Summer Training at

[4th April – 31st May, 2012]

Streamlining – Linen and Laundry
&
Implementing New Quality Indicators

By
Vishal Arora

Under the guidance of
Dr. Vijay Pratap Raghuvanshi

Post Graduate Diploma in Hospital and Health Management
2011-2013

Institute of Health Management Research,
Jaipur
2012

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Certificate

This is to certify that Dr Vishal Arora has undergone summer training in Asian Institute Of Medical Sciences, Faridabad from 4th April to 30th May, 2012

The candidate has carried out all the studies related to summer training himself. His approach to the studies has been sincere, scientific, and analytical. This summer training in partial fulfillment of the course requirement is recommended for the award of Post Graduate Diploma in Hospital & Health Management.

I wish him success in all future endeavors.

Dr .P. R.Sodani

(Dean Academics and student affairs)

Dr.Vijay Pratap Raghuvanshi

(Assistant Professor)

asian
Institute of Medical Sciences

NABH
ACCREDITED

AIMS/HR/VA/12

31st May'2012

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Dr. Vishal Arora** has successfully completed his Internship in the Department of Quality & Operations from 4th April'2012 to 31st May'2012 in this hospital.

The Projects undertaken during the training period are as follow:

- Streamlining Linen and Laundry
- Medication Edrors – Root Cause Analysis
- Swiss Cheese Model of Equipment Failure – Autoclave
- Implementing New Quality Indicators as per NABH 3rd Edition

During his tenure with us he was found to be sincere, hardworking & responsible towards his work.

We wish him all the best in his future endeavors.

for **Asian Institute of Medical Sciences**

Anupam Pandey
Director Admin & Purchase

Asian Institute of Medical Sciences
(A Unit of Blue Sapphire Healthcare Pvt. Ltd.)
Badkal Flyover Road, Sector-21A,
Faridabad (Haryana) PIN : 121001

ACKNOWLEDGEMENT

I have taken tremendous interest and effort in the project. However, it would not have been possible without the kind support and extended hand of help of many individuals. I would like to express my sincere thanks to all of them. I would like to thank all the professionals at **ASIAN INSTITUTE OF MEDICAL SCIENCES (AIMS)** for sharing generously their knowledge and precious time which inspired me to achieve the best during the summer training.

I owe a great debt to **Dr. Prashant Pandey** (Director Medical Services), **Dr. Ramesh Chandana** (Director, Quality) and **Ms Nikita Sabherwal** (DGM, Quality & Operations) for showing their interest and sharing their valuable views in spite of their busy schedule.

I am highly indebted to **Dr. Ankur Kathuria** (Sr. Executive, Quality) for his consistent guidance and marked supervision as well as for providing necessary information regarding the project that enabled me reach the completion of the same successfully.

I would like to express my gratitude towards **Dr. Manisha Mittal** (Sr. Executive, Quality) and **Ms Merily Abraham** (Sr. Executive, Quality) for their gracious co-operation and firm encouragement at every step that helped us reach the milestone.

My sincere thanks and appreciation also go to all the departmental heads and staff who spared me their valuable time and helped me with all their abilities.

Dr.Vishal Arora

TABLE OF CONTENTS

ABBREVIATIONS

CCTV - Closed Circuit Television

CMO - Causality Medical Officer

CSO - Chief Security Officer

CSSD - Central Sterile and Supply Department

DG - Diesel Generator

DOR - Discharge on Request

ETO - Ethylene Oxide

FDA - Food & Drug Administration

GDA - General Duty Assistants

HAZMAT - Hazardous Material

HIS - Hospital Information System

HOD - Head of Department

HRD - Human Resource Development

HVAC - Heating, Ventilation & Airconditioning

ICD - International Classification of Diseases

ICU - Intensive care Unit

IPD - In Patient department

IT - Information Technology

LAMA - Leave against Medical Advice

MLC - Medico Legal case

MRD - Medical Records department

OPD - Out patient Department

OT - Operation Theatre

PET/CT - Positron Emission Tomography/ Computerized Tomography

RMO - Resident medical Officer

TPA - Third Party Administrator

INTRODUCTION

As an integral part of the PGDHHM course, the summer training helps us to understand the overall functioning of the hospitals from a managerial point of view. Keeping this factor in view, we tried to visit different hospital departments of **ASIAN INSTITUTE OF MEDICAL SCIENCES (AIMS), Faridabad** with a special focus on understanding the various procedures in place. We visited different departments, met the department In-charge and interacted with the doctors, nurses and other staff.

The **Aim** of the summer training is:
"To study the administrative and managerial functioning of ASIAN INSTITUTE OF MEDICAL SCIENCES (AIMS) with special reference to the different areas / departments of the Hospital".

The **Objectives** of summer training are:

- To learn the daily operational management of the Organization and its various departments / areas.
- To study the salient and critical features about the functioning of these departments / areas.
- To identify issues / problems associated with some specific departments / areas.
- To undertake the projects / special tasks assigned to us.

METHODS OF DATA COLLECTION

Study design-

- **Area- ASIAN INSTITUTE OF MEDICAL SCIENCES (AIMS),** Faridabad
- **Duration-** From 02-04-2012 to 31-05-2012
- **Type of study-** Cross sectional Descriptive study, Observational study

Type of Data collected -

- Primary data collected by visiting the different departments.
- Secondary data from the various Hospital policies, documents in various departments.

Most of the information is collected through observations. Both types of observations – participative and non participative are used in learning the function and working of various departments.

Non Participative observation is used mainly to learn the general things about the hospital like location of different departments, behavioral aspects of employee and the response time.

HOSPITAL PROFILE

Asian Institute of Medical Sciences, Faridabad is the vision and dream of renowned surgeon, **Dr. N.K. Pandey**, FRCS (Edinburgh), FRCS (Glasgow) FACS, FICS, a 2008 Dr. B.C. Roy National Awardee.

The institute is centrally located in Sector 21-A, Faridabad in the National Capital Region (NCR) and conveniently accessible from Delhi, NCR and other parts of Northern India.

Asian Institute of Medical Sciences (AIMS) is a 350 bedded super specialty tertiary care **NABH** accredited hospital, truly futuristic in its services & technology. It brings together some of the most talented medical professionals. The institute provides preventive, diagnostic, therapeutic, rehabilitative & palliative and support services under one roof and is designed to meet patient care and research requirements of the new millennium.

The facility is planned with international quality specifications and equipped with state of the art equipment in all specialties. The institute with 11 operation theatres, 80 critical care beds, high-end diagnostics, therapeutic and preventive health facilities, is set to become a preferred destination for quality healthcare services.

All this makes AIMS not just another hospital, but a complete solution in the philosophy of healthcare.

SPECIALTIES OFFERED

Oncology,Cardiac Diseases, Renal Diseases, Neonatal, Pediatrics /Medical & Cardiac Intensive care, Orthopedics, General Surgery, Nephrology, Endocrinology, Gastroenterology, General Medicine, Gynecology, Pediatrics, Laboratory Medicine, Neurology, Ophthalmology, Radiology, Pulmonology, Urology, Aesthetic & Cosmetic Surgery, Dermatology, Pulmonary Medicine, ENT, Physiotherapy, Critical care, Dental, Alternative Medicine.

ASIAN CENTRE OF EXCELLENCE

- Asian Cancer Centre
- Asian Heart Centre
- Asian Centre For Advanced Surgery
- Asian Centre For Mother And Child
- Asian Centre For Neurology & Neurosurgery
- Asian Centre For Renal Diseases
- Asian Centre For Bone & Joints
- Asian Centre For Imaging & Advanced Imaging

VISION

"To be the most trusted healthcare partner for people through our unsurpassed quality & care and by striving to provide **accessible, affordable** and best **available** healthcare services in India".

MISSION

- To give world class patient care.
- To revolutionize our healthcare services by genuinely caring.
- To be an active participant in the local community and provide the very best medical expertise for general welfare & well being.
- To make specialized medical care available to every individual.

