Summer Training at
Santokba Durlabhji Memorial Hospital cum Medical Research Institute, Jaipur
(April 1–May 31, 2014)

Pattern of Patient Flow and Patient Satisfaction

By
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Under the guidance of
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MBA- Hospital & Health Management (MBA-HM)
2013-2015

The IIHMR University, Jaipur
2014

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CERTIFICATE

This is to certify that **Dr. Ridhima Bagaria** has undergone her summer training at **Santokba Durlabhji Memorial Hospital cum Medical Research Institute, Jaipur** from 07th April, 2014 to 07th June, 2014.

The candidate has successfully carried out the project on **Pattern of patient flow and patient satisfaction** assigned to her during summer training.

Her approach to the study has been scientific and analytical. This summer training is partial fulfilment of the course requirements, recommended for the Post Graduate Diploma in Health and Hospital with specialization in Hospital Management.

I wish her success in all his future endeavours.

Col.(Dr.) Ashok Kaushik
Dean (Academic & Student Affairs)
IIHMR Jaipur

Prof. Nutan Prabha Jain
Professor
IIHMR, Jaipur

Santokba Durlabhji Memorial Hospital
cum Medical Research Institute

sdmh
the hospital that cares
Bhawani Singh Marg, Jaipur-302015

Your Ref. :

Our Ref. :
No. 368

Date.....
June 02, 2014

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Dr. Ridhima Bagaria** student of IIHMR, Jaipur has successfully completed her two months summer training from 07.04.2014 to 07.06.2014 at Santokba Durlabhji Memorial Hospital Cum Medical Research Institute, Jaipur. She did her training with the various departments of SDMH and done her projects on the following:-

- Analysis of the pattern of patient inflow and measuring their satisfaction level.
- Introduction and implementation of appointment scheduling system.
- Designing various patient engagement programmes to offset high waiting time.

During her association with us, her work and conduct were good.

I wish her success in future.

LT. COL. BADAL VERMA
CHIEF ADMINISTRATOR

Chief Administrator
Santokba Durlabhji ... Hospital
Bha... 302...

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www.sdmh.in YouTube www.youtube.com/user/SDMHCARE

Acknowledgement

I am extremely indebted to all the professionals at Santokba Durlabhji Memorial hospital cum Medical Research Institute, Jaipur for generously sharing their knowledge and precious time which inspired me to do the best during summer training. I would like to express my gratitude to **Lt. Col. Badal Verma** (Chief Administrator), **Dr.Heena Kausar** (Assistant Medical Superintendent) for their valuable inputs, able guidance, encouragement and whole hearted co-operation throughout the duration. I would like to thank Dr.Heena Kausar (Assistant Medical Superintendent) my mentor for the summer training at Santokba Durlabhji Memorial hospital cum Medical Research Institute without whose help, it would not have been possible to understand the hospital to the extent as I have now. It has been my privilege to work under their dynamic supervision in the hospital.

I am highly grateful to all the departmental heads and staff for giving me time in spite of their hectic schedule. Without their active co-operation and participation it would not have been possible to accomplish the task assigned.

I am indebted to my mentor at IIHMR, **Prof. Nutan Prabha Jain**, who offered valuable guidance and support whenever required.

Dr. Ridhima Bagaria

Contents

Abbreviations

MRI- Magnetic resonance Imaging

CT Scan- Computerized Tomography scan

CCU- Critical Care Unit

NABH- National Accreditation Board for Hospitals and Health Care Providers.

ECG- Electro Cardiogram

ECHO- Echo Cardiogram

TMT- Tread Mill Test

TEE- Trans Oesophageal Echo

OPD- Out Patient Department

IPD- Inpatient Department

IT- information Technology

TPA- Third Party Administration

ICU- Intensive Care Unit

CSSD- Central Sterile and Supply Department

MRD- Medical Record Department

USG- Ultrasonography

UHID No.- Unique Hospital Identification Number

TAT- Turn Around Time

OT- Operation Theatre

GDA- General Duty Assistant

LAMA- Leave Against Medical Advice

MLC- Medico Legal cases

OMD- Operational Medical Director

HMO- Head of Medical Operation

BME- Biomedical engineering

MS- Medical superintendent

HR- Human Resources

ACLS- Advanced cardiac Life support

BLS- Basic Life support

MICU- Medical Intensive Care Unit

SICU- Surgical Intensive Care Unit

HOD- Head of Department

ABOUT THE HOSPITAL: Santokba Durlabhji Memorial Hospital

Santokba Durlabhji memorial hospital is a trust managed, autonomous, fee for service, not for profit, multidisciplinary, private hospital, which conceptualized by vulnerable family patriarch, the late Padamshri Khailshanker Durlabhji. He had passion and compassion to deliver affordable health-care to the people of rajas than which would be second to none in the country.

The hospital was established in 1971 and was inaugurated by late Smt. Indra Gandhi. It is located in the heart of pink city, spread over landscape 7.3 acres situated at Bhawani Singh road, Jaipur. It is self-contained campus with staff residences, a bank, a post office, medical stores, diary booth, in patient attendant complex (dharamshala) and other living facilities.

Location and area

The hospital is spread over 90 acres of land on a prime location of Jaipur. This hospital is unique of its kind and it is also certified by ISO 900: 2000 with bed capacity of 450.

Catchment area

The catchment area is whole Jaipur city along with other parts of Rajasthan and other states like Haryana, UP and overseas nations.

Targeted population

The main targeted population is middle and upper middle class. It provides free services to terminally ill patients at Avedna Ashram. The camps are been organised throughout year in various districts of Rajasthan.

VISION

SDMH shall be an integrated quaternary healthcare hub for delivery of affordable quality medical care in an economically viable, regionally, nationally and internationally positioned institutional environment.

MISSION

The hospital cares. SDMH is committed to providing quality health care at the most affordable rates to all sections of society, irrespective of caste, creed or colour. Towards making this possible, we pledge to dedicate all our efforts and all our energies.

QUALITY POLICY

With a view to establish a system of clinical excellence, patient centricity, service delivery and ethical practices, team SDMH, through adherence to establish standards of healthcare delivery; will apply medical science and technology in such a way so as to maximize benefits to health without concomitant risks.

SCOPE OF SERVICES

CLINICAL SERVICES

- Cardiology
- Cardiothoracic Surgery
- Dentistry
- Dermatology
- Dietetics and Nutrition
- ENT
- Executive health check up
- Gastroenterology
- Gastro Intestinal Surgery
- General Medicine
- General Surgery
- Nephrology
- Neurology
- Neurosurgery
- Obstetrics and Gynaecology
- Ophthalmology
- Orthopaedics
- Paediatrics and Neonatology
- Paediatric surgery

- Paediatric Neurology
- Physiotherapy
- Plastic surgery
- Psychiatry
- Pulmonary Medicine (Chest & T.B)
- Rehabilitation
- Speech Therapy & Audiology
- Urology
- Vireo Retinal

24-Hour Services

- Emergency Services
- Ambulance Services
- Pharmacy Services
- Laboratory Services and Imaging Services for IPD
- Blood Bank

Diagnostic Services

- X-ray
- Ultra Sonography
- Mammography
- Bone Mineral Densitometry
- CT Scan
- MRI
- Endoscopy
- Cardiac Catheterization Laboratory
- Neuro Diagnostic Labs like EEG, EMG, EV
- Audiometry & Speech Therapy Testing
- Cardiac Test includes:
  - Electrocardiogram
  - Echocardiography

- Trans oesophageal Echocardiography (TEE)
- Holter Monitor
- Stress Testing

➢ Pathology

➢ Including all pulmonary test e.g. Sleep Study Test

Utility services

- Dharamshala
- Avedna Ashram
- Union Bank and ATM facility
- Sarv Dharam Temple
- Utility Shops
- Book Shops
- Mobile Chargers
- Telephone Booth
- Post-office
- Cafeteria
- Salon
- Mortuary
- Diary

INTENSIVE CARE UNIT (ICU)

- Cardiac Medical-I
- Cardiac Medical – II
- Cardiac Surgical
- Medical ICU
- Neuro ICU
- Surgical ICU
- Paediatric ICU
- Neonatal ICU (IPU & PCU)

SERVICES NOT AVAILABLE

- Medico legal Cases (MLC)
- Burns Case when burns are >20%
- Organ Transplantation

OVERVIEW OF VARIOUS DEPARTMENTS IN HOSPITAL

OUT PATIENT DEPARTMENT

Outpatient department is defined as a part of the hospital with allotted physical facilities and medical and other staff in sufficient number with regularly scheduled hours, to provide care for patients who are not registered as in patient. The OPD facilities provide the main linkage of the hospital with the community.

Main purpose of OPD

Ambulatory medical care is provided to patient who are not confined to bed can be provided at a general practitioners clinic specialized clinic, a health centre or a hospital, which are part of a hospital such care is called outpatient care. This care is provided through the OPD'S for fabricating of good health to patients.

REGISTRATION

In order to avail the services offered at the hospital, the patient should be registered himself/herself at the main reception. The IPD registration is done round-the-clock and the form for the same is to be filled up and handed over at the counter itself. Please make sure that you provide accurate information in this form.

It is highly recommended to write your details as per legal documents to avoid inconvenience especially for medical reimbursement / LIC purpose. Please carry the OPD Registration card and patient file on every hospital visit. Your Unique Hospital Identification Number (UHID) is important to make sure that you receive timely services

OPD PROCESS FLOW -For New Patient:

Patient comes at enquiry for consultation

↓

The registration form is filled by the patient/attendant kept on enquiry counter.

↓

Patient directed to OPD Reception counter for Registration.

↓

All the demographic details entered in Hospital Information system by the receptionist.

↓

Patient depoits consultation fees as per hospital policy.

↓

Unique Identification Card is generated and issuing Registration card carrying unique identification no. for current and subsequent used.

↓

Receptionist handovers the consultation file and card to the patient/attendant.

↓

Patient is briefed about the consultant‟s chamber no. and respective floor.The patient goes to the doctor‟s OPD with the file and gives the file to the Nursing staff posted in Consultant‟s chamber.

↓

Nursing staff calls the patient with his/her name according to the submission of OPD file for consultation.

↓

After Consultation OPD file is sent back to the reception after end of the day by nursing staff through the ward boy.

↓

OPD file is collected and kept by receptionist with help of Housekeeping staff in the File shelf which is stored behind reception.

For Old Patient:

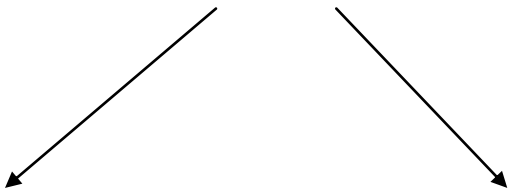
Patient Comes at Reception with OPD Registration card (mention his/ her unique identification no.), which he has got at 1st visit.

↓

After take the OPD Card, Receptionist withdraws the file from the OPD shelf which are arrange according to OPD No.

↓

OPD Cards are given by patient/attendant to the Receptionist to take OPD file for consultation which is kept in OPD record.



If Consultation date within 5 days, give file to th patient without consultation charge for consult th consultant.

If Consultation dates more than 5 days, consultat harge receive by the receptionist and handover fi the patient/attendant for consult the consultant

↓

Patient takes the consultation file and goes to the Consultant"s OPD and gives the file to the Nursing Staff.

↓

Nursing Staff calls the patient with his/her name according to the submission of OPD file for consultation as per priority for consult to the consultant.

↓

When patients has been seen by consultant, OPD file is being send to the Reception at the end of the OPD timing by Nursing Staff through the Ward boy.

↓

Receptionist Collects the file and keeps it by serial no. in the File shelf which is behind the reception area.

Process flow if investigation required:

Patient directed to concerned investigation counter.

↓

Patient goes to the billing counter with required investigation slip/Consultant"s prescription.

Required Investigation entered in hospital information system at the billing counter. Payment of investigation taken as per hospital policy

↓

After the billing is done, the patient is sent to the concerned investigation department.

↓

All Investigation reports are sent to the consultant"s OPD.

↓

If patient needs admission, patient/attendant goes to the IPD counter for admission**.**

INSURANCE CLAIM

PROCESS FLOW (For TPA Insurance claim)

Patient Comes at Enquiry for Consultation.

↓

After consultation if there is a requirement of admission by Consultant, then the patient proceeds for admission

↓

After admission patient goes to the TPA for Cashless facility

↓

Insurance Issue Card checked by the department.

↓

Policy related manual check by department.

↓

Pre-authorization form filled by Consultant and department.

↓

All Medical record copy and document sent by TPA Cell to the insurance company for claim.

↓

Approval sends by insurance company for reimbursement to the hospital.

↓

After receiving the approval, cashless process pass given to the patient.

