Summer Training at
Fortis Escorts Hospital, Jaipur
9th April - 1st June, 2012

By
Naveen Jindal

Under the guidance of
Dr. Santosh Kumar

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 Mr. Naveen Jindal from Institute of Health Management Research, Jaipur has undergone Summer Training at Fortis Escorts Hospital, Jaipur from 9th April, 2012 to 1st June, 2012.

The candidate himself carried out the project. His approach to the study has been sincere, scientific and analytical. This summer training is partial fulfillment of the course requirement is recommended for the award of post graduate diploma in health and hospital management.

I wish him success in all his future endeavors.

Dr. P.R. Sodani
Dean (Academic and Students Affairs)

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12th June, 2012

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. Naveen Jindal** worked as a **Trainee** with us in the **Dept. of Medical Services** from 9th April, 2012 to 1st June,2012.

His performance during the period in the department was good. He comes across as a willing, sincere and intelligent person who has a strong drive and zeal for learning.

We wish him the best for all his future endeavors.

Authorized Signatory

Fortis Health Management (North) Limited JAIPUR

ACKNOWLEDGEMENT

Nothing really can be accomplished alone. It's the direction, guidance, involvement, support and prayers of more than a few that results into realization.

Our institute - **Institute of Health Management Research (IIHMR), Jaipur** and its education deserves the foremost appreciation for providing us the opportunities to understand our individual capabilities. Of course, all the faculties at IIHMR had facilitated the endeavor; we acknowledge the contribution of **Brig. S.K Puri, Dean, IIHMR** and our college mentors Dr. Santosh Kumar and Mrs. Tanjul Saxena in completion of the project right from the word go.

The data collection and our learning would not have been possible without in depth discussions with **Dr. Shrikant Swami (Medical Superintendent) and Ms. Nihar Bhatia (Head- Quality and FOS).** We thank them for their kind support and guidance.

Again, this is not just to acknowledge the contributions but also to understand the fact that nothing can be accomplished alone.

Thanking you,

Naveen Jindal

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ABBREVIATIONS

FEHL	Fortis Escort Healthcare Limited
FEHJ	Fortis Escorts Hospital, Jaipur
MICU	Medical Intensive Care Unit
CSSD	Central Sterile Service Department
HDU	High Dependency Unit
LDR	Labor Delivery Room
NABH	National Accreditation Board for Hospitals & Healthcare Providers
COP	Care of Patients
MOM	Management of Medication
ISQua	International Society for Quality in HealthCare
ASQua	Asian Society for Quality in Healthcare
HLHS	Hypo Plastic Left Heart Syndrome
ECHS	Ex Service Men Contributory Health Scheme

INTRODUCTION

Summer training is an integral part of Post Graduate Diploma on Hospital Management (PGDHM) programme. As a part of the curriculum, students are required to undergo 2 months training with a reputed organization to learn the daily operational management and, if possible, help the management study and address some identified issues / problems associated with some specific operational area. The main purpose of the training is to get an exposure of the functioning of the organization.

Fortis Escorts Hospital, Jaipur, (FEHJ), a tertiary care hospital, is recognized as a centre of excellence in providing medical care, and conducts research facilities of high order in the field of medical sciences. The hospital is totally centrally air-conditioned having an installed capacity of 300 beds (210 functional beds), state-of-the-art Operation Theatres (OTs) and Intensive Care Units (ICUs). Fortis Escorts Hospital, Jaipur (FEHJ), is continuously growing by setting examples not only in the field of clinical excellence, training and research but also in the field of management expertise.

Due to these distinguishing features we did our summer training in Fortis Escorts Hospital, Jaipur with the aim and objective of getting exposure to the functioning of the organization.

The **Aim** of the summer training was:

"To study the administrative and managerial functioning of Fortis Escorts Hospital, Jaipur" with special reference to the different areas / departments of the Hospital.

The **Objectives** of the summer training were:

- To learn the daily operational management of the organization and its various departments / areas.
- To study the salient and critical features of 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.

METHOD AND DATA

• Information regarding the organization, location, area, history, planning, manpower, organizational hierarchy, statutes and other details were collected from hospital's manual, concerned authorities and from other sources.

• Various departments / services (clinical, supportive, ancillary and administrative) of the organization were identified.

• Training in the identified areas / departments was carried out by collecting information and data from co-coordinators, personal observation and by assisting the concerned personnel in daily operational management of that area.

• Data Collection: Data was collected by reviewing records (computerized as well as manual) and from coordinators. Data collected basically comprises of:

> Input to the department / area i.e. Human Resources, Physical Facilities, Inventory, Consumables etc.

> Output generated i.e. Number of patients attended, Number of patients admitted, Number of Investigations done, Number of procedures done etc.

> Other data specific to the department / area.

• Information was collected regarding location / layout, equipments used, policies and procedures, and other managerial issues.

• Additional information was collected, wherever required of that specific department/area.

The observational findings and the information collected were compiled and a report was prepared.