MOTO

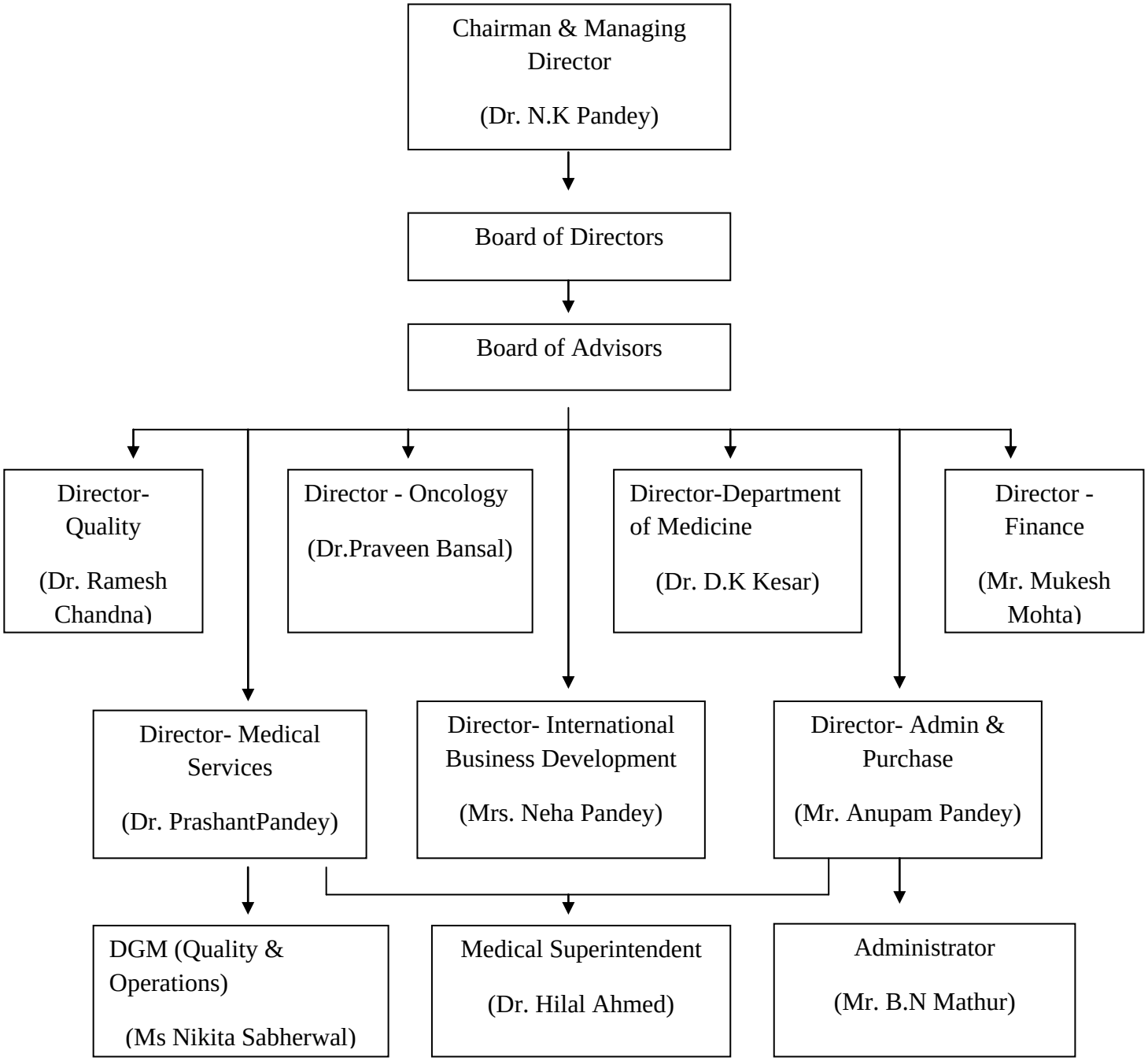
Will to Serve….

….Skill to Cure

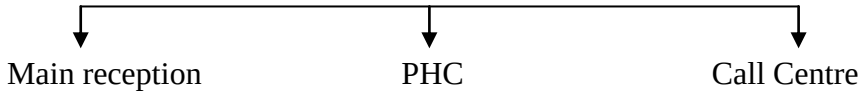
Punch Line

Caring for what matters most

ORGANISATIONAL STRUCTURE



FRONT OFFICE



Main Reception

Staff : 2 executives

Call Centre

Staff: 1 executive

- Receive and answer the various calls from outside and within the hospital.
- Connecting to various employees within the hospital by Star-Dialing.
- Attending to the emergency calls and announcing the emergency codes(ERCC) expect code BLACK

REGISTRATION COUNTERS: 9

Staff at OPD billing counters

9 Executives

1 Asst manager billing

OPD RECEPTION

OPD's are distributed amongst Ground, First & Second floor of the hospitals.

No. of OPD Counters: 13

**OPD counters for Gastroenterology is not present.

Records Maintained:

- Patient's OPD Registration records.
- Daily visitor's report.

CRM-Customer relations manager

Duties:

i) Monitoring and maintaining the smooth functioning of O.P.D.
ii) Communicating about the absence of a doctor to the concerned departments i.e. OPD counter, call centre, registration counter.
iii) Answering the queries of patients on the website of the hospital.
iv) Looking after the working of the call centre.

Financial counselor

- Every patient seeking admission in the hospital is given financial consultancy by the financial consultant.
- The patient is explained about the various room options like general ward, semi private and private rooms and he makes his choice according to his paying capacity. In the case of ESI or CGHS patients the patient is allowed a certain type of room according to his/her entitlement.
- Expected surgery expenditure including surgeon fees, anesthetist fee, O T charges, room rent, medicine charges, and investigation charges are explained to the patient.
- Doctor's fee according to the room category is mentioned.
- In case of emergency treatment, emergency charges will be levied on the treatment.
- In case of ESI patients their registration number is taken and sent for confirmation to the respective office of ESI. After confirmation the patient is admitted in the hospital according to their entitlement. Specific permission is given for specific investigations.
- According to latest notification from the Office of the state medical Commissioner(regional office Faridabad) **ESI** following super specialities are covered under the scheme:

a) Cardiology
b) Oncology
c) Neurosurgery
d) Dialysis
e) Urology
f) Gastroenterology

OPD facilities covered are:

a) CT,MRI,PET scan and nuclear medicine
b) ECHO,TMT
c) Specialized investigation more than Rs 3000/-

- Road side accident.

In case of CGHS patient verification is sought from the UTI cell for patient registration with the CGHS scheme and thereafter the patient is admitted for treatment.

At the time of discharge following documents are sent to the authorized office for reimbursement:

i) Authorization letter
ii) Final and detail bill
iii) Discharge summary
iv) Investigation reports
v) Medical bill

REPORT COLLECTION CENTRE

a) Layout:- Ground floor
b) Staff:- 2 Executives
c) Registers maintained:- 4
d) Report collection time:- 9am to 7pm**

**Original bill of the investigative test is a must to be carried to the counter to collect the report, in order to confirm with the UHID no.

TPA DESK

Layout: - Ground floor

Staff: - 1 HOD

2 Sr. Executives

1 Executive

FLOW OF TPA PATIENT

During pre-plan admission

Patient with OPD registration

↓

Consultant of concerned OPD advices admission

↓

Consultant asks patient if covered under insurance or not

↓

If yes, consultant gives diagnosis & sends patient to financial counsellor

↓

Counseling given to the patient about estimated costs of treatment and procedures

↓

Patient sent to TPA desk after the counseling

↓

TPA Desk executive confirms the following:

- Validity of insurance policy/card
- Empanelment with ASIAN
- Limit of policy
- Room category entitlement

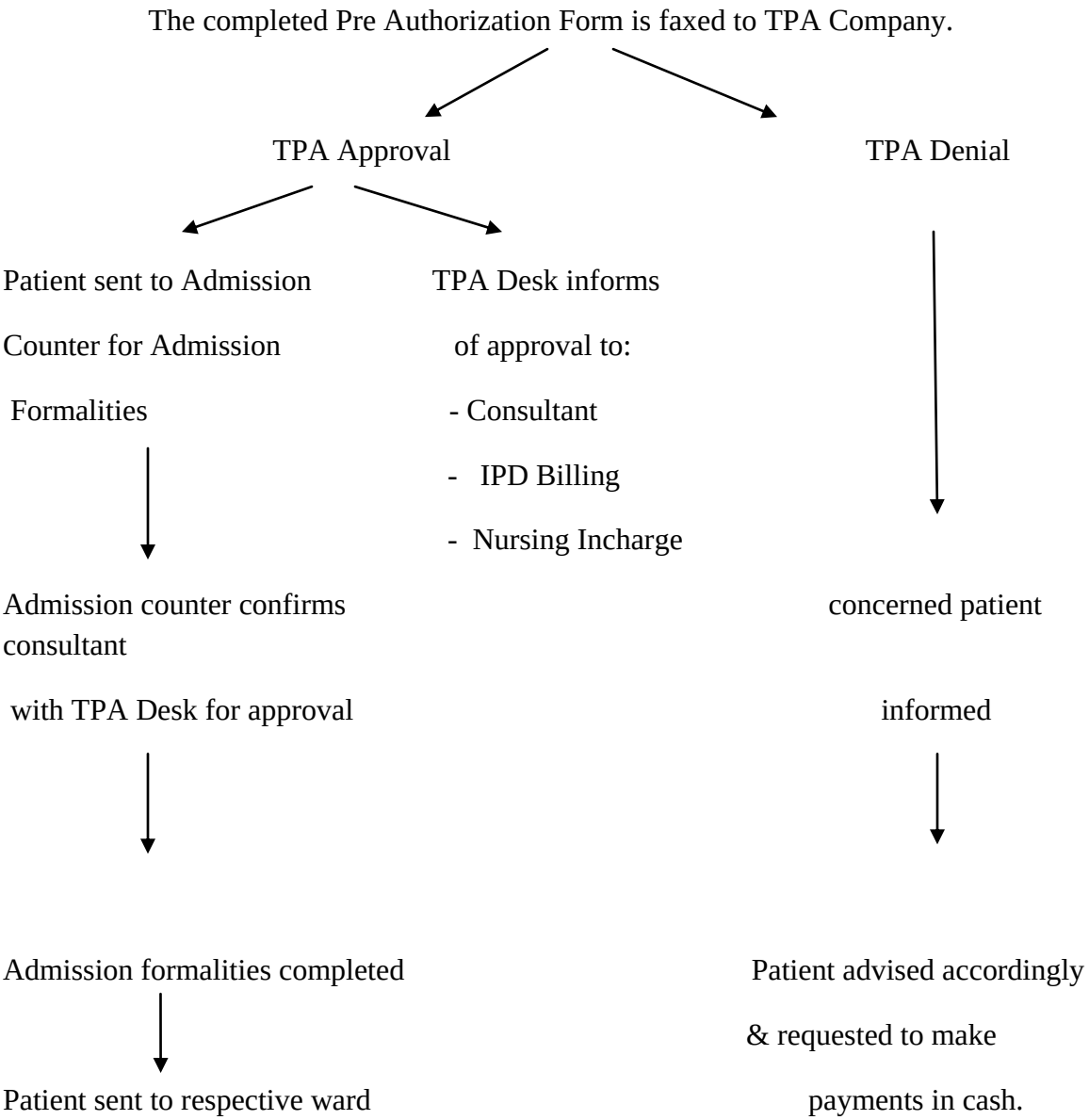
↓

Dr. at the TPA desk fills the Pre Authorization Form

↓

TPA Desk Executive fills other details & estimated cost of stay and treatment

↓



<u>Documents to be sent to TPA for approval</u>:-

a) Photocopy's of patient's TPA card
b) Photocopy of patient's photo ID proof
c) Pre-authorization form
d) Patient's case sheet stating consultant's diagnosis
e) Patient's case history sheet
f) Photocopy of the previous policies
g) Photocopy of the previous treatment records (if any)

Documents to be sent to TPA for claim within 7days of discharge:-

a) All the above mentioned documents
b) Patient's original medical bills
c) Patient's original diagnostic reports
d) Patient's original final bill
e) Patient's discharge summary

- All the documents mentioned above are compiled in a file and sent to the respective TPA within 7 days of discharge of the patient.