↓

Cheque is issued by insurance company to the hospital for clearance of all hospital"s bills.

↓

Cheque is deposited in hospital"s account for clearance of Hospital bills.

CORPORATE ADMISSION

- Corporate clients are required to submit their company"s credit letter on the date of admission. In case of emergency admissions, the credit letter has to be submitted within 12 hrs of admission.
- A letter is issued which states that the patient is deemed as a cash patient and an initial deposit is to be deposited. The same would be refunded (at the time of discharge) against the submission of the company"s credit letter.
- Patient opting for a room/bed category higher than their entitled category are required to pay the difference in charges arising thereafter. Charges for investigations, operation theatre charges, and the doctor's fees are subjected to change in accordance with the particular room category chosen.

CREDIT FACILITY

- Credit facility is offered only to the patient from Corporate & Insurance. TPA"s having a tie up for patient covered under Medical Insurance, It is mandatory to get approval for cashless facility from TPA before patient gets admitted however if the patient gets admitted in

emergency, then this approval for cashless facility must be produced before the discharge.

- In case there is a delay in authorization, patient authorization or denial of authorization from the insurance/TPA hospital cannot be held responsible & 100% of estimated cost or the difference cost to be deposited at the time of admission or before the surgery.

EXECUTIVE HEALTH CHECKUPS (EHC)

SDMH also provide preventive health care services in the form of executive health check-ups .It includes different health packages for different group of people on reasonable charges like:

- Child health check-ups,
- Senior citizen health check-ups,
- Well women health check-ups (below 40 years & above 40 years),
- Executive health check ups
- Whole body health check-ups
- Pre-employment health check-ups, routine medical health check-ups, diabetic health check-ups, comprehensive cardiac health check-ups etc.

IN PATIENT DEPARTMENT

In-door Patient Department caters the services for patients who require continues observation and supervision of experts, acute & intensive medical care and emergencies. In SDMH there is separate IPD Building which has four floors and a basement. Floor wise distribution is as follows:

Infrastructure of IPD Building:-

Connectivity of Floors

- **Lifts**: - There are total five lifts in the hospital building which has different capacity. Three of them have capacity of 15 persons at a time, one of them have capacity of 11 peoples at a time and remaining one has capacity of six persons at a time.
- **Stairs**: - There are two staircases to go up from ground floor and one staircase go on basement.
- **Ramp**: - There is one ramp from ground floor to other floors.
- **Foot Way/Connecting Bridge**:-There is ramp connectivity from OPD building to IPD building from first floor.

Fire Safety Equipments

There are various types of fire safety equipment‟s in IPD & OPD building which includes:

- Water Neel Rope: - it is used in general fire.
- Foam Cylinders: - it is used to come up with electrical fire.
- Sprinkler System
- Smoke sensors
- Fire Alarms
- Emergency fire exits

Gas pipe lines

There are different colour pipe lines are there for different gases for Wards, ICU‟s and OT‟s.

- Yellow pipe with white band: oxygen line
- Yellow pipe with blue band: nitrous oxide line
- Yellow pipe with black band: Vacuum line
- Blue pipe with white band: Air line

Waiting Area

Every ward and ICU have waiting area attached with them which has open space as well as some fixed chairs and attached washrooms.

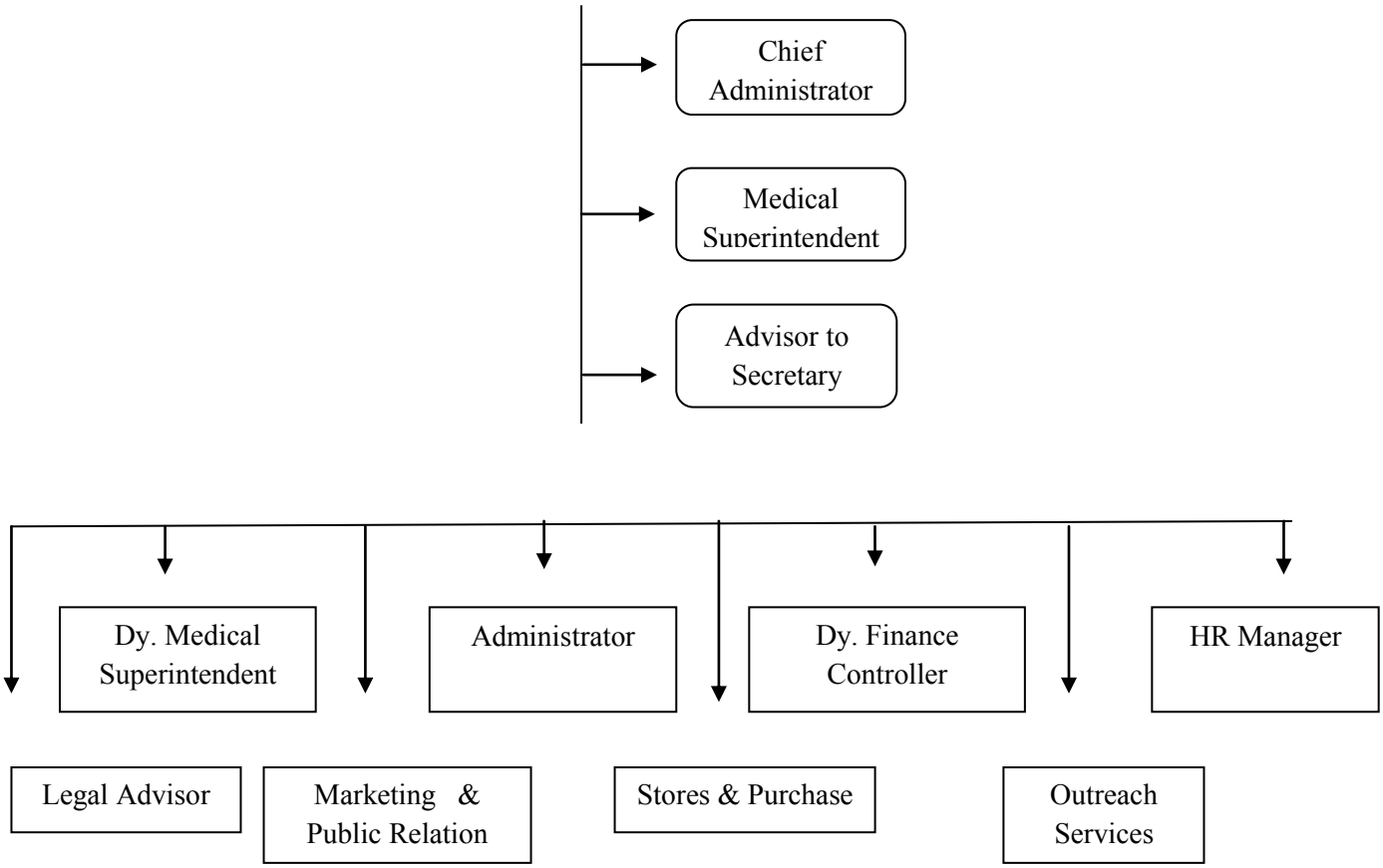
Cafeterias

It is an outsourced service. Every floor has one cafeteria in waiting lounge which provides snacks, tea and coffee. Only one or two of whole building are opened 24*7 and rest of them are running from **Morning**: 6.00am to 11.00pm.

Administrative Block: The administrative block is located in the basement of IPD building. Their description as follows:

ORGANOGRAM:

Secretary, S.D. Trust



Library-The library is situated in the basement of the IPD building. It is fully Air conditioning. Timing of this is from 9.00Am to 7.00Pm.there is attached computer room for students and faculty that have internet facilities. There is various types of the medical books, international& national journals are there.

Radiology Services - Radiology services like Digital X-ray and Ultra-Sonography Rooms are available in the campus for IPD patients. The charges for these services are not collected cash here but it will be noted down on patient Charge Sheet which is with the patient‟s file and collected at accordingly at Bank or Admission counter. There are three X-ray rooms and two Sonography rooms for IPD patients.

Laboratory Services:-The laboratory services like Pathology, Biochemistry, Histopathology and Haematology are available here for both in and out patients. For in patients, samples which are collected in

wards sent to lab with housekeeping staff and Bar codes are generated by LIS (Lab Information System). For outpatients, samples which are collected in OPD also taken for further process.

Table : Lists of Tests done

S.N.	epartment	Type of Tests
1	Biochemistry	81
2	Hormones/Marker	25
3	tool Examination	7
4	Haematology	38
5	Immunology(Serology)	85
6	Microbiology	30
7	Histopathology& Cytology	16
8	Blood Bank & Transfusion	47
9	Urine Analysis	30

Marketing Services of hospital

There is no as such core marketing activities in hospital as hospital having its Brand name. It is regulated by a trust which is running on no profit strategy. Catchment area of hospital is Jaipur city, Jaipur Rural and adjoining districts like Sikar, Ajmer, Dausa, Jhunjhanu, Makrana and Narnol etc.

As a part of promotional activities some are there:

- Publication of Clinical Success Stories in Newspaper.
- Sports awareness campaign.
- Regular CMEs (Continuous Medical Education).
- Rural Health Camps
- Public Awareness programmes.
- Free Medical facilities to International Airport at Sanganer, Jaipur.
- Organizing the Youth Soccer League (YSL).

Hospital has tie up with 40 of the corporate organization as well as various Government Agencies for regular health check ups and pre employment health check ups

Computer/IT Department

This department is situated at ground floor of the IPD Building. There are total 10 employees in IT department of hospital distribution of all as follows: -

- System Analyst
- Programmer
- Hardware engineer
- Operator

There are total 220 computers in hospital campus all are attached with a Client Server Architecture System which has data storage capacity of 260 GB.

There are four basic requirements for developing a programme/module for HMIS:-

1. Data Base: - Oracle as a data base is used in SDMH.
2. Operating System: - Windows 2003 operating system is used right now.
3. Hardware: - Client Server Architecture System of HP is used.
4. Language: - Visual basic language is used to develop programmes.

There is LAN connection which is Lease line of 5Mbps.

Human Resource Department

Human Resource Department is headed by HR manager who directly report to Chief Administrator. This department works from recruitment to retirement of an employee. There are total Approx 1200 employees in the hospital which includes Administrative Staff, Consultants, Residents, DNB Students, and Housekeeping & Security Staff.

There are three types of the employees in the hospital:

- Hospital Grade
- Wages

- Contractual man power

There is provision of (Policies of HR Department):

- Annual increment of approx.10-12% depending upon individual performance.
- Total 40 annual leaves along with leave encashment up to 20 leaves in special circumstances.
- Daily allowance which is refined twice a year once in April and then October.
- Exit interview by the next superior authority at the time of leaving the organisation.
- 360^0 Performance appraisal of every employee at the end of financial year.
- Stipend to the DNB student

Finance Department

Finance Department is headed by Finance Controller and Deputy Finance Controller is directly reporting to Secretary to SDMH trust.

Finance Controller

↓

Deputy Finance Controller (Internal Audit)

↓

Senior Accounts officer

↓

5-L.D.C.

Duties of finance department to generate revenues minimize the costing of procedures, internal auditing the departments and arranging the external audit at the end of financial year.

