors to see the patients has to be decided and strictly imposed.
- Appointment of Security personnel to be taken in all the areas to control the traffic.
- Hospital policy to be devised and implemented regarding the no. of attendants who can stay with patients.
- Hospital policy to be devised and implemented regarding transfer of patients within the hospital.
- Adequate no. of wheel chair and trolleys to be maintained.
- Soiled linen collection trolley has to be made available.
- Storage cabinets for clean linen have to be made available.
- Sluicing room has to be there in the wards.

### **Action Plan suggested for Emergency:**

- One person has to be made coordinator for ambulance services.
- Phone no. for Ambulance to be advertised.
- Availability of driver has to be insured.
- Staff to be appointed and positioned according to work pattern.
- Observation beds to be available in the Emergency department.
- Crash Cart with all essential drugs have to be available.(emergency medicine tray)
- Patient monitoring equipment to be available in the Emergency.
- Disaster cupboard to be made available in the department.
- Arrangement for resuscitation room has to be done.
- Ramp in Emergency department to be made available.
- The department to be organized as per the workflow.
- Triage Area needs to be earmarked just next to the entrance to the ER
- Equipments in Emergency should be as per IPHS guidelines.
- Stretcher, wheel chair bay has to be made available.

### **Action Plan suggested for Laboratory:**

- Separate lab for Haematology needs to be built.
- Demarcation of washing and sampling area to be done.
- Availability of personal protective devices such as masks, gloves and apron for all workers.
- Availability of fire extinguisher in the lab.
- Availability of equipments and instruments as per IPHS Guidelines.
- Manual for laboratory showing all the standard procedures.
- Display of standard operating procedures in laboratory.
- Availability of needle cutter and needle destroyer.
- External quality assurance tests to be done.
- Proper infection control measures to be practiced.
- Practice of proper segregation of waste material as per biomedical waste standards.
- Calibration of instruments and record for calibration to be maintained.
- Record maintenance of preventive maintenance of each equipment.

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# ANNEXURE

# IPHS Checklist

## Physical Infrastructure

Physical Infrastructure		
		Current Availability in the Hospital
2.1.	Size (Area) of the Hospital (In Sq. Meters)	6 acres
2.2.	Number of indoor beds available	100/100
Location		
2.3.	Is the hospital located near residential area? (Yes / No)	Yes
2.4.	Is the hospital building free from danger of flooding? (Yes / No)	No
2.5.	Is the hospital located in an area free from pollution of any kind including air, noise, water and land pollution? (Yes /No)	No
2.6.	Is necessary environmental clearance obtained? (Yes / No)	Yes
2.7.	Whether hospital building is disabled friendly as per provisions of Disability Act? (Yes / No)	Yes
Building Status		
2.8.	What is the present stage of construction of the building (Complete: 1; Incomplete: 0)	complete
2.9.	Compound Wall / Fencing (1-All around; 2-Partial; 3-None)	All around
2.10.	Condition of plaster on walls (1- Well plastered with plaster intact every where; 2- Plaster coming off in some places; 3- Plaster coming off in many places or no plaster)	plaster coming off in some places
2.11.	Condition of floor (1- Floor in good condition; 2- Floor coming off in some places; 3- Floor coming off in many places or no	floor in good condition

	proper flooring)	
<b>Building Requirements (Availability to be recorded in Yes / No)</b>		
2.12.	Administrative Block	yes
2.13.	Circulation Area	no
2.14.	Entrance Area	Yes
2.15.	Ambulatory Care Area (OPD)	Yes
2.16.	Waiting Spaces adjacent to each consultation and treatment room	Yes
2.17.	Registration Counter	Yes
2.18.	Assistance and Enquiry Counter	Yes
2.19.	<b>Departments / Clinics</b>	
a.	General	Yes
b.	Medical	Yes
c.	Surgical	Yes
d.	Ophthalmic	Yes
e.	ENT	Yes
f.	Dental	Yes
g.	Obstetric & Gynecologist	Yes
h.	Paediatrics	yes
i.	Dermatology & Venereology	yes
j.	Psychiatry	yes
k.	Neonatology	yes