Role and responsibilities of the TPA desk:-

a) Empanelment of TPAs.
b) To coordinate with TPA for any issues.
c) To scrutinize the Pre-Authorization form.
d) To solve the queries raised by TPA and patients as well.
e) To inform the patients when the approval is received from the TPA and the conditions associated with the approval.
f) To get the TPA declaration form filled by the patient/attendant.
g) To follow up with the TPAs for pending payments.
h) To ensure patient satisfaction with respect to insurance related concepts.
i) To explain to the patients about the copayments and non-payables.
j) To coordinate with the billing department for early receiving of the document of the discharge patient.
k) To send mid-enhancement (further approval for running bill) letter to TPA if patient stay increases due to medical emergency.
l) To guide the patients to avail maximum benefits from the policy.
m) To carefully check the policy papers and mediclaim related documents of the patients.

PHC

(PREVENTIVE HEATH CHECKUP)

Layout: 1st Floor

Staff: 2 Executives

WORKFLOW:

Patient enters hospital

↓

Registration done at Main reception

↓

Billing done at PHC Counter

↓

Sample collection done in PHC Sample Collection Room

↓

Sample sent to Lab

EMERGENCY COMPLEX

Layout: -1 Basement

Infrastructure:

- Beds: Total: 22
  - In Day Care Ward: 11
  - For Casualty: 6
  - For Triage:5
- Ambulances: 3 ALS Ambulances + 1 Van Ambulance

Staff :

Doctors: **CMO** – Dr. Satish Chaku

RMO'S – 5

Nursing and other staff: 18

GAPS:

- No sterilization protocols for Procedure room.
- Need for more nursing staff.
- Only 1 fire extinguisher in whole ER Complex.
- City's & NCR region map not available with ambulance driver.
- No portable oxygen cylinder in ambulance and emergency depart

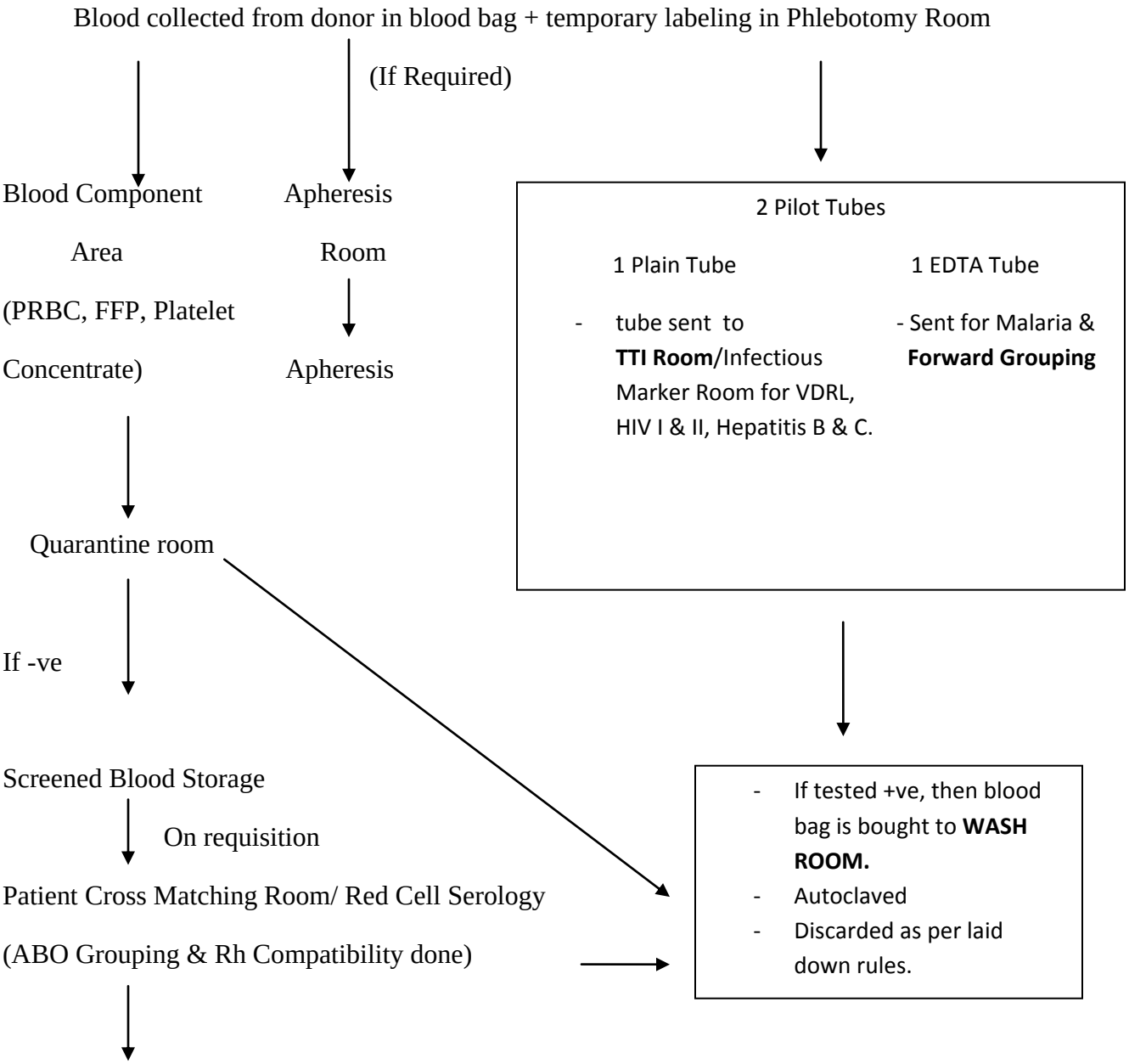
BLOOD BANK

Layout: 4th Floor

Total staff: 9

Department Head: Dr. Ramesh Chandna (Director-Quality)

Movement of Donor's Blood:



Labeling of blood bag

Storage

**If donor tested +ve for HIV the patient is called and referred to BK hospital (V.C.T.C/ I.C.T.C) Faridabad

Label Color codes to be used -

- Yellow - A
- Pink - B
- Blue - O
- White - AB

Issue time :

Issue of blood and blood components after receiving issue slip from ward

- PRBC : 15 minutes
- Platelets : 15 minutes
- FFP: 30 minutes
- Whole blood : 15 minutes

Quality indicators used in Blood Bank

- Percentage of transfusion reactions
- Percentage of wastage of blood and blood products
- Percentage of wastage of blood and blood products
- Percentage of blood component usage
- Turnaround time for issue of blood and blood components
- Blood Bag Traceability Form received
- Blood Issued but not Used
- Total urgent blood requirement

Recommendations:

- Hand rub to be kept next to shoe cover rack
- Use of gloves in the blood bank
- Eating and drinking should not be allowed in the blood bank area
- HMIS module for blood bank to be started
- Maintenance check of the equipments to be done on time.
- Blood donation couches should be used for phlebotomy.

OPERATION THEATRE

Layout : 3rd floor

No. of OT's : 10

- General OT's – 8
- Cardiac OT's – 2

No. of beds in Pre operative ward : 5

No. of beds in Recovery Room : 8

Doctor's Lounge : 1

Nurse and Technician Lounge : 1

Pantry : 1

Sterile room : 1

Changing rooms : 4

Doctor (male) changing room : 1

Doctor (female) changing room : 1

Nurse (female) changing room : 1

Technician + Nurse (male) changing room : 1

Department Head:

Dr. Naintara Batra

(MD, Senior Consultant, HOD- Anaesthesia)

MEDICAL RECORDS DEPARTMENT

Layout: -1 Basement

Staff: 5

Infrastructure:

- Desktop: 1
- Printer: 1

Functions of MRD

- To ensure that the AIMS Hospital has complete & accurate medical record for every patient.
- Public dealings wrt. to TPA **queries, Bill verification, MLC cases and dealing with Summons to the doctors, hospital.**
- To ensure that the records are Identified and stored safely to prevent unauthorized changes and easily retrieved whenever required.
- Issuing **Emergency, Medical, Birth & Death certificates**.
- To generate **Bed Occupancy reports** (daily & monthly), **P.N.D.T, M.T.P** reports (monthly).

Record Retention Periods:

- IP Record : 05 years
- Emergency Register : 02 years
- MLC Records : Not to be destroyed
- Birth/Death Register : Not to be destroyed
- OPD documents : Handed over to the patients

GAPS:

- Insufficient space provided for MRD department, according to 350 bedded hospital.
- Records are maintained manually.