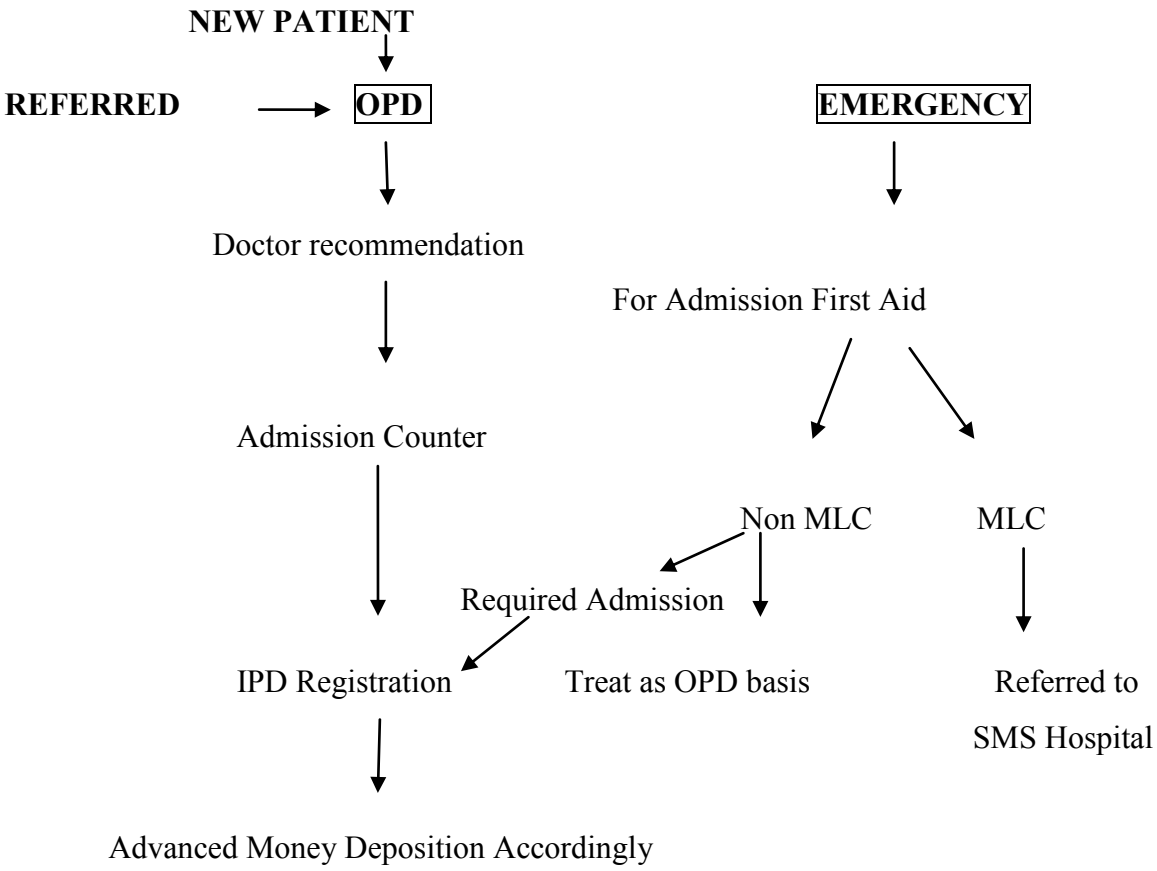
There are two types of revenues in hospital that is medical like OPD, IPD, Investigations, Procedures and OT fees another is non medical like from MOU"s, Outsourced departments and Rent.

Internal auditing is done to check the manipulations. There are various types of auditing in hospital that are as follows:-

- Cost audit like Per bed costing
- Man power audit

- Department audit
- Per day revenue audit
- Observational audit

Flow of Patient in IPD



DISCHARGE

- The discharge process is initiated only after the patient‟s consultant deems him/her fit for discharge.

- Discharge timing is before 12:00 p.m.
- In case a patient does not wish to continue his/her stay at the hospital, he can, in consultation with his doctor, ask for the Leave Against Medical Advice (LAMA)
- Before leaving, the patient"s attendant needs to check his/her room carefully for any personal belongings, hospital is not liable for their belongings.
- To avail an ambulance/transport facility, the patient can put in a request at the nursing counter/ reception counter.
- When you are being discharged from the hospital, your doctor and nurse, dietician, pharmacies will explain the treatment plan which you should follow.
- For nutritional queries dietician can be consulted.

Table 3: Types of Wards and Bed Strength

Type of Ward	Bed Strength
General Ward	299
Private Ward	21
Deluxe	15
LDR	2
Critical Care Area	63
PICU	7
PCU	20
Trustee room	1
NSR	2
SSR	2
Total	432

Note: Avedna Ashram which caters services for terminally ill patient has 82 beds.

10.11 Discharge Process & Documentation:-

Discharge summary is made by consultant doctors

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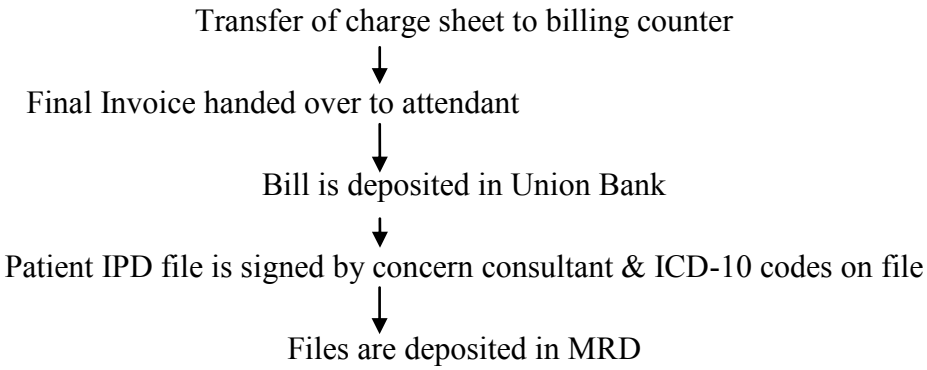
Nursing staff completes the patient charge sheet

↓



10.12 Cath. Lab

- Cath.lab is situated at first floor of IPD Building adjacent to Cardiac O.T. It is a certified Lab for Invasive Radiology.
- This is one of the oldest Cath.lab in Jaipur which installed before 40 years. It had renovated in 2009 with new Phillips equipment"s.
- Maintenance of this is seen by company persons in every 6 months.
- It has three rooms: Outer room is Computer room &Registration room; adjacent to this room is scrub & changing room; inner room is procedure room.
- Timing of Cath.lab is 9Am to 11Pm.in emergencies technician is called it off.
- Total no of staff is 10 in which two of were Cath. Lab technicians.
- Average 5-6 cases are coming per day in Cath.lab.
- All consumables and emergency medicines requirement send by monthly indent to store in last week of every month and this will be delivered in first week of next month.
- **10.13 Operation Theatre**

There are total five Operation Theatres in Hospital which has 11 Operation rooms.

Table 5: Description of O.T

O.T. Name	otal Nursing	Total Housekeep staff	O.T. Room No.	Type of Surgery performed
Old O.T.			Old O.T.-1	Cardiac Surgeries
			Old O.T.-2	Neuro-Surgeries
New O.T.			New O.T.-1	Gynaecology Surgeries
			New O.T.-2	
			New O.T.-3	
Terrance O.	20	13	Terrance O.T.-1	Infected Surgeries including Gen.& Or
			Terrance O.T.-2	
			Terrance O.T.-3	Clean General & Ortho.Surgeries
			Steel O.T.	joint Replacement Surgeries
Urology O.T.			Urology O.T.-1	Urology-surgeries

10.13 Wrist Band Colour Coding:

A band is tied on patient wrist which has general information of patient like patient name, IPD no., ward name in which patient admitted and date of admission. This is tied only for following admitted patients:

Table 9: Wrist Band Colour Coding

Blue	Surgical Patient (Patient Going for any Surgery)
Pink	Newly born baby and delivered mother
Orange	Vulnerable patients (65years>Patient Age< 14years)

"Nanhi Chaan":- Save the Girl Child Campaign

Every mother who had delivered girl child has given a small plant (Tulsi,) at the time of discharge. The concept behind this is to care that plant as their child.

Outside labour room blue balloon for newly delivered male child while pink balloon for newly delivered female child.

10.15 **Security**

Security Service of SDMH IPD building is outsourced. The contract is renewed every year. There are three duty rosters of security persons which as follows:

Table 7: Security Timings

Shift	**Timing**	**No. of Security guards**
Morning	6 .00Am to 2.00Pm	18
Evening	2 .00Pm to 10.00Pm	10
Night	10.00Pm to 6.00Am	7

There are total 35 security guards in IPD building amongst which maximum of them are present during the morning shift because of maximum no. of visitors are in morning hours and minimum no is required during night time .

Every patient is provided single attendant pass during admission. Only for neurological cases or special recommendation by concerning consultant the extra attendant pass is provided to the patient with extra payment of 100 Rs at admission counter in which 90Rs is refundable at the time of discharge.

10.16 Critical Care Area

There are total 63 beds in critical care areas of the hospital. The occupancy is much higher in that area of hospital which is approximately 95%. Distribution of critical care area has given below:-

Table 8: No & strength of critical care unit

Name of ICU	**Bed Strength**	
S tep Down ICU-1	1 1	I also known as High Dependency Unit(HDU).
Medical Critical Care Unit-1	10	It also known as Step Down ICU-2.
Medical Critical Care	10	

Unit-2		
Surgical Critical Care Unit	7	It caters the services for cardiac s surgery patients.
P paediatric Intensive Care Unit	7	
Surgical Intensive Care Unit	8	
Neuro-Science Intensive Care Unit	1 10	

Equipment List of ICU

- Multipara Monitor
- Defibrillator
- ECG Machine
- Syringe Pump
- IABP
- Blood Storage Cabinet
- Temp. Pacemaker
- Ventilator
- Bi PAP
- Patient Blanket
- Pulse Oxy meter

There are Specific equipment"s that required in Neonatal and paediatric ICU as follows:

- Radiant Heat Warmer
- Digital Weighting Scale
- Nebulizer
- Infant Ventilator
- Incubator

10.17 Emergency

Department of Emergency is located at ground floor of IPD building. It caters 24*7 services. Patient coming at emergency required to deposit Rs.200 as file charge or registration charge at admission counter. From there patient get their unique identity no.

There are three duty rosters in each shift with one doctor and three staff nurse. In emergency doctors are ACLS/BLS certified. Training for this conducted by hospital time to time.

There are four beds in emergency normally 30-35 patients visit per day in this department. Frequently coming emergencies are fall injuries, Cardiac emergencies and poisonous intake etc.

There is minor OT in emergency department for suturing and other minor procedures. In minor OT there is an OT table, High Mask Light and Emergency Medicines are there.

List of Equipment in Emergency Department

- Crash cart
- Defibrillator
- ECG Machine
- Pulse Oxy meter
- Suction

10.18 Ambulance Services

There are total 8 ambulances in SDMH. Two of them are critical care ambulances amongst which one is fully equipped with lifesaving equipment"s like ventilator, defibrillator, O_2 cylinder, and emergency medicine...etc. one of them are donated by State Bank of Bikaner & Jaipur.

10.19 Hospital Management Information System

The hospital has own management information system. It covers the following arena.

- Blood Bank management Information System
- IPD Management Information System
- Medical Record Management Information System
- OPD management Information System

- Operation Theatre Utilization information System
- Pay Roll information System
- Pharmacy Retail Chain Management Information System
- Ward Management Information System
- Lab information System

10.20 Central Sterilization Room

- It caters the services for Wards and ICU etc.
- Separate autoclave is present in OT‟s.
- Autoclave machine and ETO is present for sterilization.
- There is separate entry and exit door in CSR.
- Replacement system is been followed.
- Bow dick‟s test is done to check the sterilization.
- Human resources: total no of staff is four in which two are trained in sterilization procedures.
- The items are packed before coming to CSR to prevent mixing of items.
- Sterilized items were issued for ward at particular time in morning between 7.30Am to 7.45Am and in Evening between 2.30Pm to 3.00Pm.

10.21 Dietary Services

- Dietary services of hospital are on contract basis which is renewed every year. For IPD patients‟ contractor has payee by hospital on per plate basis.
- A dietician is appointed by hospital to prepare the diet schedule of every patient according their requirement. Dietician takes round on every morning and take note on the patient required diet.
- Diet charges are included in Bed/Room/Ward charges .Normally 5 meals are given to the patients in wards while in private rooms 7 meals are given to the patient.
- There are different diets for patients with Diabetes Mellitus, Hypertension, Renal disease or cardiac disease.

- Food trolleys temperature is kept at 50 degree Celsius.
- Weekly scheduling of diet is done by hospital appointed dietician as well as canteen own employed dietician. In absence of hospital dietician canteen employed dietician has to work.
- There is a separate arrangement of food preparation for patient which require more hygiene and for attendants.

10. OTHER SERVICES

11.1 AVEDNA ASHRAM

It is a charitable based hospice of 82 beds, where it provides a home for patients with terminal illness. It provides free shelter, food and care to terminally ill patients mainly suffering from cancer and pelagic patients of Rajasthan and neighbouring states.

Human Resources

- 4 Volunteering Nuns + 1 Nursing Aid + 1 Ward Boy

Avedna Ashram comprises of three floor comprising of:

1st Floor

- Female ward- 21 Beds
- Male ward- 21 Beds
- Central ward- 10 Beds

2nd Floor

- Male private rooms- 9 rooms- 11 Beds
- Female private rooms- 7 rooms- 9 Beds
- Central ward- 10 Beds
- 1 Common TV Room

3rd Floor

- Coordinator Room

- Staff staying room
- Trustee Member Meeting Hall
- Prayer Room

Services

- Free palliative, medical and nursing care to terminally ill cancer patients with free boarding and lodging.
- Ostectomy care services.

11.2 ANANTH BHANDHARI DAY CARE CENTRE

It mainly looks after the spiritual, academic, intellectual and creative needs of the senior citizens through yoga, medication, music, reading lectures etc. They also provided with subsidized lunch and free tea and snacks.

Services

- Care of body, mind and soul through religious prayers and programmers etc.
- Common prayer room is provided for patients in Avedna Ashram and senior citizens at day care centre.