i.	Orthopedic	yes
m.	Social Service	no
n.	Infectious & Communicable Diseases located in remote corner with independent access	no
o.	National Health Programmes	yes
2.20.	Nursing Stations	yes
2.21.	<b>Diagnostic Services</b>	
a.	X-Ray Room	yes
b.	Dark Room for X-Ray film developing and processing	yes
c.	X-Ray Reporting Room for Doctor	yes
d.	Is X-Ray room accessible to OPD, Wards and Operation Theatre?(Yes / No)	yes
e.	Ultrasound Room	yes
f.	Is Ultrasound room accessible to OPD, Wards and Operation Theatre?(Yes / No)	yes
g.	Ultrasound Reporting room for Doctors	yes
2.22.	<b>Clinical Laboratory</b>	
a.	Fully equipped laboratory	no
b.	Sample Collection Room with facility for quick diagnosis of blood, urine, etc.	yes
c.	Separate reporting room for Doctors	yes
2.23.	<b>Blood Bank</b>	
a.	Fully equipped Blood Bank	no
b.	Is the blood bank located in close proximity to pathology department and at an accessible distance to Operation Theatre, ICU, Emergency and Accident department? (Yes / No)	yes

c.	Separate reporting room for Doctors	yes
2.24.	<b>Intermediate Care Area (Inpatient Nursing Units)</b>	
a.	General Wards (Number to be given)	
i.	Male	1
ii.	Female	1
iii.	Total	2
b.	Private Wards (Number to be given)	1
c.	Wards for Specialities (Number to be given)	5
d.	Nursing Stations (Number to be given)	4
e.	Doctors' Duty Room	yes
f.	Pantry	yes
g.	Isolation Room	no
h.	Treatment Room	yes
i	Nursing Store	yes
j.	Toilets	yes
2.25.	<b>Pharmacy (Dispensary)</b>	
a.	Medical Store facility for indoor patients	yes
b.	Separate pharmacy with accessibility for OPD patients	yes
2.26.	<b>Intensive Care Unit (ICU) &amp; High Dependency Wards</b>	
a.	Number of beds available in ICU	10
b.	Number of beds available in High Dependency Wards	no
c.	Changing Room	no
d.	Is the unit located close to OT, X-Ray and Pathology department? (Yes / No)	yes
e.	Essential Specialized Services	no

i.	Piped Suction	no
ii.	Medical Gases	no
iii.	Uninterrupted Electric Supply	no
iv.	Heating	no
v.	Ventilation	no
vi.	Central Air Conditioning	no
f.	Nurses' Station	no
g.	Clean Utility Area	no
h.	Equipment Room	no
2.27.	<b>Critical Care Area (Emergency Services)</b>	
a.	Critical Care Area with independent entry	yes
b.	Adequate space for free passage of vehicles	no
c.	Covered area for alighting patients	no
2.28.	<b>Operation Theatre</b>	
a.	Fully equipped Operation Theatre	no
b.	Location of OT in close relation to ICU, Radiology, Pathology, Blood Bank	yes
c.	Specialized Services in OT	no
i.	Piped suction and medical gases	no
ii.	Uninterrupted Electric Supply	no
iii.	Heating	no
iv.	Air Conditioning	yes
v.	Ventilation	yes
vi.	Efficient Life Service	yes
d.	Other Rooms adjoining OT	