RECOMMENDATIONS:

- MR department should be maintained electronically and incorporated in HMIS system so that records are retrievable easily and the department will require less space.
- By this records will be accessible at every point in hospital and can be updated easily.

CLINICAL NUTRITION & DIETICS DEPARTMENT

Layout: -2 Basement

Head Dietician: Dr. Shilpa Thakur

Functions:

- Catering to Inpatients, Hospital staff, Patient attendants.
- Diet counseling
- Education
- To check the patient, Attendant & Staff food for quality, preparation, presentation and packing.
- Coordinating closely with the Nursing shift in charges for changes in the patient's diet or new admissions etc.

LAUNDRY SERVICES

Layout: -2 Basement

Equipments:

- Dryers : 2
- Washing machine (each 50 kg) : 2
- Extractors (each 25 kg) : 2
- Hand presses : 2
- Steam Boilers : 1
- Calendar Machine : 1
- Trolleys : 6

Total Manpower: 11+1 tailor (deployed during the project)

GAPS:

- No barrier between soiled linen & infected linen.
- No weighing scale.
- No supervision over measured use of detergent.
- Trolleys for collecting linen from floors are small so more time is needed for the process as the collecting person has to go twice for each ward's laundry collection.
- No periodicity defined for the condemnation of the unfit linen.

IPD PHARMACY

Layout: 2nd Basement

Staff: 13

Hierarchy:

Manager Pharmacy

↓

Pharmacist

↓

Pharmacy Assistants

Infrastructure:

- Desktops: 4
- Printers: 3
- Refrigerators: 3

Workflow:

In-Patient Wards, All ICU's, OT, Emergency, CTVS, Cath Lab

↓

↓

Ward boy/Nurse brings Request for Drug indentation through "**Indoor Patient Drug Requisition Form"**

↓

IPD Pharmacy

↓

Issues drugs

↓

Ward boy/ nurse take drugs to respective ward/OT/ICU

GAPS:

1. No analysis done for inventory management.
2. Stocking of drugs poorly done.
3. Space constraints.

SECURITY SERVICES

Status: Outsourced to **APOLLO SECURITY SERVICES**

Headed by: Cap Kamaljeet Singh (CSO),

Total security personnel: 58

- 34: In morning shift
- 24: In night shift

Operational CCTV's: 23

Area of Operation (Present):

- Visitor's check
- Surveillance of hospital through CCTV's
- Theft , Burglary
- Violence
- Handling of MLC
- Material movements in & out of the hospital
- Handling visitor's pass
- In case of patient's death, handling emotional chaos of attendants
- Parking management and traffic control.
- Playing their role once different codes are brought into action.
    - Blue : Cardio-Pulmonary arrest
    - Black : Bomb Threat
    - Red : Fire/Internal Disaster
    - Pink : Child/Infant abduction
    - Orange : Disaster(Patient influx)
    - Violet : Violent incident

- Locker & key management.
- Conducting Mock Fire and Disaster Drills.
- Playing their part in **HAZMAT**.

GAPS:

- No security supervisor in night to keep a check on overall security and on the attentiveness of security guards.
- No **DMFD (Door Frame Metal Detector)** at the Emergency entrance.
- Noting down number of each and every vehicle entering or leaving hospital is not done.

MAINTENANCE & ENGINEERING

Layout: -2 Basement

Total Staff: 41

Components:

- Electricals
- Sewage treatment plant
- Carpentry
- Pump House + Fire Fighting
- HVAC
- Plumbing

Head Engineering and Maintenance: Mr. Bhardwaj

Functions:

- Preparing the plan for equipment daily and preventive maintenance, spare parts and consumable for the department so that each facility works properly & there is minimum breakdown.
- Engineering is also responsible for controlling and ensuring for optimum use of power, water and diesel.

HUMAN RESOURCE DEPARTMENT

Layout: -2 Basement

Total Staff: 7

Director HR: Mr Vivek Menon

Jobs & Responsibilities:

- Manpower Planning
- CV Selection
- Credential Policy
- Confirmation and Appraisal
- Staff Queries
- Follow up with selected candidates
- Issuing of appointment letters
- Disciplinary Policy
- Leaves sanctioning
- Payroll
- Doctors payout
- Issuing of Experience letters
- Investigation of staff grievances
- Issues of show cause
- Salary statement
- Full n final settlement
- Outsource staff attendance
- Induction and orientation
- Finger print report checking
- Dispatch of salaries
- Pre recruitment calls
- Organizing interviews
- Housekeeping of CV'S
- Preliminary interviews

- Joining formalities
- Leave record maintenance
- Issuing of I-Cards
- Conducting Employee Welfare Programme e.g. Nurse Day
- Issuing of Refreshment Coupons
- Conducting Exit Interviews.

STORES

Layout: -2 Basement

Staff: 5

Store Incharge: Mr Dinesh Pandey

Duties of Store Incharge:

- Forecasting requirement
- Budgetary requirement
- Inventory control
- Stock verification
- Inspection & Quality control
- Communicate the purchase department about requirement
- Minimize pilferage.
- Distribution
- Disposal of surplus/ obsolete material

GAPS

- No forecasting of requirement done i.e. Reorder Levels not defined.
- No analysis like ABC, VED done for inventory control.

CSSD

(Central Sterile Supply Department)

Layout: 4th floor ("U" shaped layout)

Staffing: 1 Asst. Manager

3 Technicians

1 Asst. technician

METHODS OF STERILIZATION USED:

No. of autoclaves – 2 • Type – Pulse vacuum type • No of cycles per day – Acc. to load. • Temp/time/pressure. 121 deg C/ 15 mins/ 1.2 kg 134 deg C/ 4 mins/ 2.2 kg • **STERILIZATION CHECK :** a) Bowie Dick Indicator (Chemical Indicator) Once a day b) Biological Indicator : *G. Stereothermophilus* Once a week	• Number – 1 • No of cycles – usually 1 / day (But can vary acc. to load) • Temp – 54 deg C • 12 hour cycle • **STERILIZATION CHECK :** ✓ Biological indicator *Bacillus atrophaeus* : Each load.	• Number – 1. • Not regularly used. **Used in case of emergency; when ETO not in use.** • Temp – 45 deg C • 50 min cycle. • **STERILIZATION CHECK :** ✓ As such no biological indicator available. ✓ Therefore, its use is limited and only for emergency purpose. ✓ But *Bacillus atrophaeus* can be used.

GAPS :

- Non uniform floor in sterile storage area – problem with trolley loading and shifting
- Records are manually maintained – need for HIS for CSSD
- Maintenance contracts of equipments (like autoclaves, plasma) not clearly defined.
- Water supply – hard water supply – not recommended.
- Equipment/Machine usage manual not available.

STRENGTHS

- State of art equipments.
- Experienced staff
- Dumb waiter – for efficient and improved exchange of sterilized items.
- Strong focus on sterilization, its monitoring and thus quality through continuous physical, chemical, biological monitoring.
- Goal: To become Class 10,000 CSSD.

Other Departments in the Hospital

DEPARTMENT NAME	LOCATION
1. CRITICAL CARE	3rd FLOOR
2. CATH LAB & CCU	6th FLOOR
3. CTVS	3rd FLOOR
4. LAB SERVICES	4th FLOOR
5. IMAGING AND RADIOLOGY	GROUND FLOOR
6. RADIATION AND NUCLEAR MEDICINE	2nd BASEMENT
7. DIALYSIS	4th FLOOR
8. LABOUR ROOM, ANTE-NATAL & POST NATAL WARD	2nd FLOOR
9. GASTRENTEROLOGY & ENDOSCOPY	GROUND FLOOR
10. ALTERNATIVE MEDICINE	
(HOMEOPATHY, AYURVEDA & PHYSIOTHERAPY)	GROUND FLOOR
11. 11.PURCHASE	1st FLOOR
12. FINANCE AND ACCOUNTS	2nd BASEMENT
13. MARKETING DEPARTMENT	2nd BASEMENT
14. IT DEAPARTMENT	2nd BASEMENT

PROJECT:-

IMPLEMENTING NEW QUALITY INDICATORS AS PER NABH 3RD EDITION

INDEX

AIM: To plan ways how to implement the new quality indicators in various departments as per the NABH 3rd edition (NOV 2011) to be implemented 1st June 2012 .

OBJECTIVES :

- To fulfill requirement of implementing mandatory NABH quality indicators
- To find out the new indicators to be implemented as per NABH 3rd edition
- To plan ways how to implement these new quality indicators
- To conduct mock trials and assessment of these quality indicators
- Final implementation of these indicators

INTRODUCTION:

National Accreditation Board for Hospitals & Healthcare Providers (NABH) is a constituent board of Quality Council of India, set up to establish and operate accreditation program for healthcare organizations. the board is structured to cater to much desired needs of the consumers and to set benchmarks for progress of health industry. The board while being supported by all stakeholders including industry, consumers, government, has full functional autonomy in its operation.

NABH 2nd edition which was introduced in November 2007 had 10 chapters, 100 standards and 514 objectives. As per the revised 3rd edition which came in January 2012, there are 10 chapters, 102 standards, 636 objectives and 64 indicators. In the second edition there was no defined sample size and formula for the calculation of the quality indicators, which had been taken care in the third edition.

Asian Institute Of Medical Sciences, Faridabad got NABH certification in May 2011 and is coming strong on its compliances of these indicators. The revised NABH indicators as per the 3rd edition have to be implemented from June 2012 along with implementing 17 new indicators. As I was posted in the quality department so I got a chance to work on ways to implement these new quality indicators.