11.3 MORTUARY

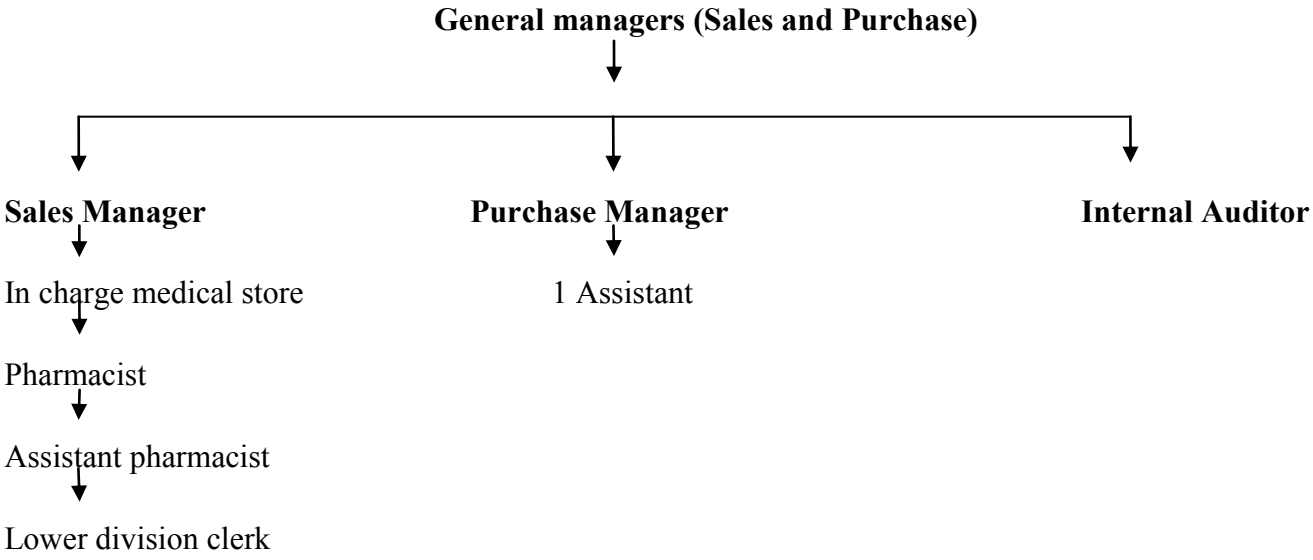
It is one of the support services of a hospital. Here the dead bodies of patients who die in the hospital are kept. They are kept either due to delay in their funeral or due to any medico legal reasons.

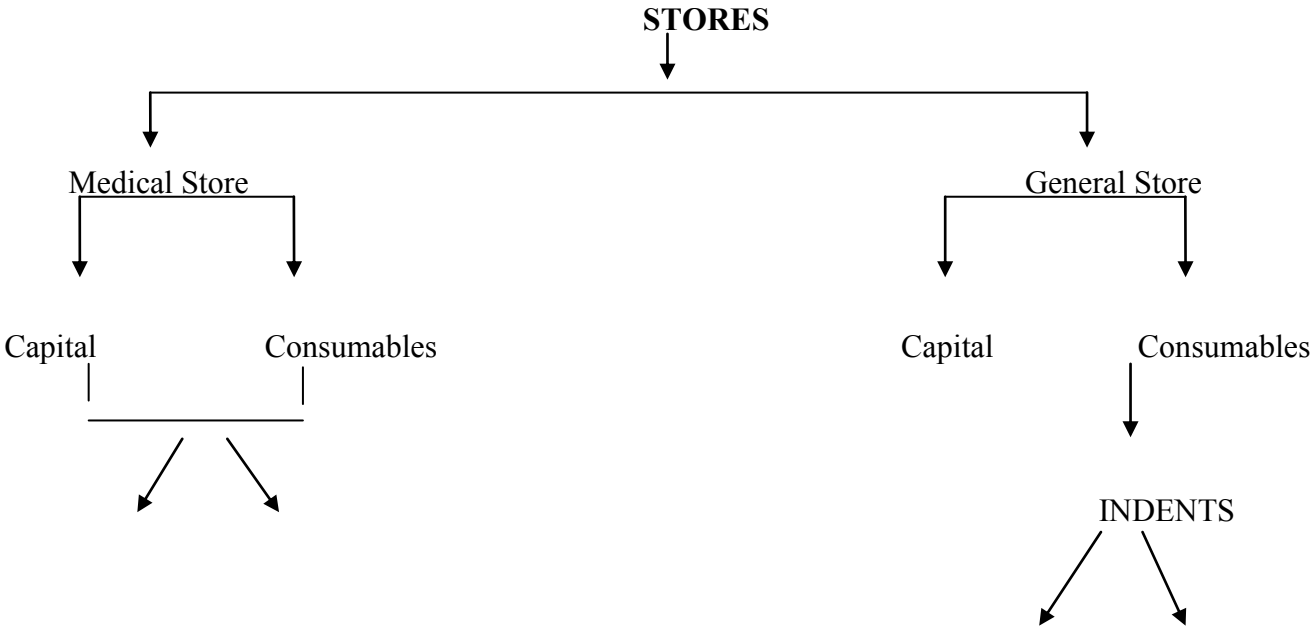
It is located in the basement of Avedna Ashram. A single insulated room were dead body is kept in the room. At a time 3 dead bodies can be kept in the room.

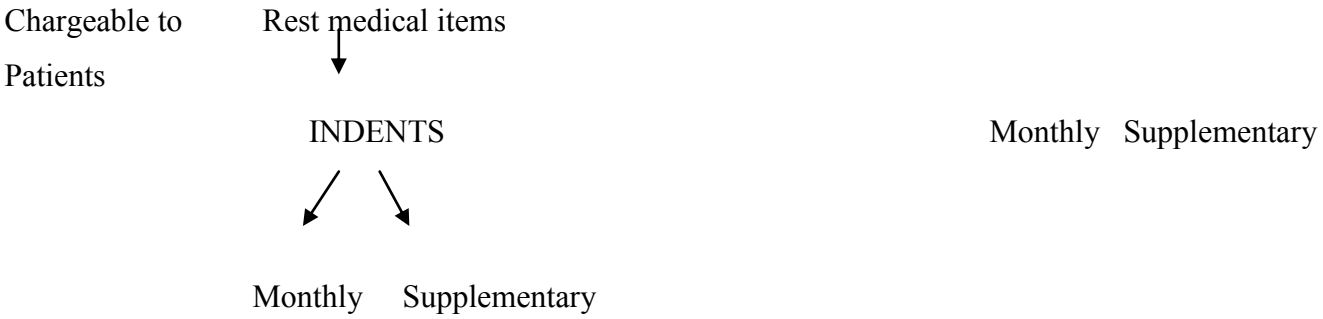
- Last rites services according to written request of the patients.
- AC mortuary services.

11.4 STORES & PURCHASES

This department is primarily responsible for inviting quotations, negotiating, purchasing and issuing desirable medical /general, capital/consumables to various departments of hospital.







11.4.1 Process of procuring Capital Items for new items:

It includes both medical and general capital items-

Step 1- Order is received from respective department during the specific period i.e. beginning of calendar year.

Step 2- Quotations are being invited on the above requirement.

Step 3-All the quotation are shown to the head of the department as per there requirement.

Step 4- Items are purchased as per the head"s direction.

Step 5- After the procurement items are send directly to the respective department.

Step 6- After the assurance of the item up to the mark, payment is being made by accounts departments.

Important points:

- List of new items to be procured is being made at the beginning of the financial year
- Purchase department can take decision regarding capital items of up to Rs. 20,000 only i.e. controller of stores.
- Further the capital purchase of more than Rs. 20,000 the decision is being taken by capital purchase committee.
- Advisor to secretary is head of this department.

11.4.2 Process for Replacement of capital items:

If a equipment is a replacements then,

Step 1- department fills the breakage form

Step 2- the form is been send to MS.

Step 3- MS further directs the BMW and engineer service department to check and verify the request.

Step 4- on the above approval the new equipment is been ordered in a planned mannered.

Important point

- Medical equipment"s – bio medical workshop
- Other all equipment"s- engineering service department

11.4.3 Process involved in obtaining and supplying consumables

Consumables are supplied to every department through indents. These indents are of two types monthly and supplementary. This is applicable for both medical and general consumables.

11.4.4 Monthly Indents

- Every department send their requirement in specific format i.e. monthly indent.
- The indents are being filled and send between 25^{th} to last date of each month.
- On the basis of indents collected order of each department is being placed.
- The indents are been supplied to respective departments in first week of next month according to allotted dates.

11.4.5 Supplementary indents

In certain cases, if monthly indents fall short for any department then they send supplementary indent which includes the name and quantity of indent.

Important point:

- There is list of standard indent according to respective department per bed. The quantity always remains fixed only price varies. This indent helps in keeping a control check on the consumption of consumables per bed in each ward.

11.5 MEDICAL RECORD ROOM

The key functions of the department are:

- To keep the record of IPD patients and discharges from the hospital
- To maintain the IPD records of deaths
- To provide the records whenever requested as per the law and also to dispose of the old records according to the law.
- Bills verification for the government employees.

Human resources

Head of department

↓

Medical officer (1)

↓

LDC (1)

Equipment's

Computer

Physical facility

Rooms available

Activity flow

(a) IPD Records

Patients discharge → Filling up charge sheet → Nurse enter it in ward register → Files comes to MRD → Entry in computer/ manually in register → Arranging file according to serial number.

(b) To get the file (Patients/ Attendant)

Application to MS → On approval of application → Photocopy of file is handed over

(c) For disposing of records

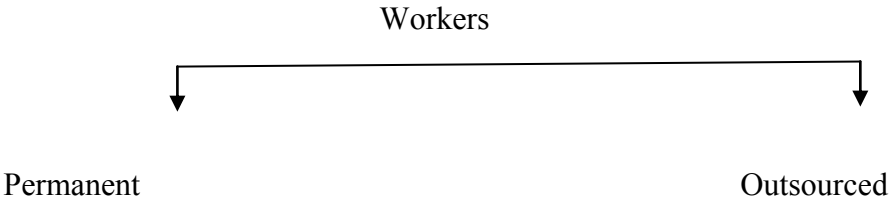
Report committee meeting is called and order is passed on the basis of unanimous decision of this committee. For disposal of records laws has to be followed

Important points

- Birth and death records are available here from the year 1971- till date.
- Discharge records for
- Report committee comprises of MS, legal advisor and doctor.
- Insurance company has to pay Rs 500 for obtaining records of a patients
- SDMH has also municipality computer and employee for issuing birth and death certificate.

11.6 HOUSEKEEPING

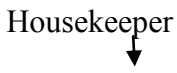
It is the in house department with a working staff of 400 and if and when required workers are outsourced.



Key functions

- To ensure the cleanliness of the hospital.
- To get cloths from wards to the laundry and make an entry and supply it back to wards.
- To make arrangement for various other function, conferences and camps.
- To collect the post and distribute it.

Human resources



Assistant (2)

↓

Staff (400)

Note: Staff includes sweepers, ward boys, ward ladies and drivers

11.7 **MAINTENANCE DEPARTMENT**

The maintenance department mainly includes workshop of:

- Carpenter
- Painter
- Mechanical
- Plumber

Human Resources

The total no of employees working in the department are 22.

- Maintenance: 4
- Carpenter: 4
- Painter :4
- Mechanical:6
- Plumber:4

Activity flow

Receive complain from respective department → Handed over to Maintenance supervisor → complaint is handed over to respective workshop for repair/Maintenance/construction → first line of repair/ maintenance is done by maintenance staff, if not then send it outside.

11.8 BIO MEDICAL ENGINEERING (BME) DEPARTMENT

Key functions

The main functions of the department are as follows:

- First line of repair and maintain all the Bio Medical Equipment"s of the hospital.

- Inventory management of instruments.
- Medical gas room maintenance

For maintenance of equipment in OT, ICU and wards AMC and CMC are given.

Human resource

Bio Medical Equipment- 1 Assistant → 1 Technician

Medical Gas Room- 3Staff member/ 1 Reliever

Equipment's

All basic and necessary tools related to their work.

Activity flow

Receive complain from department → estimate the budget for repair and followed by comment of the respective doctor → Handed over to GM, Purchase → DMS → MS → Parcel is send to company workshop for repair → receive the parcel from company → functioning of equipment is checked by respective doctor → if satisfactory, payment is done.