i.	Preparation Room	no
ii.	Pre-operative Room	no
iii.	Post-operative Room	yes
iv.	Scrub-up Room for washing and scrubbing	yes
v.	Sub-sterilizing Unit	yes
2.29.	<b>Delivery Suit Unit</b>	
a.	Fully equipped Delivery Suit Unit located near OT	yes
b.	Facilities in Delivery Suit Unit	
i.	Reception and admission	yes
ii.	Examination and Preparation Room	yes
iii.	Labour Room (clean and a septic room)	yes
iv.	Delivery Room	yes
v.	Neo-natal Room	no
vi.	Sterilizing Rooms	yes
vii.	Sterile Store Room	no
viii.	Scrubbing Room	no
ix.	Dirty Utility	no
2.30.	<b>Physiotherapy</b>	
a.	Physiotherapy department located at a convenient access to both outdoor and indoor patients	for opd
b.	Facilities	
i.	Physical and electro-therapy rooms	no
ii.	Gymnasium	no
iii.	Office	no
iv.	Store	no

v.	Separate toilets for male and female	no
2.31.	<b>Hospital Services</b>	
a.	Hospital Kitchen (Dietary Service)	yes
b.	Central Sterile and Supply Department (CSSD)	
i.	CSSD located	yes
ii.	Easily accessible to OT	yes
iii.	Provision of hot water supply	no
c.	Hospital Laundry	no
d.	Medical and General Stores	yes
e.	Mortuary	yes
2.32.	<b>Engineering Services</b>	
a.	<b>Electric Engineering</b>	
i.	Electric Sub Station and standby generator room	yes
ii.	Emergency Lighting (shadow less light in OT and Delivery Rooms and portable light units in Wards and Departments)	yes
iii.	Call Bells	no
iv.	Ventilation (Natural or mechanical exhaust)	yes
b.	<b>Mechanical Engineering</b>	
i.	AC and Room Heating in OT and Neo-natal units	yes
ii.	Air coolers or hot air convectors	no
iii.	Water coolers and Refrigerators	no
c.	<b>Public Health Engineering</b>	
i.	<b>Water Supply</b>	
1	Round the clock piped water supply	yes
2	Overhead water storage tank with	no

	pumping and boosting arrangements	
3	Separate provision for fire fighting and	no
	water softening plants	
ii.	<b>Drainage and Sanitation</b>	
	Proper drainage and sanitation system for waste water, surface water, sub soil water and sewerage	no
iii.	<b>Waste Disposal System</b>	
	Proper waste disposal system as per National Guidelines	no
iv.	<b>Trauma Centre</b>	
d.	Fire Protection	yes
e.	Telephone and Intercom	no
f.	Medical Gas	yes
g.	Cooking Gas	No
h.	Laboratory Gas	No
i.	Office-cum-store for maintenance work	No
j.	Parking place	Yes
k.	Administrative Services	Yes
i.	General Section	yes
ii.	Medical Records Section	no
l.	Committee Room	no
m.	Residential Quarters for all medical and Para medical staff	yes

**# Manpower requirement as per workload in the Civil Hospital,  
Gurdaspur(100 bedded)**

**A. Doctors**

S. N o.	Personnel	IPHS Norm	Sanctioned posts	Proposed new posts (Required as per workload)	Current Availability at Hospital (Indicate Numbers)	Total
1	Hospital Superintendent/ S.M.O	1	1	0	1	1
2	Medical Specialist	3	3	0	3	3
3	Surgery Specialists	2	3	0	3	2
4	O&G specialist	4	1	1	3	4
5	Psychiatrist	1	1	0	1	1
6	Dermatologist / Venereologist	1	1	0	1	1
7	Paediatrician	2	2	0	2	2
8	Anesthetist (Regular / trained)	2	1	0	2	2
9	ENT Surgeon	1	2	1	2	2
10	Ophthalmologist	1	1	0	1	1
11	Orthopedician	1	1	1	1	2
12	Radiologist	1	1	1	0	1
13	Microbiologist	1	1	0	1	1
14	Casualty Doctors / General Duty Doctors	6	7	0	4	7
15	Dental Surgeon	1	2	0	2	2
16	Forensic Expert	1	1	0	1	1
17	Public Health Manager <sup>1</sup>	1	0	0	0	1
18	AYUSH Physician <sup>2</sup>	2	1	0	1	1
19	Pathologists	2	1	0	1	1
	<b>Total</b>	<b>34</b>	<b>23</b>		<b>23</b>	<b>36</b>