METHODOLOGY:

A thorough literature review was done to get familiarized with the NABH 2nd edition and the 3rd edition , followed by the compilation of a comparative excel sheet of the new indicators and the revised indicators as per NABH 3rd edition and departmental categorizing of these new indicators

The visits to these departments were scheduled and the ways to start implementing these new indicators were worked upon and a rough draft was prepared. Then these were discussed with HODs respective department and final draft presented to the management ..

DATA SOURCE: NABH 3RD EDITION JANUARY 2012

NEW QUALITY INDICATORS TO BE IMPLIMENTED:

INDICATOR NO	STANDARD	DEAPRTMENT	INDICATOR
33	CQI 3i	ETHICS COMMITTEE	Percentage of research activities approved by the Ethics committee
34	CQI 3i	ETHICS COMMITTEE	Number of patients withdrawing from the study
35	CQI 3i	ETHICS COMMITTEE	Percentage of protocol violations, deviations reported
36	CQI 3i	ETHICS COMMITTEE	Percentage of serious adverse events (which have occurred in the organization) reported to the ethics committee within the defined timeframe.
30	CQI 3h	ICU	Return to ICU within 48hrs
2	CQI 3a	QUALITY	Percentage of cases (inpatients)wherein care plan with desired outcome is documented and countersigned by the clinician.
4	CQI 3a	QUALITY	Percentage of cases (inpatients)wherein the nursing care plan is documented.
62	CQI 4g	MRD AUDIT	Percentage of medical records not having codification as per International Classification of Diseases (ICD).
10	CQI 3c	NURSING	Percentage of admissions with adverse drug reaction(s)
11	CQI 3c	NURSING	Percentage of medication charts with error prone abbreviations
12	CQI 3c	NURSING	Percentage of patients receiving high risk medications developing adverse drug event
31	CQI 3h	NURSING	Return to emergency department within 72hrs with similar presenting complaints
32	CQI 3h	NURSING	Re-intubation rate
59	CQI 4f	NURSING	Incidence of blood body fluid exposures
17	CQI 3e	OT	Percentage of unplanned return to OT
19	CQI 3e	OT	Percentage of cases where the organization's procedures to prevent adverse events like wrong site, wrong patient and wrong surgery have been adhered to
20	CQI 3e	OT	Percentage of cases who received appropriate prophylactic antibiotics within the specified time frame

INDICATOR 33: RESEARCH ACTIVITIES APPROVED BY ETHICS COMMITTEE

STANDARD : **CQI 3i**

DEPARTMENT : **ETHICS COMMITTEE**

FORMULA :

$$\frac{\text{Number of research activities approved by ethics committee}}{\text{Number of research protocols submitted to ethics committee}} * 100$$

REMARKS:

This indicator shall be captured on a quarterly basis.

FORMAT:

S.NO	STUDY NAME	STUDY COORDINATOR	DATE OF SUBMISSION FOR APPROVAL	DURATION OF STUDY	NO OF PATIENTS	STATUS APPROVED / NOT APPROVED	REMARKS

INDICATOR 34 : PATIENTS WITHDRAWING FROM THE STUDY

STANDARD : CQI 3i

DEPARTMENT : ETHICS COMMITTEE

FORMULA:

$$\frac{\text{Number of patients who have withdrawn from all on-going studies}}{\text{Number of patients enrolled in all on-going studies}} * 100$$

REMARKS: This indicator shall be captured on a quarterly basis.

FORMAT:

STUDY NAME:

STUDY COORDINATOR:

S.NO	PT NAME	DATE OF ENROLMENT	STATUS CONTINUING/ WITHDRAWN	WITHDRAWN ON

INDICATOR 35 : PERCENTAGE OF PROTOCOL VIOLATIONS, DEVIATIONS REPORTED

STANDARD : CQI 3i

DEPARTMENT : ETHICS COMMITTE

FORMULA :

$$\frac{\text{Number of protocol violations, deviations reported}}{\text{Number of protocol violations, deviations that have occurred}} * 100$$

REMARKS :

This indicator shall be captured on a quarterly basis. Any protocol violation, deviation that gets reported based on an internal, external assessment finding shall be considered as deemed to have happened but not reported. Hence, even though it gets reported it shall be included to only capitulate the denominator and shall not be included in the numerator.

FORMAT : To be calculated and reported by study coordinator in sync. with the ethics committee coordinator.

INDICATOR 36: PERCENTAGE OF SERIOUS ADVERSE EVENTS

STANDARD : CQI 3i

DEPARTMENT : ETHICS COMMITTE

FORMULA :

$$\frac{\text{Number of serious adverse events reported within the defined timeframe}}{\text{Number of serious adverse events reported within and outside the defined timeframe}} * 100$$

REMARKS :

The timeframe for reporting shall be as per ICMR guidelines or as laid down by the sponsor.

FORMAT

STUDY NAME:

STUDY COORDINATOR: :

TIME FRAME FOR REPORTING OF ADVERSE EVENTS AS PER SPONSOR / ADVERSE EVENTS
(TICK APPROPRIATE)

S.NO	ADVERSE EVENTS	OCCURRED ON	REPORTED ON	WITHIN ABOVE DEFINED TIME FRAME (YES /NO)

INDICATOR 30 : RETURN TO ICU WITHIN 48 HRS

STANDARD : CQI 3h

DEPARTMENT : ICU

FORMULA :

$$\frac{\text{Number of returns to ICU within 48hrs}}{\text{Number of discharges, transfers or deaths in the ICU}} * 100$$

FORMAT:

S.NO	PT. NAME	AGE/ SEX	IPD/ UHID	CONSULTANT NAME	DATE AND TIME OF TRANSFER OUT	DATE AND TIME OF TRANSFER IN	DIAGNOSIS	REMARKS

INDICATOR2 : CARE PLAN WITH DESIRED OUTCOMES

STANDARD : CQI 3a

DEPARTMENT : QUALITY DEPARTMENT ACTIVE AUDIT

DEFINITION : Desired outcome include curative, preventive ,rehabilitative etc.

FORMULA :

$$\frac{\text{No. of in patient case records wherein the care plan with desired outcomes has been documented}}{\text{No. of discharges and deaths}} * 100$$

SAMPLE SIZE :

- For hospitals with <20 patients/day -100% of the patients / day.
- For hospitals with 20-50 patients/day-50% of the patients / day.
- For hospitals with >50 patients/day- 20% of the patients / day.

REMARKS :

- The indicator shall be captured during the stay of the patient and not from the medical record department.
- It shall be collected on a monthly basis.
- The sampling base shall be patients who have completed 24 hours of stay in the hospital. However, immediate correction is to be initiated, when gaps are seen on a real time basis.

FORMAT :

CARE PLAN

PATIENT NAME…… AGE/SEX……...
IPDNO……DOA……

CARE
PLAN:_____

_____

_____

DESIRED
OUTCOME:_____

_____

_____

CURATIVE ASPECT	PREVENTIVE ASPECT	REHABILITATIVE ASPECT

DOCTOR SIGN &
STAMP_____ DATE_____ TIME_____

INDICATOR 4 : NURSING CARE PLAN TO BE DOCUMENTED

STANDARD : CQI 3a

DEPARTMENT : QUALITY DEPARTMENT ACTIVE AUDIT

DEFINITION : Nursing care plan shall be the outcome of the nursing assessment done at the time of admission

FORMULA :

$$\frac{\text{No of in-patient case records wherein the nursing care plan has been documented}}{\text{No of discharges and deaths}} * 100$$

SAMPLE SIZE :

- For hospitals with <20 patients/day - 100%.of the patients / day
- For hospitals with 20-50 patients/day- 50% of the patients / day
- For hospitals with >50 patients/day - 20% of the patients / day

REMARKS :

- The indicator shall be captured during the stay of the patient and not from the medical record department.
- It shall be collected on a monthly basis.
- The sampling base shall be patients who have completed 24 hours of stay in the hospital. However, immediate correction is to be initiated, when gaps are seen on a real time basis.

FORMAT:

NURSING CARE PLAN

Assessment		Nursing Diagnosis	Possible outcome / Goal to be achieved	Plan of care	Implementation	Evaluation
Subjective information	**Objective information**	Define each nursing diagnosis and the related factors	Mention all the possible outcomes	Care plan or interventions will be documented for all the listed nursing diagnosis on priority basis		
After the initial assessment, nurse will write all the problems of the patients as told verbally	The nurse will document the clinical evidence for the complaints mentioned by the patient					

INDICATOR 62: PERCENTAGE OF MEDICAL RECORDS NOT HAVING CODIFICATION AS PER ICD 10

STANDARD : CQI 4g

DEPARTMENT : MRD AUDIT

DEFINITION : The ICD is the international standard diagnostic classification for all general epidemiological, many health management purposes and clinical use. These include the analysis of the general health situation of population groups and monitoring of the incidence and prevalence of diseases and other health problems in relation to other variables such as the characteristics and circumstances of the individuals affected, reimbursement, resource allocation, quality and guidelines (WHO).

FORMULA :

$$\frac{\text{No of medical records not having codification as per International Classification of Disease}}{\text{Number of discharges and deaths}} * 100$$

SAMPLE SIZE :

- For hospitals with < 20 discharges/day - 100 % of the patients / day
- For hospitals with 21 - 50 discharges/ day - 50 % of the patients / day
- For hospitals with 51- 100 discharges/day - 20 % of the patients / day
- For hospitals with > 100 discharges/ day -10 % of the patients / day

REMARKS :

ICD codification shall be done by the concerned staff within the specified period following discharge. After completion of this specified period an audit shall be done (using sample size mentioned in the previous column)by an independent person to capture this.