11.9 **ELECTRICITY DEPARTMENT**

The main function of electricity workshop department is as follows:

- Electricity supply including emergency supply.
- Maintenance of AC and air cooling.
- Maintenance of central suction
- OT cautery wire
- Maintenance of hydraulic table- OT
- Oxygen pipelines
- Maintenance of centrally dry air compression
- Soft water processor

Resources available

- **Human resources**

Supervisor

↓

Electrician

↓

Electrician Helpers

- **Duties**
- **Roaster**
- Mainly deals with the maintenance part of instruments
- Functional 24*7
- **Workshop**
- It mainly deals with the maintenance part of heavy instruments like vacuums
- Functional for 8 hours daily
- **Equipment's**
- Generators AC plants
- Digi sets Air compressor
- UPS (Uninterrupted Power Supply) Ducting system

11.10 BANK

- The hospital has a branch of a Union Bank as well as Bank‟s ATM inside the hospital campus.
- There is a direct transaction of monthly salary of hospital staff from hospital accounts section to the employee bank account.

11.11 POST OFFICE

- Post office SDMH branch is present inside the hospital campus.

11.12 IN PATIENT ATTENDANT (IPA) BLOCK

- It is a 50 bedded dharamshala providing accommodation facility for the attendants of the IPD patients.

11.13 CRECHE

- Extended services in the form of crèche i.e. room with a pantry is present inside the hospital campus.
- It is mainly for the staff‟s children under 5 years of age.
- 4 helping staff is hired to take care of toddlers**.**

11.14 RECREATIONAL ROOM

- Keeping in mind the health of the resident doctors and staff quarter‟s a recreation room namely GYM is present.
- It is open during morning and evening time.

11.15 LAUNDRY

- The laundry services in SDMH are outsourced and the contract is renewed annually.
- The cost per cloth is pre decided and monthly the payment is done on those bases.

Human Resources

Total – 10 workers

Equipments

- 3 Machines are soaking the soiled and untainted linen.
- 3 Washing machines are present for washing purposing.
- 3 Blow dryer machines are present to dry the linen.
- 1 roller for ironing is present.

11.16 BIO MEDICAL WASTE

This department is outsourced by the hospital. The waste is collected on the bases of colour coding which is as follows:

Blue: Glass, needle syringes and solid waste

Black: Municipality waste

Red: solid waste, plastic bags, mouth mask and head caps

Yellow: Cotton, gauze pieces etc.

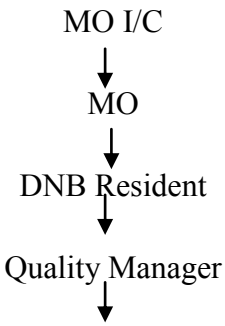
Important Points

- The waste is been collected in the morning and further the waste is been taken by the contractor on the basis of weight.
- There is a separate exist of the waste to be disposed off.
- Currently the sewerage plant is under construction which will help in treating the contaminated water and further using it for additional purpose.
- There are 3 water harvesting system present inside the hospital campus, help in maintaining the water level and further used for gardening, washing and cleaning.

11.17 **BLOOD BANK**

The blood bank of SDMH was established in 1973, initially designed to meet the needs of in-house SDMH patients, but later converted to a state of the art multi-component blood bank and transfusion service by 2003. It is regulated by “Drug and Cosmetic Act”.

Human resources



Technical Supervisor

↓

General Nurses

↓

Blood Bank Technician

↓

Ward Boys

STAFFING

These many above personnel are mandatory according to the act. Other than the minimum obligation, personnel available

- Medical Social Worker
- Accountant
- Store I/C
- Computer Programmer
- Helper

Facilities and services

Names of component

- Whole blood
- Paediatric/ Divided RBC units
- Red Cell Concentrate
- Fresh Frozen Plasma
- Platelet Concentrate
- Old Frozen Plasma
- Single Donor Platelet concentrate
- Cryoprecipitate concentrate
- All components with Anti- HBc (Total) Tested
- All components of NAT (Nucleic Acid Amplification) Tested
- Tested Performed
- Blood Group ABO- Rh
- Rh- Antibody titre

- Coombs Direct test
- Coombs Indirect test
- Cold Agglutination
- HbA2 (Haemoglobin 2) Electrophoresis
- Rh phenotype and Kell (Antibody Screening)
- Complete Irregular Antibody Identification

Important Point

- Charges are set by joint decision of Hospital Transfusion committee, RSACS, and Health Directorate.
- It is basically a not for profit department therefore only cost is covered.
- Fund collected goes to hospital"s account but have a separate sub account.

Process

Step1: Donor form→ Medical social worker→ Pre donation counselling

Step2: Hb test, it should be more than 12.5

Step 3: MO screening→ General physical examination → Nucleic Acid Test

Step 4: Donors Room→ Donation Completes → Refreshment Room

Step 5: TTD lab → Kept as whole blood→ Components Preparation

Step 6: Components Preparation → RBC & Plasma → Platelets & Plasma Serums

Step 7: Labelling and storage

Step 8: Request come from patient with sample

Step 9: Sample → Serological lab →forward group test (Cell Grouping)/Reverse Group Test (Serum Grouping)

Step 10: Cross matching→ minor (Serums)/ Major (Cells)

Steps 11: Coomb"s Test (To find out unregulated anti bodies)

Steps 12: Compatible→ Issue

PROJECT ON:

PATTERN OF PATIENT FLOW AND PATIENT SATISFACTION

Aim:

To improve quality of health care services in the hospital.

Objectives:

1. To study the pattern of patient flow from different districts .
2. To study the trend of conversion of new patient into old and hence check their satisfaction level.
3. To asses patient satisfaction level in OPD

Methodology:

The research involved an interaction with 250 patients. Within these 250 patients, 100 patients" responses were recorded using interview schedule. They were interviewed in duration of 25 days, during OPD hours.

A. **Study Area:** OPD waiting area of SDMH.
B. **Sampling**: 100 patients were selected by purposive (non probability) sampling
C. **Tools and techniques of data collection:**
    i. Semi structured-Interview schedule was prepared.
    ii. Face to face interviews were conducted.
    iii. Respondents were the patients themselves or their attendants.
D. **Data Analysis**: Collected data was analysed using SPSS.

Patients from different districts of Rajasthan, Punjab, Assam, Haryana, U.P were part of study.

DATA ANALYSIS :

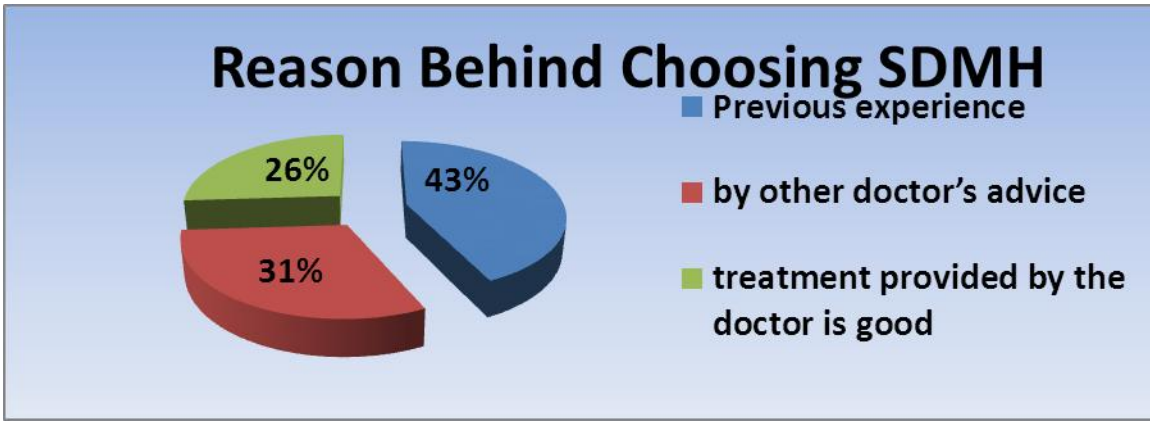
Table 1: Pattern of patient flow by state and districts and percent change from mew to old during March 2013 - February 2014.

Sr. No	State	District	New patients	Old Patients	Percent Change (%)
1	RAJASTHAN	SIKAR	9,375.00	4,000.00	42.67
2	RAJASTHAN	GANGANAGAR	1,820.00	770.00	42.31
3	RAJASTHAN	ALWAR	7,527.00	3,156.00	41.93
4	RAJASTHAN	NAGAUR	5,226.00	2,149.00	41.12
5	RAJASTHAN	AJMER	2,136.00	869.00	40.68
6	RAJASTHAN	SAWAI MADHOPUR	2,235.00	907.00	40.58
7	RAJASTHAN	DAUSA	3,074.00	1,244.00	40.47
8	RAJASTHAN	JAIPUR	48,149.00	18,230.00	37.86
9	HARAYANA	BHIWANI	359.00	178.00	49.58
10	HARAYANA	REWARI	1,207.00	582.00	48.22

It has been observed that maximum number of patient conversion rate is from the district of Bhiwani, Sikar, Alwar, Ganganagar, Nagaur, Ajmer, SawaiMadhopur, Dausa. Jaipur contributes the maximum number of patients (48, 149), but conversion rate is 37.86%.

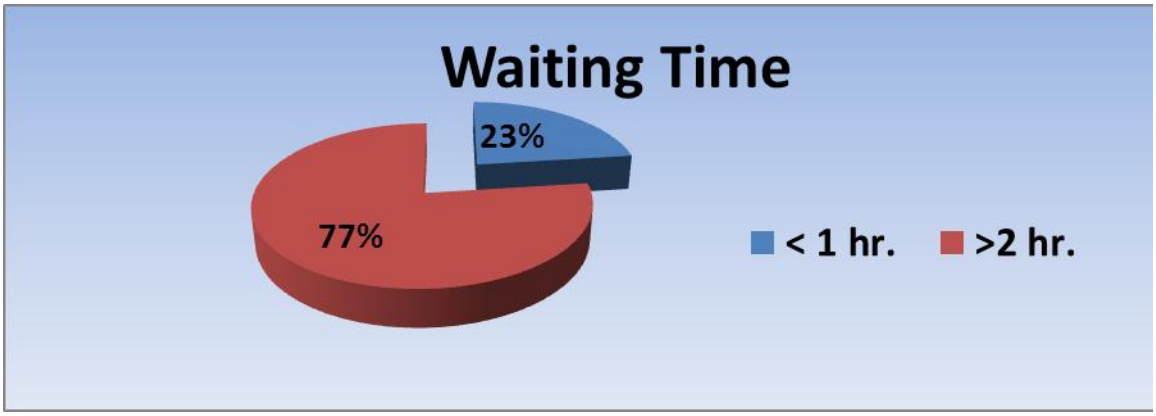
It was observed that number of new patients is decreasing. It was assumed that this could be out of low level of satisfaction among patients. But on the other hand it was observed that new patients are converted in to the old as they were coming to the hospital again and again. To find out reasons for old patient numbers are increasing and new patients are decreasing, we interacted with patients. The results are presented below.

Fig-1: Percent distribution of respondents by reasons for choosing SDMH



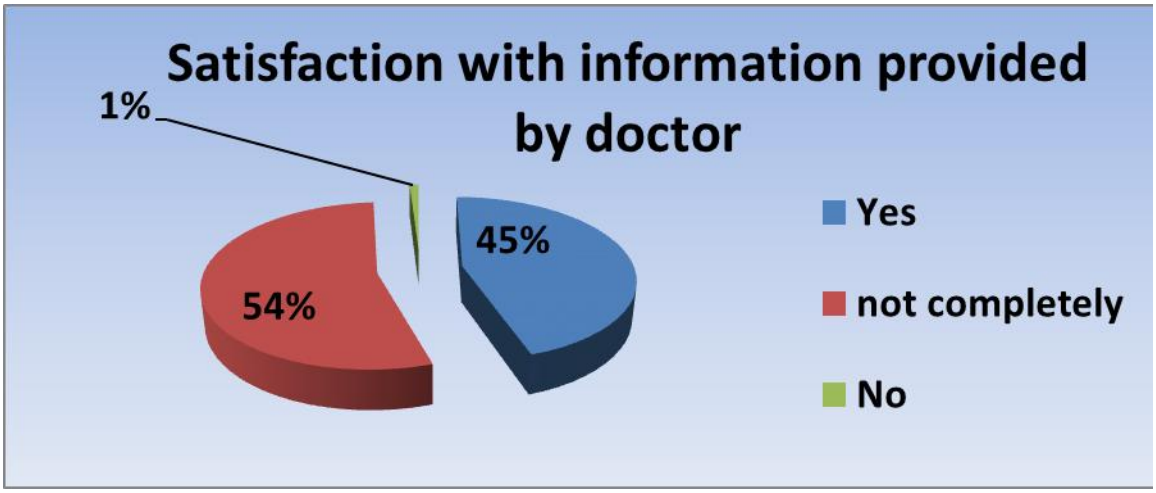
After having interaction with patients it was found that out of ten patients four of them were coming to this hospital because of previous satisfactory, three out of ten were coming as they were referred patients, and three patients out of ten were coming due to competent doctors in the hospital.