<sup>1</sup> May be a Public Health Specialist or management specialist trained in public health

<sup>2</sup> Provided there is no AYUSH hospital / dispensary in the district headquarter

**B. Para-Medicals**

S.N o.	Personnel	IPHS Norm	Sanctioned posts	Proposed new posts (Required as per workload)	Current Availability at Hospital (Indicate Numbers)	Total
1	Staff Nurse*	75 to 100	24	24	20	48
2	Hospital worker (OP/ward +OT+ blood bank)	20	10	20	10	30
3	Sanitary Worker	15	7	7	7	15
4	Ophthalmic Assistant / Refractionist	1	1	0	1	1
5	Social Worker / Counsellor	1	3	0	3	3
6	Cytotechnician	1	0	1	0	1
7	ECG Technician	1	0	0	0	1
8	ECHO Technician	1	0	1	0	1

9	Audiometrician		0	0	0	0
10	Laboratory Technician ( Lab + Blood Bank)	12	10	2	10	12
11	Laboratory Attendant (Hospital Worker)	4	2	4	2	6
12	Dietician	1	0	1	0	1
13	PFT Technician	-	0	0	0	0
14	Maternity assistant (ANM)	6	8		8	6
15	Radiographer	2	4	0	4	4
16	Dark Room Assistant	1	0	1	0	1
17	Pharmacist <sup>1</sup>	5	3	2	3	5
18	Matron	1	1	0	1	1
19	Assistant Matron	2	0	0	0	2
20	Physiotherapist	1	1	0	1	1
21	Statistical Assistant	1	1	0	1	1
22	Medical Records Officer / Technician	1	0	1	0	1
23	Electrician	1	0	1	0	1
24	Plumber	1	0	1	0	1

\* 1 Staff Nurse for every eight beds with 25% reserve

<sup>1</sup> One may be from AYUSH

### C Administrative Staff

S. No.	Personnel	IPHS Norm	Sanctioned posts	Proposed new posts (Required as per workload)	Current Availability at Hospital (Indicate Numbers)	Total
	Manager (Administration)	-	0	1	0	1
	Junior Administrative Officer	1	0	1	0	1
	Office Superintendent	1	0	1	0	1
	Assistant	2	1	2	1	2
	Junior Assistant / Typist	2	0	2	0	2
	Accountant	2	1	0	1	2
	Record Clerk	1	0	1	0	1
	Office Assistant	1	0	1	0	1
	Computer Operator	1	5	0	5	5
	Driver	2	1(phsc)	1	1(phsc)	2
	Peon	2	0	2	0	2
	Security Staff*	2	0	5	0	6
	<b>Total</b>	<b>17</b>	<b>9</b>	<b>17</b>	<b>9</b>	<b>26</b>

**Note:** Drivers post will be in the ratio of 1 Driver per 1 vehicle. Driver will not be required if outsourced

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

**D. Operation Theatre**

S.No.	Staff	IPHS Norm		Current Availability at Hospital (Indicate Numbers)	Proposed new posts (Required as per workload)		
		Emergency / FW OT	General OT				
1	Staff Nurse	8	1	2	4		6
2	OT Assistant	4	2	1	5		6
3	Sweeper	3	1	1	3		4
	<b>Total</b>	<b>15</b>	<b>4</b>	<b>4</b>	<b>12</b>		<b>16</b>

**E. Blood Bank / Blood Storage**

S.No.	Staff	IPHS Norm		Current Availability at Hospital (Indicate Numbers)	Proposed new posts (Required as per workload)		
		Blood Bank	Blood Storage				
1	Staff Nurse	3	1	1	0		1
2	MNA / FNA	1	1	0	0		0
3	Lab Technician	1	-	6	0		6
4	Safai Karamchari	1	1	1	0		2
	<b>Total</b>	<b>6</b>	<b>3</b>	<b>8</b>	<b>0</b>		<b>9</b>