FORMAT:

PARTICULARS	1	2	3	4	5	6
IPD No.						
Completion of Medical Record as per the file index						
→ **Codification as per ICD 10**						
Discharge summary completion: Reason for admission Significant findings Diagnosis Patient condition at the time of discharge Preventive strategies						
Medication advice and food and drug interaction if any - Documented in discharge summary						
Medical record having initial assessment and plan of care						
Complete or proper consent forms						
Date, time and signatures on the progress notes, nurses records, operation notes						
Any cross referrals mentioned, if yes, then time taken for cross referrals						
Legible handwriting (Capital letters) - Medication charts						
Any error prone abbreviations						
Signature / Stamp of doctors in drug prescription chart						
Time taken for initial assessment of patients						
Nursing Assess. complete or not Within 30 mins						
Nutritional asst. within 24 hrs						
Nutritional Reassessment within 7 days						
Remarks						

INDICATOR 10 : PERCENTAGE OF ADMISSIONS WITH ADVERSE DRUG REACTION(s)

STANDARD : CQI 3c

DEPARTMENT : NURSING

DEFINITION :

A response to the drug which is noxious and unintended and which occurs at doses normally used in man for prophylaxis, diagnosis , or therapy of disease or for the modification of physiologic function.

Therefore ADR = adverse event with causal link to a drug.

FORMULA :

$$\frac{\text{Number of adverse drug reactions}}{\text{Number of discharges and deaths}} * 100$$

FORMAT :

To be discussed by the management.

INDICATOR 11 PERCENTAGE OF MEDICATION CHARTS WITH ERROR PRONE ABBREVIATIONS

STANDARD : CQI 3c

DEPARTMENT : NURSING

DEFINITION : Medication chart with illegible handwriting and unaccepted error prone abbreviations

FORMULA :

$$\frac{\text{Number of medication error prone abbreviations}}{\text{Number of medication charts reviewed}} * 100$$

SAMPLE SIZE :

- For hospitals with average occupancy <50patients/day-10% of patients/day.
- For hospitals with average occupancy 51-100 patients/day- 5% of patients/day.
- For hospitals with average occupancy 101-300 patients/day- 2% of patients/day.
- For hospitals with average occupancy 501-1000 patients/day- 1% of patients/day.
- For hospitals with average occupancy>1000 patients/day- 0.5% of patients/day.

REMARKS :

This could be clubbed with the activity for capturing medication errors

FORMAT :

PARTICULARS	1	2	3	4	5	6
IPD No.						
Completion of Medical Record as per the file index						
Codification as per ICD 10						
Discharge summary completion: Reason for admission Significant findings Diagnosis Patient condition at the time of discharge Preventive strategies						
Medication advice and food and drug interaction if any - Documented in discharge summary						
Medical record having initial assessment and plan of care						
Complete or proper consent forms						
Date, time and signatures on the progress notes, nurses records, operation notes						
Any cross referrals mentioned, if yes, then time taken for cross referals						
Legible handwriting (Capital letters) - Medication charts						
Any error prone abbreviations						
Signature / Stamp of doctors in drug prescription chart						
Time taken for initial assessment of patients						
Nursing Assess.complete or not Within 30 mins						
Nutritional asst. within 24 hrs						
Nutritional Reassessment within 7 days						
Remarks						

INDICATOR 12 : PERCENTAGE OF PATIENTS RECEIVING HIGH RISK MEDICATIONS DEVELOPING ADVERSE DRUG EVENT

STANDARD : CQI 3c

DEPARTMENT : NURSING

DEFINITION : High risk medications are the medications involved in a high percentage of medication errors or sentinel events and medications that carry a high risk for abuse ,error, or other adverse outcomes. A good reference for this is the "ISMP'S list of high -alert medications"

.**FORMULA :**

$$\frac{\text{Number of patients receiving high risk medications who have an adverse drug event}}{\text{Number of patients receiving high risk medications}} * 100$$

REMARKS :

The denominator can be captured from the pharmacy by having a master list of in-patients who have been dispensed high -risk medications. This could be clubbed with the activity for capturing medication errors

FORMAT:

- The Pharmacy department with the help of the IT department will create a group of high risk medications with the help of which will enable us to get our denominator at the end of every month.
- Numerator will be obtained from the adverse drug reaction form filled by the nursing in charges.

INDICATOR 31: RETURN TO EMERGENCY WITHIN 72HRS

STANDARD : **CQI3h**

DEPARTMENT : **NURSING**

FORMULA :

$$\frac{\text{Number of returns to emergency within 72hrs with similar presenting complaints}}{\text{Number of patients who have come to the emergency}} * 100$$

REMARKS:

To capture this indicator it may be a good practice to capture during the initial assessment itself if the patient had come within 72hrs for similar complaints

FORMAT:

S.NO	NAME	AGE/SEX	UHID NO	DATE	CHIEF COMPALINT	DATE OF PREVIOUS REPORTING	PREVIOUS CHIEF COMPLAINT	REMARKS

INDICATOR 32: RE-INTUBATION RATE

STANDARD : **CQI 3h**

DEPARTMENT : **NURSING**

FORMULA :

$$\frac{\text{Number of re-intubations within 48hrs of extubation}}{\text{Number of intubations}} * 100$$

REMARKS:

This shall include re-intubation within 48hrs of extubation

FORMAT:

S.NO	PT. NAME	AGE/ SEX	IPD/ UHID	CONSULTANT NAME	DATE AND TIME OF EXTUBATION	DATE AND TIME OF REINTUBATION	DIAGNOSIS	REMARKS

INDICATOR 59 INCIDENCE OF BLOOD BODY FLUID EXPOSURES

STANDARD : CQI 4f

DEPARTMENT : Nursing, Housekeeping

DEFINITION :

An exposure is when blood, blood components or other potentially infectious materials come in contact with a staff's eyes, mucous membranes, non-intact skin or mouth. (Adapted from Joan Viteri Memorial Clinic "PEP "Post Exposure Prophylaxis)

FORMULA :

$$\frac{\text{Number of blood body fluid exposures}}{\text{Number on in-patient days}} * 100$$

REMARKS :

All exposures to blood/body fluids should be assessed on a case-by-case basis.

FORMAT:

Asian Institute of Medical Sciences

Badkal Flyover Road, Sector-21A, Faridabad, Haryana
Tel. : +91 129 425 3000

BLOOD BODY FLUID EXPOSURES / NEEDLE STICK INJURY FORM

To be completed by Staff member who has sustained the sharp/skin injury (or by the Supervisor if the Staff member HCW is unable to fill the form) and then taken to Emergency Dept and / or Occupational Health.

Personal Details

Name : ..... Emp ID : .....

Designation : ..... Place of Work : .....

Age : ..... In Charge : .....

Date : ..... Time of Accident / Incident : .....

Details of the Injury

Brief description of the incident with blood/blood stained body fluids (please tick box if applicable)

SHARPS INJURY :

- ❑ Needle/scalpel blade (or other sharp instrument)
- ❑ Scratch
- ❑ Bite
- ❑ Cut
- ❑ Bone

CONTAMINATION :

- ❑ Abrasion
- ❑ Eczema
- ❑ Psoriasis
- ❑ Other

EXPOSURE TO MUCOUS MEMBRANE :

- ❑ Eye
- ❑ Other

Which high risk body substance ?

- ❑ Blood
- ❑ Blood stained body fluid
- ❑ Amniotic Fluid / Urine
- ❑ Saliva (if visibly blood stained e.g. in association with dentistry)
- ❑ Used needle in sharps box
- ❑ Vomitus
- ❑ Clinical waste (yellow bag/red bag)

(Other please specify).....

Source Patient History

(If known, to be completed by Doctor / Nurse managing staff member and NOT the injured person)

Name : ..... Address : .....

Tel. No. .....

Age / Sex : .....

Consultants Name / CMO : .....

Source patient investigations

- ❑ Anti HIV antibody
- ❑ HBs ag surface antigen
- ❑ Anti-HCV antibodies
- ❑ Others (please specify).....
- ❑ Source patient on medication for one (or more) of above illnesses
- ❑ IV drug user (present or previous)
- ❑ Does client have high-risk behaviour? (ask only if appropriate and in strictest confidence)

Health-care worker Investigations :

TEST		Follow Up		
		❑ 6 Weeks	❑ 3 months	❑ 6 months
❑ Anti HIV antibody	❑ At Time of Injury	-	-	-
❑ HBs ag surface antigen	❑ At Time of Injury	-	-	-
❑ Anti-HCV antibodies	❑ At Time of Injury	-	-	-
❑ Anti-HBs ag antibodies	❑ At Time of Injury	-	-	-

Name _____ Designation _____ Signature _____

Nrsg / Needle Stick / Ver 1.0 / 1st Jan 10

INDICATOR 17: PERCENTAGE OF UNPLANNED RETURN TO OT

STANDARD : CQI 3e

DEPARTMENT : OT

FORMULA :

$$\frac{\text{Number of unpalnned return to OT}}{\text{Number of patients operated}} * 100$$

FORMAT :

S. NO	DATE	PT. NAME	AGE / SEX	IPD NO	SURGEON	ANEST-HESIST	ANEST -HESIA	SURGERY	REEXPL RATION	OT	PRE SURGERY	DATE OF PRE SURGERY	REMARKS

INDICATOR 19: PERCENTAGE OF CASES WHERE THE ORGANIZATION'S PROCEDURES TO PREVENT ADVERSE EVENTS LIKE WRONG SITE,WRONG PATIENT AND WRONG SURGERY HAVE BEEN ADHERED TO