Fig-2: Percent distribution of respondents by waiting time before meeting consultant.



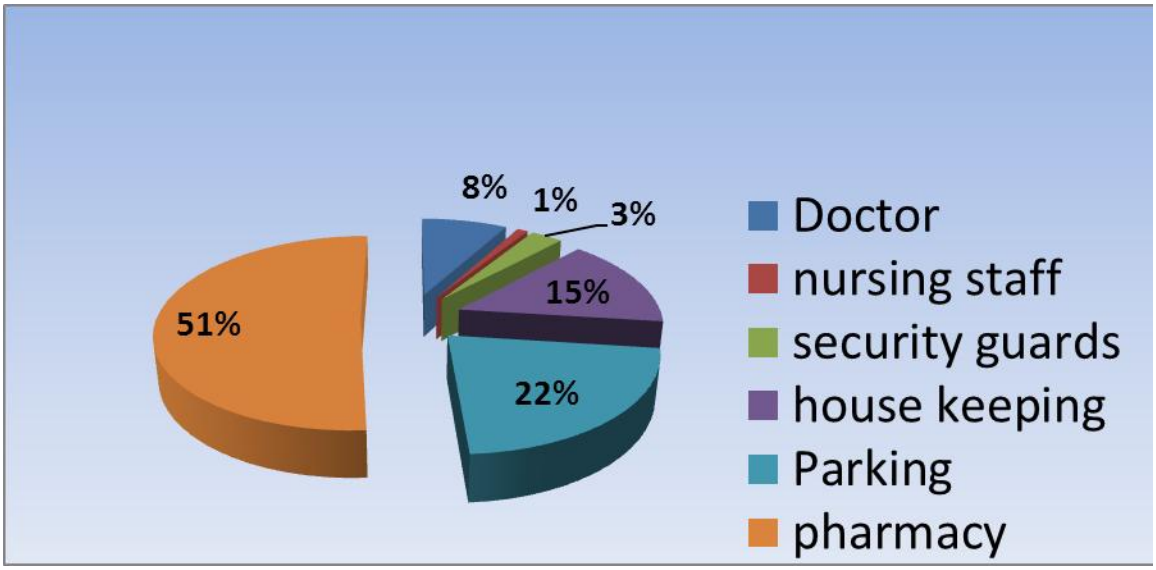
After having interaction with patients regarding waiting time they have to wait before meeting the consultant as it is minutes but patients were waiting since long so we recorded it in hours instead in minutes.as per the guidelines thirty minutes is the maximum waiting time but after the interaction with the patients it was found that out of ten patients seven were waiting more than two hours and three out of ten patients waited less than one hour around forty five to sixty minutes so our conclusion after analysis was that waiting time is to long..

Fig-3: Percent distribution of respondents by their satisfaction with the information provided by doctor.



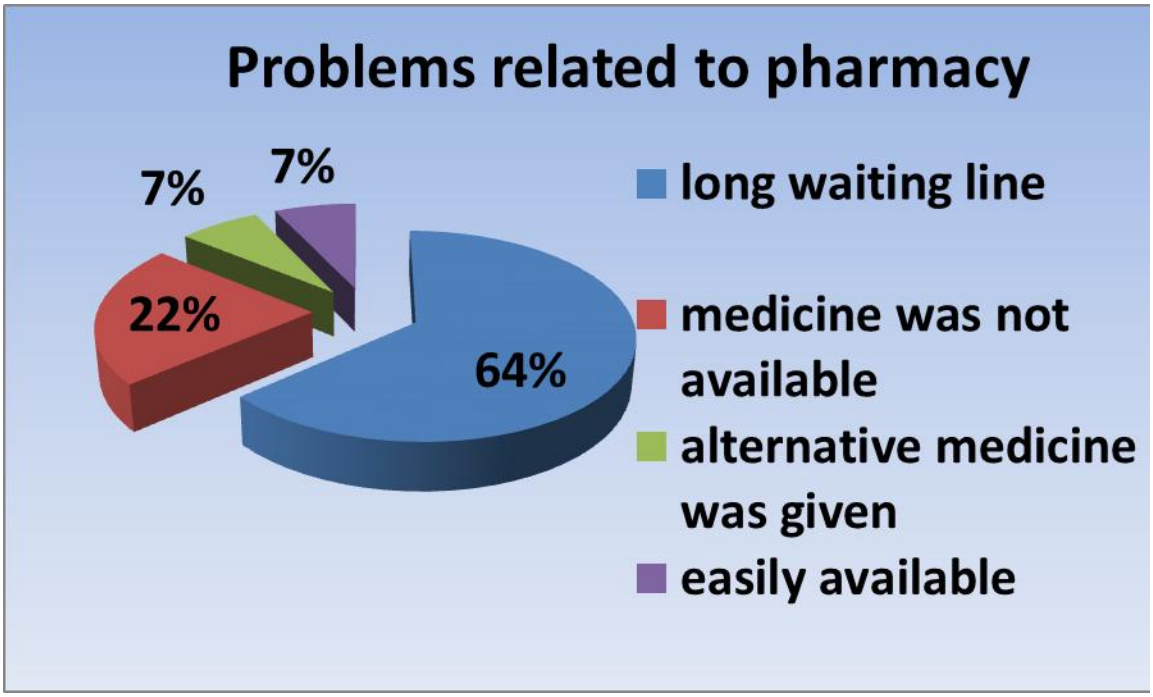
After having interaction with patients regarding perception with the information provided by doctor out of ten patients five patients were satisfied with the information provided ,four out of ten were not fully satisfied with the information and one out of ten was not at all satisfied with the information provided by doctor.

Fig 4: Percent distribution of respondents by satisfaction with the type of staff



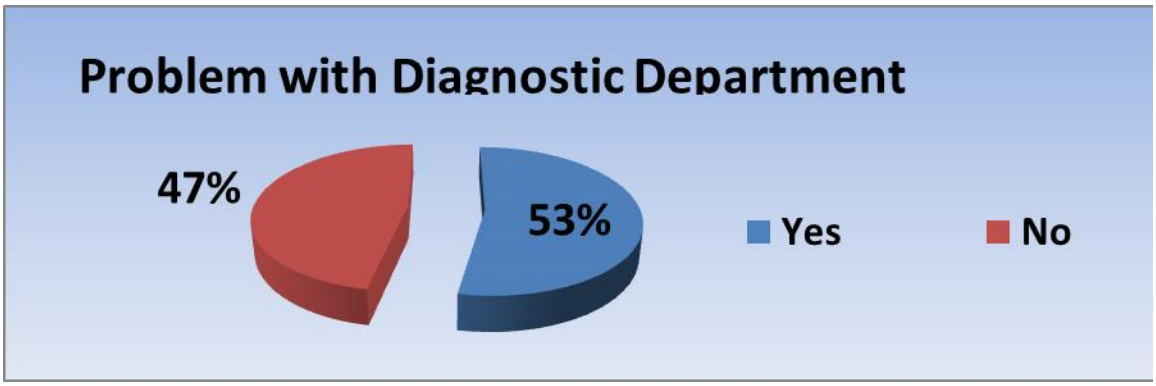
After having interaction with patients regarding satisfaction with the type of staff. five out of ten were not satisfied with the pharmacy related services , two were not satisfied with behaviour of doctor, and one out of ten were not satisfied with housekeeping ,security and nursing staff.

Fig-5: Percent distribution of respondents in the problems faced related to pharmacy.



After having interaction with patients regarding pharmacy related problems they faced was out of ten patients six of them faced problem because of long queue in front of pharmacy, two out of ten faced problem due to nonavailability of medicines and one out of ten patients faced problem because of alternative medicine given and only one patient out of ten easily get the medicine without any discomfort.

Fig-6:percent distribution of respondents in case of problems in diagnostic department.



After having interaction with patients regarding problems they faced with diagnostic department while using diagnostic services was out of ten six of them faced problem related to diagnostics, four out of ten were satisfied with the diagnostic services.

Percent distribution of respondents observed in improvement of hospital facilities.

After having interaction with patients regarding any improvement in the hospital facilities their perception was out of ten eight of them noticed improvement in hospital facilities compared to their last visit in quality of health services to patients**.**

Possible reasons found were-

1. Long waiting time before meeting the doctor.
2. Patients were not satisfied with sudden increase in registration fees, and doctors reference fees. Registration fees is valid for only 5 days after that again same fees of Rs.500 is charged from them, whereas patient wants some discount over it or extension of days.
3. If any internal reference occurs then also patient is charged 350 rupees, which is not satisfactory for them.
4. Diagnostic report collections are major frustration areas for patients, sometimes due to unavailability of doctors or delayed time period leads to delay in report collection. This causes major problem for those who are coming from out of station as either they have to stay in the city on their own or have to travel back which becomes very hectic for them.
5. Parking problem: For those patients coming by their own vehicle parking is always overcrowded and the guard and other parking staff don‟t communicate properly.
6. Accommodation problem for new patients: those OPD patients who are coming from out of city they don‟t have any facility inside the hospital premises to relax.
7. Lift is the area of issue as number of lifts in each building is very less so overcrowding can be seen around the lift.
8. Pharmacy is the hub of issues:
    a. Long queue.
    b. Unavailability of medicines
    c. No proper communication between pharmacy staff and patients

d. Medicines are sold on MRP only, no discounts given.
e. Sometimes alternative medicines are given without consulting respective doctors.

No proper sign boards in hospital.

Recommendations:

After observing the in-coming general patients‟ trend in the hospital, their complains and to increase their retention possible recommendations are as follows-

a) Refer to the findings on waiting time it was found that more than 75% patients waited for two hours or more. In general a patient should not wait more than 30 minutes and therefore, it is suggested that proper patient engagement programmes should be introduced in hospital for proper utilization of patient time. An appointment system may be introduced to reduce the waiting time.
b) To increase the numbers of counters in the pharmacy.
c) Proper training to the staff so that they guide the patient whenever required.

<u>Introduction of full-fledged appointment system</u>

Importance of OPD Services

- First point of contact
- It is the shop window of hospital
- Makes or mars the hospital image
- A good OPD service can reduce the load on in-patient services
- It is a place for implementing preventive &promotive health activities.
- Facilitates teaching
- About twice the in-patients attend OPD every day

Problems In OPD

- Patients overcrowding
- Long waiting time

Probable Reasons

- Wrong planning of departments
- Restricted registration time
- Absence of appointment system
- Shortage of staff

Need to introduce appointment system-

An average internal waiting time for patients of 19 minutes. The internal waiting time includes all the time patients have to wait after their scheduled appointment time has been passed. About 45% of the clinic sessions last at least 30 minutes longer than scheduled (overtime) as referenced in "essay.utwente.nl/57961/1/scriptie_J_Westeneng.pdf"

1. To avoid „queuing system"-The basic phenomenon of queuing arises whenever a shared facility needs to be accessed for service by a large number of jobs or customers. And more than one attendants seen with patients.
    - Here in SDMH neurology and radiology departments are the major department where queuing can be seen in abundance. Followed by gynaecology.
2. Characteristics of queuing systems
    - Arrival Process: The distribution that determines how the task arrives in the system.
    - Service Process: The distribution that determines the task processing time
    - Number of Servers: Total number of servers available to process the tasks

Need to start appointment system

- Long queues in OPD"s
- Standing in lines from early in the morning
- Encourages corruption and malpractices (like private practising and over charging)

Unavailability of doctors

- Patients usually come from far distances and it is a major socio-economic burden to come for follow up visits.
- In case doctor in charge is on leave or busy , then patient have to come another day which is not informed to them beforehand.

INITIATIVE: Appointment system or call centre steps:

1. Call centres" phone in evening and gives next appointment based on doctor"s order.

2. Mobile number is captured in EMR and verified by call centre during first visit/admission
3. Call centres gives appointment using voice orSMS.
4. On day-1 sends list of all appointments that files can be taken out
5. On day 0 final list is prepared and put on each doctors table.
6. Patient waits with token number which is displayed outside each room

Methods of appointment

To improve the current appointment system, we evaluate six experimental factors:

- Method of decision-making, which involves the possibility to schedule patients in batches at the same time (static scheduling), or immediately when the patient requests an appointment (dynamic scheduling, as in the current situation)

- Length of the scheduling horizon.

Appointment Schedule (Arrival time of doctors is 10 AM)-recommended

Sl. No.	**FROM**	**TO**	**ACTIVITY**
1	10:15 AM	10:45 AM	OPD files of new patients
2	10:45	11:15	Appointment time
3	11:15	12:00	IPD rounds
4	12:00	12:30	OPD files of new patients
5	12:30	01:00	Appointment time
6	01:00	01:30	OPD files of new patients

7	01:30	02:00	Lunch
8	02:30	3:00	OPD files of new patients
9	3:00	03:30	Appointment time
10	03:30	04:00	OPD files of new patients
11	4:00	04:15	Tea time
12	04:15	05:00	OPD files of new patient
13	05:00	05:30	Appointment

References:

1. https://www.google.co.in/?gfe_rd=cr&ei=586CU6-bHeXA8gfayoCIDQ#q=patient+engagement+while+waiting+time+in+OPD
2. http://www.healthcareitnews.com/blog/strategies-maximize-patient-engagement-retention
3. essay.utwente.nl/57961/1/scriptie_J_Westeneng.pdf

Annexure-1

Patient repeat rate data:(Conversion of new patients into old patients)

PATO_STATE	PATO_DISTRICT	SUM(NEW)	SUM(OLD)	Conversion rate %/repeat rate%
BIHAR	DHANBAD	1.00	1.00	100.00
BIHAR	AURANGABAD	2.00	2.00	100.00
sssBIHAR	EAST CHAMPARAN	2.00	2.00	100.00
GUJRAT	PANCH MAHAL	1.00	1.00	100.00
HARAYANA	JAIPUR	1.00	1.00	100.00
RAJASTHAN	SURAT	1.00	1.00	100.00
RAJASTHAN	IMPHAL	1.00	1.00	100.00
RAJASTHAN	REWARI	1.00	1.00	100.00
RAJASTHAN	GWALIOR	1.00	1.00	100.00
RAJASTHAN	GUWAHATI	1.00	1.00	100.00
RAJASTHAN	HAMIRPUR	1.00	1.00	100.00
RAJASTHAN	LALITPUR	1.00	1.00	100.00
RAJASTHAN	FARIDABAD	2.00	2.00	100.00
RAJASTHAN	JHUN JHUNU	1.00	1.00	100.00
RAJASTHAN	GANDHINAGAR	2.00	2.00	100.00
RAJASTHAN	MUZAFFARNAGAR	1.00	1.00	100.00
UTTAR PRADESH	BASTI	1.00	1.00	100.00
UTTAR PRADESH	KHERI	1.00	1.00	100.00
UTTAR PRADESH	SITAPUR	1.00	1.00	100.00
UTTAR PRADESH	AZAMGARH	2.00	2.00	100.00
UTTAR PRADESH	HAMIRPUR	2.00	2.00	100.00
UTTAR PRADESH	MORADABAD	1.00	1.00	100.00

UTTAR PRADESH	RAE BARELI	1.00	1.00	100.00
UTTAR PRADESH	SAHARANPUR	3.00	3.00	100.00
MADHYA PRADESH	HARDA	1.00	1.00	100.00
MADHYA PRADESH	MANDLA	1.00	1.00	100.00
MADHYA PRADESH	BALAGHAT	1.00	1.00	100.00
RAJASTHAN	JIND	5.00	4.00	80.00
PUNJAB	JALANDHAR	3.00	2.00	66.67
WEST BENGAL	DARJEELING	3.00	2.00	66.67
UTTAR PRADESH	JALAUN	3.00	2.00	66.67
MADHYA PRADESH	ASHOKNAGAR	6.00	4.00	66.67
RAJASTHAN	BHIWANI	5.00	3.00	60.00
UTTAR PRADESH	MEERUT	12.00	7.00	58.33
MADHYA PRADESH	SAGAR	7.00	4.00	57.14
RAJASTHAN	MAHENDARGARH	22.00	12.00	54.55
MADHYA PRADESH	MORENA	33.00	17.00	51.52
ASSAM	GOLAGHAT	2.00	1.00	50.00
BIHAR	SAMASTIPUR	2.00	1.00	50.00
DELHI		2.00	1.00	50.00
GUJRAT	BARAUCH	2.00	1.00	50.00
GUJRAT	KACHCHH	4.00	2.00	50.00
PUNJAB	FARIDKOT	6.00	3.00	50.00
FOREIGN	MASHKAR	2.00	1.00	50.00
HARAYANA	AMBALA	2.00	1.00	50.00
HARAYANA	YAMUNA NAGAR	2.00	1.00	50.00
JHARKHAND	BOKARO	2.00	1.00	50.00
RAJASTHAN	GURGAON	2.00	1.00	50.00
RAJASTHAN	DUNGARPUR	4.00	2.00	50.00
UTTAR PRADESH	KANNAUJ	2.00	1.00	50.00
UTTAR PRADESH	LALITPUR	4.00	2.00	50.00
UTTAR PRADESH	SONBHADRA	2.00	1.00	50.00

UTTAR PRADESH	MUZAFFARNAGAR	4.00	2.00	50.00
MADHYA PRADESH	BETUL	2.00	1.00	50.00
MADHYA PRADESH	KATNI	4.00	2.00	50.00
MADHYA PRADESH	RAISEN	2.00	1.00	50.00
MADHYA PRADESH	SEHORE	2.00	1.00	50.00
HARAYANA	BHIWANI	359.00	178.00	49.58
HARAYANA	REWARI	1,207.00	582.00	48.22
UTRAKHAND	DEHRADUN	23.00	11.00	47.83
PUNJAB	FAZILKA	236.00	111.00	47.03
HARAYANA	ROHTAK	28.00	13.00	46.43
HARAYANA	SIRSA	2,091.00	970.00	46.39
PUNJAB	MUKTSAR	100.00	46.00	46.00
HARAYANA	HISAR	268.00	123.00	45.90
MADHYA PRADESH	GUNA	22.00	10.00	45.45
HARAYANA	JHAJJAR	78.00	35.00	44.87
RAJASTHAN	MAKRANA	29.00	13.00	44.83
HARAYANA	MAHENDARGARH	8,103.00	3,623.00	44.71
RAJASTHAN	JHUNJHUNU	8,408.00	3,747.00	44.56
PUNJAB	ABOHAR	66.00	29.00	43.94
PUNJAB	MANSA	32.00	14.00	43.75
RAJASTHAN	CHURU	4,496.00	1,957.00	43.53
RAJASTHAN	HANUMANGARH	4,071.00	1,754.00	43.09
HARAYANA	FATEHBAD	191.00	82.00	42.93
UTTAR PRADESH	HATHRAS	14.00	6.00	42.86
UTTAR PRADESH	GORAKHPUR	7.00	3.00	42.86
RAJASTHAN	SIKAR	9,375.00	4,000.00	42.67
PUNJAB	BATHINDA	73.00	31.00	42.47
RAJASTHAN	GANGANAGAR	1,820.00	770.00	42.31
RAJASTHAN	ALWAR	7,527.00	3,156.00	41.93
MADHYA PRADESH	UJJAIN	12.00	5.00	41.67

RAJASTHAN	CHITTORGARH	148.00	61.00	41.22
UTTAR PRADESH	ETAWAH	17.00	7.00	41.18
RAJASTHAN	NAGAUR	5,226.00	2,149.00	41.12
RAJASTHAN	AJMER	2,136.00	869.00	40.68
RAJASTHAN	SAWAI MADHOPUR	2,235.00	907.00	40.58
RAJASTHAN	DAUSA	3,074.00	1,244.00	40.47
RAJASTHAN	KARAULI	2,413.00	973.00	40.32
HARAYANA	JIND	5.00	2.00	40.00
NAGALAND	DIMOPUR	5.00	2.00	40.00
MEGHALAYA	MEGHALAYA	5.00	2.00	40.00
MADHYA PRADESH	SHEOPUR	119.00	47.00	39.50
RAJASTHAN	JAISALMER	33.00	13.00	39.39
RAJASTHAN	TONK	1,788.00	695.00	38.87
RAJASTHAN	BHARATPUR	2,882.00	1,118.00	38.79
PUNJAB	FIROZPUR	75.00	29.00	38.67
RAJASTHAN	BUNDI	275.00	106.00	38.55
RAJASTHAN	JALOR	26.00	10.00	38.46
RAJASTHAN	KOTA	560.00	215.00	38.39
ASSAM	ASSAM	55.00	21.00	38.18
RAJASTHAN	BIKANER	711.00	271.00	38.12
RAJASTHAN	JAIPUR	48,149.00	18,230.00	37.86
HARAYANA	MEWAT	65.00	24.00	36.92
RAJASTHAN	BHILWARA	789.00	287.00	36.38
UTTAR PRADESH	MATHURA	166.00	60.00	36.14
RAJASTHAN	DHOLPUR	319.00	115.00	36.05
RAJASTHAN	JHALWAR	90.00	32.00	35.56
HARAYANA	FARIDABAD	58.00	20.00	34.48
RAJASTHAN	BARA	114.00	39.00	34.21
BIHAR	PURNEA	6.00	2.00	33.33
BIHAR	DARBHANGA	9.00	3.00	33.33

GUJRAT	VALSAD	6.00	2.00	33.33
ORISSA	NAVRANGPURA	9.00	3.00	33.33
PUNJAB	PATIALA	3.00	1.00	33.33
FOREIGN	ENGLAND	3.00	1.00	33.33
RAJASTHAN	SIROHI	18.00	6.00	33.33
RAJASTHAN	RAJSAMAND	48.00	16.00	33.33
TAMIL NADU	CHENNAI	3.00	1.00	33.33
UTTAR PRADESH	HARDOI	3.00	1.00	33.33
UTTAR PRADESH	AURAIYA	3.00	1.00	33.33
UTTAR PRADESH	BIJINOR	3.00	1.00	33.33
UTTAR PRADESH	MAINPURI	3.00	1.00	33.33
UTTAR PRADESH	VARANASI	3.00	1.00	33.33
UTTAR PRADESH	SULTANPUR	6.00	2.00	33.33
MADHYA PRADESH	DATIA	3.00	1.00	33.33
MADHYA PRADESH	DEWAS	3.00	1.00	33.33
MADHYA PRADESH	RAJGARH	3.00	1.00	33.33
MADHYA PRADESH	JABALPUR	3.00	1.00	33.33
MADHYA PRADESH	SHIVPURI	21.00	7.00	33.33
HARAYANA	GURGAON	105.00	34.00	32.38
MADHYA PRADESH	GWALIOR	44.00	14.00	31.82
RAJASTHAN	UDAIPUR	73.00	23.00	31.51
PUNJAB	PUNJAB	139.00	43.00	30.94
RAJASTHAN	JODHPUR	193.00	59.00	30.57
UTTAR PRADESH	NOIDA	10.00	3.00	30.00
RAJASTHAN	BARMER	51.00	15.00	29.41
UTTAR PRADESH	BAREILLY	7.00	2.00	28.57
UTTAR PRADESH	FIROZABAD	18.00	5.00	27.78
UTTAR PRADESH	AGRA	173.00	48.00	27.75
ASSAM	GUWAHATI	22.00	6.00	27.27
UTTAR PRADESH	ALIGARH	15.00	4.00	26.67

DELHI	DELHI	180.00	47.00	26.11
BIHAR	MADHUBANI	4.00	1.00	25.00
GUJRAT	SURAT	12.00	3.00	25.00
PUNJAB	LUDHIANA	8.00	2.00	25.00
FOREIGN	CANADA	4.00	1.00	25.00
HARAYANA	KAITHAL	4.00	1.00	25.00
JHARKHAND	DHANBADH	4.00	1.00	25.00
RAJASTHAN	PRATAPGARH	16.00	4.00	25.00
UTTAR PRADESH	BADAUN	4.00	1.00	25.00
UTTAR PRADESH	JHANSI	4.00	1.00	25.00
RAJASTHAN	PALI	114.00	28.00	24.56
MADHYA PRADESH	NEEMUCH	30.00	7.00	23.33
BIHAR	PATNA	9.00	2.00	22.22
FOREIGN	AUSTRALIA	9.00	2.00	22.22
RAJASTHAN	JABALPUR	9.00	2.00	22.22
UTTAR PRADESH	GHAZIABAD	18.00	4.00	22.22
MADHYA PRADESH	MANDSAUR	9.00	2.00	22.22
HIMACHAL PRADESH	HIMACHAL PRADESH	9.00	2.00	22.22
RAJASTHAN	BANSWARA	19.00	4.00	21.05
WEST BENGAL	SILIGUDI	19.00	4.00	21.05
FOREIGN	NEPAL	5.00	1.00	20.00
HARAYANA	PANCHKULA	10.00	2.00	20.00
JHARKHAND	FIROZPUR(JHARKHAND)	10.00	2.00	20.00
RAJASTHAN	SIRSA	5.00	1.00	20.00
CHHATISGARH	RAIPUR	10.00	2.00	20.00
UTTAR PRADESH	ALLAHABAD	5.00	1.00	20.00
MADHYA PRADESH	RATLAM	10.00	2.00	20.00
JAMMU &	JAMMU	5.00	1.00	20.00