STANDARD : CQI 3e

DEPARTMENT :OT

FORMULA :

$$\frac{\text{Number of cases where the procedure was not followed}}{\text{Number of surgeries performed}} * 100$$

REMARKS :

This could be checked in the post-op/recovery room and documented in a register/system

FORMAT:

asian
Institute of Medical Sciences

SURGICAL SAFETY CHECK LIST

Patient's Name : _____ IPD No. _____
IPD No. _____ Age : _____
Sex : _____ D.O.A. : _____
Unit : _____ Date : _____

BEFORE INDUCTION OF ANAESTHESIA	BRFORE SKIN INCISION	BEFORE Patient Leaves Operation Room
SIGN IN	**TIME OUT**	**SIGN OUT**
☐ Patient has confirmed • Identity • Site • Procedure • Consent ☐ Site marked / Not applicable ☐ Anaesthesia safety check completed ☐ Pulse oximeter on patient and functioning **DOES PATIENT HAVE A :** Known allergy ☐ No ☐ Yes Difficult airway/aspiration risk ☐ No ☐ Yes, and equipment/assistance available Risk of > 500ml blood loss 7ml/kg in children ☐ No ☐ Yes, and adequate intravenous access and fluids planned	☐ Confirm all team members have introduced themselves by name and role ☐ Surgeon, Anaesthetist, and Nurse verbally confirm • Patient • Site • Procedure Anticipated critical events ☐ Surgeon reviews : What are the critical or unexpected steps, operative duration, anticipated blood loss Anaesthesia team reviews : ☐ Are there any patient - specific concerns Nursing team reviews ☐ Has sterility (Indicator results) been confirmed. Are there equipment issues or any concerns ? Has antibiotic prophylaxis been given with in the last 60 minutes. ☐ Yes ☐ Not applicable Is essential imaging displayed ☐ Yes ☐ Not applicable	Nurse verbally confirms with the team ☐ The name of the procedure recorded ☐ That instrument, sponge and needle counts are correct (or not applicable) ☐ Has the specimen been labelled (including patient name) ☐ Whether there are any equipment problems to be addreseed ☐ Yes ☐ No ☐ Surgeon, anaesthesia professionals and nurse review the key concerns for recovery and management of this patient.

Nurse (Name)..... Anaesthesiologist (Name)..... Surgeon (Name).....

Signature..... Signature..... Signature.....

Asian Institute of Medical Sciences
Badkal Flyover Road, Sector-21A, Faridabad - 121 001

Surg-M&S&I Chklist/V1.0/0113

INDICATOR 20 : PERCENTAGE OF CASES WHO RECEIVED APPROPRIATE PROPHYLACTIC ANTIBIOTICS WITHIN THE SPECIFIED TIME FRAME

STANDARD : CQI 3e

DEPARTMENT :OT

FORMULA :

$$\frac{\text{Number of patients who did not receive prophylactic antibiotic(s)}}{\text{Number of surgeries performed}} * 100$$

REMARKS :

- It is also equally important that the antibiotic should have been given not more than two hours prior to the incision.
- This indicator could be captured in a register/system before the patient enters the OT

FORMAT :

asian
Institute of Medical Sciences

PREOPERATIVE INSTRUCTION CHECKLIST

Name of Patient : ..... Age/Sex : ..... I.P.D. No. .....

Ward/Bed No. : ..... D.O.A. : ..... Surgery Planned for : .....

Diagnosis : ..... Date & Time : .....

1.	Informed consent / High risk consent	Taken / Not Taken
2.	Part preparation done	Yes / No
3.	Nil orally	From ..... am/pm
4.	Hospital clothing	Yes / No
5.	Catheterization	Yes / No
6.	Ryles tube	Yes / No
7.	Enema given	Yes / No
		Time ..... am / pm
8.	Blood arranged	Yes / No
		No. of units.....
9.	Investigation :	
	X-Ray ..... USG	CT .....
		OTHERS .....
	MR ..... LAB	
10.	HIV/Hbs Ag Status	Positive/Negative
11.	Personal Hygiene	Yes / No
12.	Under clothing present	Yes / No
		Present / Removed
13.	Dentures	
14.	Loose teeth	Yes / No
15.	Eye glass / contact lens removed	Yes / No
16.	Jewellery removed	Yes / No
17.	Nail polish removed	Yes / No
18.	Makeup removed	Yes / No
19.	IV line present	Yes / No
20.	PAC done	Yes / No
21.	Billing clearance	Yes / No
22.	PROPHYLACTIC ANTIBODIES GIVEN	Yes / No TIME .....AM/PM
23.	Antibiotic Sensitivity Test Done (AST)	Yes / No
24.	Surgeon name	informed at ..... am / pm
25.	Anaesthetist name	informed at ..... am / pm
26.	OT staff	informed at ..... am / pm
27.	Any other specific instructions :	

Received by : ..... Signature of staff nurse .....

Name & Signature .....

Time ..... am/pm Name of staff nurse .....

Asian Institute of Medical Sciences
Badkal Flyover Road, Sector-21A, Faridabad-121001

Surg-M44/PreOp Checklist.0/0110

PROJECT 2

STREAMLINING LINEN AND LAUNDRY SERVICES

TABLE OF CONTENTS

ABSTRACT

This project is a prospective study done to find the gaps in the laundry services at a 350-bedded super-specialty tertiary care hospital in Faridabad. This study is aimed at streamlining the entire process from the collection of soiled linen from respective areas of the hospital to the delivery of clean, disinfected linen to the floors. The project identified the problems of nursing and laundry department by conducting individual interviews. The findings were analyzed and potential solution suggested for improvement.

INTRODUCTION

The aim of the project is to streamline the process of linen and laundry at Asian Institute of Medical Sciences, Faridabad.

Laundry and linen is an important section of housekeeping and plays a major role in the hospital. The main objective of this service is to provide adequate quantity of the right quality linen to all the in-door patients.

The purpose of this department is:

- ✓ To provide linen - free of dirt, soils and stains to all the user departments.
- ✓ To disinfect the infected linen received from various departments and make it ready for use.
- ✓ To mend the torn linen received from various departments.
- ✓ To maintain record of linen received for cleaning from various departments.
- ✓ To condemn the irreparable linen and give requisition to the housekeeping in charge for replacement of the condemned linen.
- ✓ To ensure the quality of the linen and inventory control (linen, chemicals and consumables).

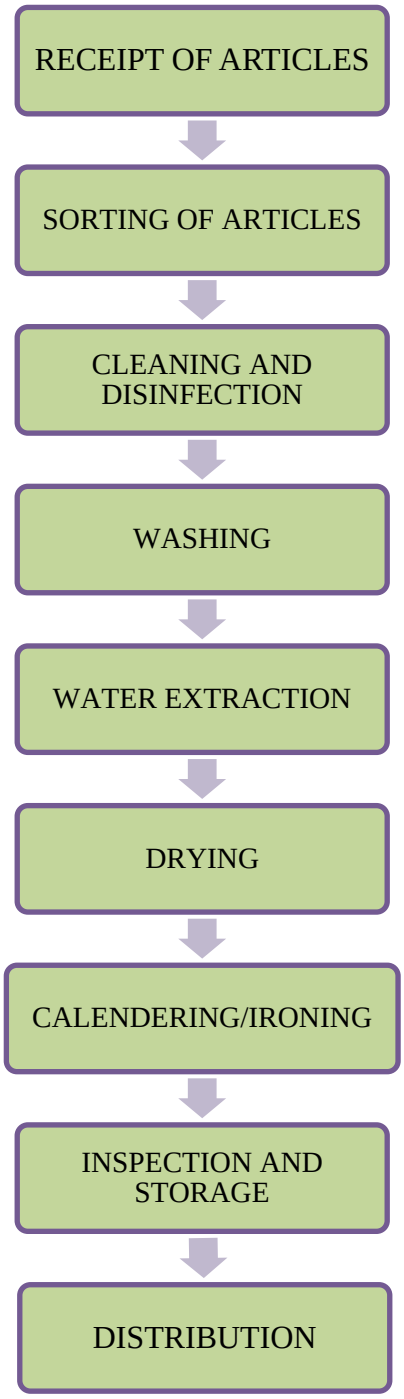
Asian Institute of Medical Sciences, Faridabad is a 350 bedded hospital with average bed occupancy of 200. There is no defined patient linen ratio for the wards as per the occupancy of the hospital. The condemnation of unfit linen is done on a periodic basis (approx. 4-5 months) and the linen is replaced to the respective departments.

The types of linen received in the laundry are:-

- Ward linen
- O.T. linen
- Linen for Doctor’s duty room

- Linen for the Critical care areas

FLOWCHART OF THE ACTIVITY IN LAUNDRY DEPARTMENT



A single breech in the process may call for patient dissatisfaction and increased chances of infection.

OBJECTIVES:

i) To identify the problems in the existing system of laundry (both on the nurses' end and on the laundry's side).
ii) To decide the bed to linen ratio and send the requirement to purchase department.
iii) To suggest improvements in the record keeping system of linen in respective departments.
iv) To make suggestions to streamline the laundry process and improve it's efficiency.

METHODOLOGY:

Study Design

It is a prospective study conducted over a period of 2 months in Asian Hospital, Faridabad.

Study area

This study is conducted in the laundry and various patient care departments of the hospital.

Data Collection Tools

Data was collected by conducting **interviews** of the laundry staff, nurse in charges of various wards and the housekeeping supervisor. They were asked about the problems faced by them related to the laundry service.