KASHMIR				
MADHYA PRADESH	BHOPAL	11.00	2.00	18.18
UTTAR PRADESH	BULANDSHAR	6.00	1.00	16.67
MAHARASHTRA	MAHARASHTRA	67.00	11.00	16.42
GUJRAT	AHMEDABAD	14.00	2.00	14.29
PUNJAB	AMRITSAR	7.00	1.00	14.29
HARAYANA	SONIPAT	8.00	1.00	12.50
WEST BENGAL	KOLKATA	32.00	4.00	12.50
UTTAR PRADESH	LUCKNOW	9.00	1.00	11.11
MADHYA PRADESH	INDORE	21.00	2.00	9.52
BIHAR	GAYA	1.00	0.00	0.00
BIHAR	ARWAL	2.00	0.00	0.00
BIHAR	BANKA	2.00	0.00	0.00
BIHAR	SIWAN	2.00	0.00	0.00
BIHAR	KAIMUR	1.00	0.00	0.00
BIHAR	NALANDA	2.00	0.00	0.00
BIHAR	BHAGALPUR	1.00	0.00	0.00
BIHAR	GOPALGANJ	1.00	0.00	0.00
BIHAR	JEHANABAD	1.00	0.00	0.00
BIHAR	KISHANGANJ	1.00	0.00	0.00
BIHAR	MUZAFFARPUR	3.00	0.00	0.00
GUJRAT	ANAND	2.00	0.00	0.00
GUJRAT	DAHOD	2.00	0.00	0.00
GUJRAT	PATAN	1.00	0.00	0.00
GUJRAT	BARODA	1.00	0.00	0.00
GUJRAT	RAJKOT	1.00	0.00	0.00
GUJRAT	MEHSANA	2.00	0.00	0.00
GUJRAT	JAMNAGAR	2.00	0.00	0.00
GUJRAT	PALANPUR	1.00	0.00	0.00
GUJRAT	VADODARA	2.00	0.00	0.00

GUJRAT	GANDHINAGAR	2.00	0.00	0.00
GUJRAT	BANAS KANTHA	1.00	0.00	0.00
KERALA	IDUKKI	6.00	0.00	0.00
KERALA	KOLLAM	11.00	0.00	0.00
KERALA	PATHANAMTHITTA	7.00	0.00	0.00
PUNJAB	MOGA	2.00	0.00	0.00
PUNJAB	BARNALA	2.00	0.00	0.00
PUNJAB	SANGRUR	2.00	0.00	0.00
PUNJAB	HOSHIARPUR	1.00	0.00	0.00
PUNJAB	TARN TARAN	1.00	0.00	0.00
PUNJAB	FATEHGARH SAHIB	1.00	0.00	0.00
FOREIGN	IRAQ	1.00	0.00	0.00
FOREIGN	U.K.	9.00	0.00	0.00
FOREIGN	USSR	3.00	0.00	0.00
FOREIGN	U.S.A.	1.00	0.00	0.00
FOREIGN	DENMARK	4.00	0.00	0.00
FOREIGN	GERMANY	15.00	0.00	0.00
FOREIGN	SWITZERLAND	1.00	0.00	0.00
FOREIGN	LJUBLJANA SLOVENIA	4.00	0.00	0.00
MANIPUR	IMPHAL	4.00	0.00	0.00
HARAYANA		1.00	0.00	0.00
HARAYANA	KARNAL	5.00	0.00	0.00
HARAYANA	KURUKSHETRA	2.00	0.00	0.00
JHARKHAND	RANCHI	3.00	0.00	0.00
JHARKHAND	GIRIDIH	3.00	0.00	0.00
KARNATAKA	BANGLORE	10.00	0.00	0.00
RAJASTHAN		2.00	0.00	0.00
RAJASTHAN	AGRA	1.00	0.00	0.00
RAJASTHAN	MEWAT	1.00	0.00	0.00

RAJASTHAN	ABOHAR	1.00	0.00	0.00
RAJASTHAN	KARNAL	1.00	0.00	0.00
RAJASTHAN	PUNJAB	1.00	0.00	0.00
RAJASTHAN	ALIGARH	1.00	0.00	0.00
RAJASTHAN	FATEHBAD	1.00	0.00	0.00
RAJASTHAN	BHAGALPUR	2.00	0.00	0.00
UTTRANCHAL	ALMORA	1.00	0.00	0.00
UTTRANCHAL	HARIDWAR	1.00	0.00	0.00
WEST BENGAL	jalpaiguri	1.00	0.00	0.00
UTTAR PRADESH		1.00	0.00	0.00
UTTAR PRADESH	ETHA	1.00	0.00	0.00
UTTAR PRADESH	UNNAO	4.00	0.00	0.00
UTTAR PRADESH	BAGPAT	1.00	0.00	0.00
UTTAR PRADESH	BALLIA	1.00	0.00	0.00
UTTAR PRADESH	DEORIA	3.00	0.00	0.00
UTTAR PRADESH	KANPUR	4.00	0.00	0.00
UTTAR PRADESH	RAMPUR	2.00	0.00	0.00
UTTAR PRADESH	JAUNPUR	1.00	0.00	0.00
UTTAR PRADESH	FAIZABAD	2.00	0.00	0.00
UTTAR PRADESH	FATEHPUR	1.00	0.00	0.00
UTTAR PRADESH	MIRZAPUR	2.00	0.00	0.00
UTTAR PRADESH	PILIBHIT	2.00	0.00	0.00
UTTAR PRADESH	BARABANKI	1.00	0.00	0.00
UTTAR PRADESH	CHANDAULI	1.00	0.00	0.00
UTTAR PRADESH	CHITRAKUT	1.00	0.00	0.00
UTTAR PRADESH	KAUSHAMBI	1.00	0.00	0.00
UTTAR PRADESH	FARRUKHABAD	2.00	0.00	0.00
UTTAR PRADESH	MAHARAJGANJ	1.00	0.00	0.00
UTTAR PRADESH	SHAHJAHANPUR	2.00	0.00	0.00
UTTAR PRADESH	SIDHARTH NAGAR	5.00	0.00	0.00

ANDHRA PRADESH	HYDRABAD	14.00	0.00	0.00
MADHYA PRADESH	REWA	5.00	0.00	0.00
MADHYA PRADESH	BHIND	1.00	0.00	0.00
MADHYA PRADESH	DAMOH	2.00	0.00	0.00
MADHYA PRADESH	PANNA	1.00	0.00	0.00
MADHYA PRADESH	SATNA	3.00	0.00	0.00
MADHYA PRADESH	ANUPPUR	1.00	0.00	0.00
MADHYA PRADESH	BARWANI	1.00	0.00	0.00
MADHYA PRADESH	KHANDWA	1.00	0.00	0.00
MADHYA PRADESH	KHARGONE	1.00	0.00	0.00
MADHYA PRADESH	SHAJAPUR	2.00	0.00	0.00
MADHYA PRADESH	BURHANPUR	1.00	0.00	0.00
MADHYA PRADESH	SINGRAULI	1.00	0.00	0.00
MADHYA PRADESH	TIKAMGARH	2.00	0.00	0.00
MADHYA PRADESH	CHHATARPUR	1.00	0.00	0.00
MADHYA PRADESH	HOSHANGABAD	3.00	0.00	0.00
MADHYA PRADESH	NARSINGHPUR	3.00	0.00	0.00
JAMMU & KASHMIR	KASHMIR	2.00	0.00	0.00
JAMMU & KASHMIR	SRINAGAR	2.00	0.00	0.00
DADRA AND NAGAR HAVELI	DADRA AND NAGAR HAVELI	4.00	0.00	0.00

Annexure-2

Table 1 : Floor wise distribution of IPD

Basement	Administrative Block/Offices
	Laboratory services
	Library
	Radiology services
Ground floor	Enquiry
	Admission Counter
	Ambulance Enquiry
	Pharmacy Shop
	Emergency
	Security desk
	Billing counter
	Computer/IT lab
	Male private Ward
	Nurses sick Room
	Staff Sick Room
	General Deluxe Ward-3
	General Deluxe Ward-5
	Medical Intensive Care Unit
	Step Down ICU-1
First Floor	Female Private Ward
	Old Operation Theatre (Cardio. + Neuro.)
	Cath. Lab
	New Operation Theatre
	Surgical Critical Care Unit
	Medical Critical Care Unit-1

	Medical Critical Care Unit-2
	General Deluxe Ward-4
	Few Private Room
Second Floor	Maternity Ward
	Labour Room
	Paediatric Intensive Care Unit
	P re-mature Care Unit(PCU)/Neonatal ICU
	Labour Delivery Rooms
	Chairman Room
	Paediatric Ward
	Surgical ICU
	Transit Ward
	Urology Ward
	Super Deluxe Rooms
	semi Deluxe Rooms
Third Floor	Dialysis Unit
	Nephrology Ward
	Orthopaedic Ward(KMO)-1
	Orthopaedic Ward(KMO)-2
	Terrance Operation Theatre
	Neuro-Science ICU
	Central Sterilization Room(CSR)
	Neuro Science ward
	General Deluxe Ward-1
	General Deluxe Ward-2
Fourth Floor	Deluxe Rooms
	Colour Master Ward
	convalescent Ward-Medicine
	convalescent Ward-Gastro.

	Convalescent Ward-Surgery
	New Medicine Ward

Annexure-3:

Table 2 : Lab Equipment list

S.N.	Biochemistry	Haematology	Histopathology	Microbiology
1	Vitros 5,1 FS	STA-ART-4	Tissue processor	BACTEC-9050
2	Vitros-250dry chemistry	STA-Compact	Cytostate machine	Microplate ELISA Reade
3	Blood gas/electrolyte(B)bay	SysmexXT-1800i	pH meter	Vitros ECI
4	(Bio red)D-10 (Glyco-Hb)	Vasmatic-20	Microscope	Vitros -3600
5	Laser Nephlometer	Clinitek-Advantus	Fluorescence microsco	Vitek-2 Compact
6	Nephlometric Analyser(elecctralat)		STAT Spin Cytofuge	BACTEC-9120
7	ERBA-Chem-5 plusv2 (Semiautoanalyser)		Leica Embedding Stat	
8	Genio-S		Microtome	
9	Cardiac Marker Analyser		Microwave	

Annexure-4:

Equipment list of Wards

There are various types of equipment"s in wards which are listed in Table 6.

Table 4 : List of equipment's

S.N	CSSR Iten	Cup Board Items	Trolley Items	loating Items	Almeria Ite	mergency Tray
1	Scissors	B.P. Instrumen	Tongue epressor	lotor with Piston	Enema Can	T. Tube o.6.5,7,7.5,8,8.5
2	Suture Cutting Scissors	Stethoscopes	Ambu Ba	ool Jug	Hot Water B	irway
3	Ophthalmi cissors	Thermometers	Dyna -Pla	eight Machine	SS(Big)	Megaforcep
4	Bowl Set	Hammer	Laryngo copic Plate	xtension Board	Nebulisation achine	Ambubag
5	Dressing Set	Torch	Vaculain older	atient Trolley with attress	Pulse Oxy meter	Nasal prong
6	L.P. Tray	Inch Tape	Needle estroyer	$_2$ Cylinder	Syringe Pump	High Conc. Mask
7	Aspiration	Scale	Medicine	heel Chair	Drug Tray	Wenflone No.20,18
8	Cut Down Tray	Stapler	Plastic Ki ray	stand	Water Mattress	Tourniquets
9	Eye Tray	Tailor Scissor		ardiac Table	Induction Plate	uture 3.0,4.0
10	Cotton Roll Tray	Glucometer		le Folder	Home Theatre	Teagarden
11	Eye Swab	Stamp Pad		uction Set	Injections	Zylocaine jelly

	Tray					
12	Catheter Tray	Micro Drip Set		rinal	laryngoscope Blade	rip Set
13		Blood Set		ed Pan	ECG Lead	ing
14		3-Way		ool Pan	O_2 Cylinder	sterile Gloves
15		Wenflone o.22,20,18		aundry Beg	Torch	Suction Set
16		Marker Pen		plastic Box		-piece
		Nasal Prong		Mug		ebulization Mask
		Gluco Strips		plastic Bucket		$_2$ mask
17		O_2 Mask		illows		edicine Box
18		Air Way		eight Scale		ubber Suction
19		Foley"s Catheter		Walkers		Micropore with Cutt
20		Uro Bag		CG Machine		ET shelle
21		Paid O_2 Mask & Drip Set		Medicine Box		
22		Doctors Seal		Laundry Items		
23		Surgical Glove		patient Gown		
24		T-piece		and Towel		
25		Punching Mac		Blanket		
26		Nebulisation Mask				
27		B-D Syringe				

Note: There is Nurse Call Systems for Private Rooms to cater better services in private rooms.