The laundry personnel were monitored during the processes of sorting, washing, ironing and folding through close observation over a period of three weeks.

The records and registers maintained in the laundry department were deeply studied to find discrepancies (if any).

The stock of linen received in the laundry from the stores was cross checked from the dispatch records of the stores department.

STUDY FINDINGS:

The study has revealed a number of issues concerning each department individually. The various problems reported are as described below:-

a) **From the nursing's side**:

1. The quantity of linen sent to the laundry never equaled the amount of the linen received and the due was kept pending for months.
2. Most of the linen received (approx 70%) was not usable as it was torn or/and without the Velcro tapes and tying strips.
3. The ratio of the linen was not allotted as per the requirement and occupancy standards.

b) From the laundry department's side:

1. There is lack of availability of a separate stock of linen in the laundry.
2. There is no full time tailor inside the department to get the torn linen repaired parallely.
3. The condemnation of the unfit linen is not done on a regular basis further adding to the shortage.
4. The department is understaffed as per requirement in view of the bed occupancy and workload.
5. The laundry sheet has unnecessary items listed due to which the routine items have to be scribbled every day.
6. The dangerous and sharp instruments are often received along with the linen received from the OT department.
7. The size of the collection and distribution trolleys used is significantly small that calls for multiple rounds to be taken on the same floors.
8. The wheels of the trolley make excessive disturbing noise that quite often irritates the patients as well as the doctors.
9. The record keeping is massive, difficult to maintain and is all done manually which otherwise should have been computerized.
10. The exhaust system in the laundry is ineffective making it a warm and unhealthy place to work in.

c) From the Housekeeping department's side:

1. There is a marked unavailability of stock in the stores to replace the condemned linen as and when it is done.

2. The laundry supervisor fails to maintain the records of the department appropriately as demanded.
3. The stock allotted to the nursing staff is not maintained efficiently.
4. There is lack of a full time supervisor for the laundry to monitor the process and functioning of the department.
5. There are multiple indenting points from which the requisition for the linen is placed.

CORRECTIVE ACTIONS PROPOSED & IMPLEMENTED:

1. A meeting was conducted with the nurse incharges from various departments along with the Chief Nursing Officer & Housekeeping Manager and different ratios for different linen was decided and defined as per the occupancy of the respective department, nevertheless approved by the Director Medical Services of the Hospital.

   Bed Sheets = **1:5** in General, Gynae, Paediatric and Oncology wards
   & **1:6** in Single Room, Semi Cabin and Private Suites.

   Patient Dress = **1:4** throughout the hospital

   Hand Towels = **1:3**

2. An inventory was done all across the hospital by the Housekeeping supervisor and the calculated shortage as per the defined ratio is placed for requisition to the purchase department.
3. A separate stock of linen for the laundry is approved and sent for requisition as per the hospital policies and procedure.

4. A full time tailor separately for the laundry is deployed within the department for the repair of torn linen and mending patient dress.

5. The periodicity of condemnation as discussed with the Housekeeping and the Stores Manager is defined as one month and it is notified to the laundry supervisor to ensure that the condemnation is done on a monthly basis.

6. The condemnation and indenting rights are solely granted to the Housekeeping Manager.

7. As the laundry is outsourced, the contractor is instructed to ensure the availability of sufficient manpower to handle the workload and timely delivery of linen to the floors.

8. The OT team is educated about the fact (instruments being sent to laundry) and advised to be careful while sending the linen to the laundry as the sharp instruments might cause unintended injury to the laundry personnel and increase the chances of sentinel event.

9. A DUE register is maintained in the laundry department and the supervisor is instructed to clear pending dues (if any) within 36hrs of receipt of the item.

10. A Laundry Due Sheet is prepared and circulated across all nurse stations to be maintained for the dues kept pending from the laundry on a daily basis.

11. The nurse incharges are asked to maintain the stocks allotted as per the ratio and they are to be held responsible for the loss beyond the acceptable limit.

12. **A new revised Laundry Sheet is made in consultation with the laundry supervisor which needs to be discussed with the management before being implemented.**

13. A sample of wheels of the trolley sent to the Bio-medical engineering department and requisition placed for replacement.

CONCLUSION:

The project is a prospective study carried over a period of two months at Asian Institute of Medical Sciences, Faridabad. It is aimed at streamlining the process of linen and laundry from the collection of soiled linen from the floors to the distribution of clean and disinfected linen to the respective wards. The study identified the laundry related issues faced by the nursing, housekeeping and laundry departments by conducting personal interviews with them individually.

The reported findings were then analyzed and accordingly corrective measures were suggested and implemented. After having deployed the full time tailor within the department, there has been no complaint for torn linen and/or unusable patient dress from the wards. The laundry contractor has increased the no. of manpower in the department after the meeting and since then no dues from the laundry have been kept pending. All the previous dues have been cleared over a period of two weeks and it is ensured that no dues further would be kept pending for more than 36hrs from its reception.

The condemnation, if conducted on a regular basis along with the parallel replacement for the condemned linen would result in minimum or no shortage of linen throughout the hospital and it would eventually lead to the smooth, organized and efficient function of the linen and laundry service within the hospital.

Despite our high participation rates, the study had its limitations. The major limitation was the lack of time. The interviews were conducted, analyzed, measures were implemented and the functioning reviewed again over a short period of time.

RECOMMENDATIONS:

1. There should be a full time supervisor designated for the laundry to ensure the organized and efficient functioning of the department.
2. The daily record keeping of linen must be maintained strictly by the nurses as well as the laundry supervisor.
3. The exhaust system of the department must be maintained and examined for efficient functioning on a regular basis.
4. Two large sized collection trolleys must be brought to the department to eliminate multiple rounds on the same floor, thus enhancing manpower efficiency.

The linen inventory should be conducted once in every three months across the floors and laundry to ensure the maintenance of stock levels as per the allotted ratio

ANNEXURES

1. Laundry Due Sheet
2. Laundry Inventory Sheet
3. Revised Laundry Sheet

Laundry Due Sheet **Month_____** **Ward_____**

Linen items	1			2			3			4		
	Sent	Rcvd	Due	Sent	Rcvd	Due	Sent	Rcvd	Due	Sent	Rcvd	Due
Bed sheets												
Draw sheets												
Pillow Covers												
B/B Sheets												
X-Ray gown												
Patient gown												
Patient gown (Pink)												
Patient Pettikot (Pink)												
Patient kurta (green)												
Patient kurta(blue)												
Patient kurta (beige)												
patient kurta (purple)												
Patient pajama(green)												
Patient pajama(blue)												
Patient pajama (beige)												
Patient pajama(purple)												
Paediatric kurta												
Paediatric pajama												
Cartoon kurta												
Cartoon pajama												
Wrapper												
Gynae sheets												
Trolley sheets												
Legging												
White coat												
Hand towel												
Bath towel												
Frock												
Blanket(br/bl/rd)												
B/blanket												
Dr. kurta												
Dr. pajama												
Green towel												
Total												

LAUNDRY INVENTORY SHEET

S. No	Date of receiving from stores	Item Received	Indent number	Number received	Sign of Laundry Supervisor

asian
Institute of Medical Sciences

LIST OF LINEN FOR WASHING

Department_____ Date _____ Given by _____

Item **Quantity**

- Bed Sheets __
- Draw Sheets __
- Pillow Covers __
- B/B Sheets __
- X-Ray Gown __
- Patient Gown __
- Patient Patikot __
- Patient Kurta

Adult	Cartoon	Pediatric

- Patient Pajama

Adult	Cartoon	Pediatric

- Wrapper __
- Gynae Sheets __
- Trolley Sheets __
- Legging __
- White Coat(ITRC) __
- Hand Towel(M) __
- Big Towel __
- Frock __
- Blanket

Blue	Red	Brown	Light Blue

- B/ Blanket __
- Doctor's Kurta __
- Doctors's Pyjama __
- Doctor's Bed Sheet __
- Nurses Uniform __
- Green Towel __

Received By----------

Annex A. Time Schedule

S. No.	Name of the department	Date(s) of visit	% of time spent	People met (with designation)
1.	FRONT OFFICE ,FINANCIAL COUNSELLER+ BILLING	5th – 10th April	50%	Dr. Purnima Rao (Customer Relations Officer)
2.	T.P.A	11th -12th April	50%	Dr. Faizal
3.	BLOOD BANK	13th – 16th April		Dr. Uma Rani
4.	EMERGENCY	17th – 19th April		Dr. Satish Chaku (C.M.O)
5.	M.R.D	20th – 21st April		Mr. James (Manager)
6.	HUMAN RESOURCES	22nd – 25th April		Mr. Vivek Menon (H.O.D)
7.	RADIATION AND NUCLEAR MEDICINE	26th -27th April		Dr. Pramod Arora
8.	LAUNDRY	28th April		Mr. Dheeraj (Housekeeing Manager)
9.	FOOD AND BEVERAGES	30th April		M. Praveen (Manager)
10.	SECURITY SERVICES	1st May		Mr. Kamaljeet (Manager)
11.	HOUSEKEEPING	2nd – 3rd May		Mr. Dheeraj (Manager)
12.	ENGINEERING SERVICES	4th -5th May		Mr. Bhardwaj (Manager)
13.	OPERATION THEATRE	14th – 15th May		Dr. Devesh Arora (Sr. Anaesthetist)
14.	STORES	16th – 17th May		Mr. Pandey (Manager)
15.	PHARMACY	18th May		Mr. Jairajan (Manager)
16.	CSSD	19th May		Mr. Dhir Singh (Asst. Manager)