HOSPITAL PROFILE

Fortis Healthcare is India's fastest growing healthcare chain, with state-of-the-art facilities and an unparalleled commitment to patient care. Fortis Escort Healthcare Limited (FEHL) is founded on the vision of becoming an integrated Healthcare Delivery Organization driven by quality, excellence, technology and compassionate care. FEHL, one of the largest private healthcare companies in India, has one of its hospitals in Jaipur as Fortis Escorts Hospital, Jaipur. (FEHJ) which specializes in cardiac sciences, neurosciences, renal sciences and gastrointestinal diseases. The hospital also provides superior services in mother and childcare, orthopedics and also a complete range of multi-specialty services in all disciplines.

FEHJ has dedicated facilities for comprehensive care of trauma patients and others in need of emergency care which include an emergency operation theatre and a 10-bedded medical intensive care unit (MICU). FEHJ is the first amongst the proposed multi super specialty hospitals to be set up in Rajasthan. FEHJ is the first hospital in the country to attain NABH Accreditation in minimum stipulated time (Six months) after commencement of operations and was re-accredited on 27th April 2011. FEHJ is a super-specialty hospital backed by multispecialty.

Super Specialities- Cardiology & Cardiac Surgery, Renal Sciences, Neuro Sciences, Gastro-Intestinal sciences.

Multi Specialities - Orthopedics & Joint Replacement, Diabetes & Endocrinology, Dermatology, Internal Medicine, Pulmonary, Medicine, Ophthalmology, Dietetics, Physiotherapy and Preventive Health Check, General Surgery, Dental Surgery, Cosmetic & Plastic Surgery, ENT, Gynaecology & Obstetrics, Paediatrics & Neonatology.

VISION OF THE HOSPITAL:

"To create a world-class integrated healthcare delivery &learning system in India, entailing the finest medical skills combined with compassionate patient care".

HISTORY:

Jaipur, Aug 2, 2007 - Fortis Healthcare Ltd, one of the largest private healthcare companies in India, Thursday announced a multi-specialty hospital at Jaipur as part of its initiative to expand its operations in Rajasthan . The then Chief Minister, Mrs. Vasundhara Raje inaugurated the Fortis Escorts Hospital Jaipur (FEHJ) in the presence of Mr. Malvinder Mohan Singh, Chairman, Fortis Healthcare, Mr. Shivinder Mohan Singh, CEO and MD, Fortis Healthcare, besides other dignitaries and company officials.

INFRASTRUCTURE:

The infrastructure facilities of Fortis Escorts Hospital, Jaipur, are par excellence, such as:

C arm with digital subtraction angiography

Flat panel cath lab

Advanced pathological lab

Mobile X-Ray

64 Slice CT scan

TMT, ECHO, HOLTER recorder and monitor and ECG to help non-invasive cardiac investigations.

500mA image intensifier TV

Digital CR reader

X-Ray.

LOCATION:

The access to the hospital is very easy. The hospital is located on JLN Marg road, Jaipur. The address of the hospital is:

Fortis Escorts Hospital, Jaipur

Jawahar Lal Nehru Marg,

Malviya Nagar,

Jaipur- 302107

Rajasthan, India

Tel: 91-141-2547000

AREA:

Spread over 6.68 acres with an investment of Rs. 1.10 billion, it has an operational bed facility of 210 beds with an installed bed capacity of 300 beds.

NUMBER OF DEPARTMENTS:

There are presently 34 functional departments in the hospital comprising of Clinical and Non clinical departments. The detailed information about each department visited is given later. The list of functional departments is as follows:

Clinical departments:

1. Infection control
2. CSSD (Central Sterile Service Department)
3. Physiotherapy
4. CTVS
5. SICU
6. NICU
7. LDR
8. Operation theatres
9. Triage/Emergency
10. HDU (High Dependency Unit)
11. Radiology
12. General ward
13. Laboratory's
14. Dietetics
15. MICU
16. CCU
17. Dialysis
18. Cath Lab

Non clinical departments:

1. Engineering
2. Biomedical Engineering
3. Finance
4. Marketing
5. Human Resource
6. House keeping
7. Laundry
8. Pharmacy
9. Medical Records
10. Food & beverages
11. Security
12. Central stores
13. Quality Assurance
14. Research
15. Patient Welfare Department
16. Information Technology

SERVICES PROVIDED:

There is a long exhaustive list of services provided by the hospital comprising of clinical and non-clinical services. Both the services go hand in hand for maintaining the efficacy and efficiency of the organization for the patient and staff welfare.

Clinical services:

1. Cardiac Surgery
2. CTVS
3. Cardiology
4. Renal Science
5. Nephrology

6. Urology
7. Neurology
8. Neuro Surgery
9. Gastro Intestinal Diseases
10. Internal Medicine
11. Pulmonology
12. Endocrinology
13. Dermatology
14. Psychiatry
15. General Surgery
16. Plastic Surgery
17. Pediatric Surgery
18. Obstetrics
19. Gynecology
20. Pediatric
21. Neonatology

Non Clinical services:

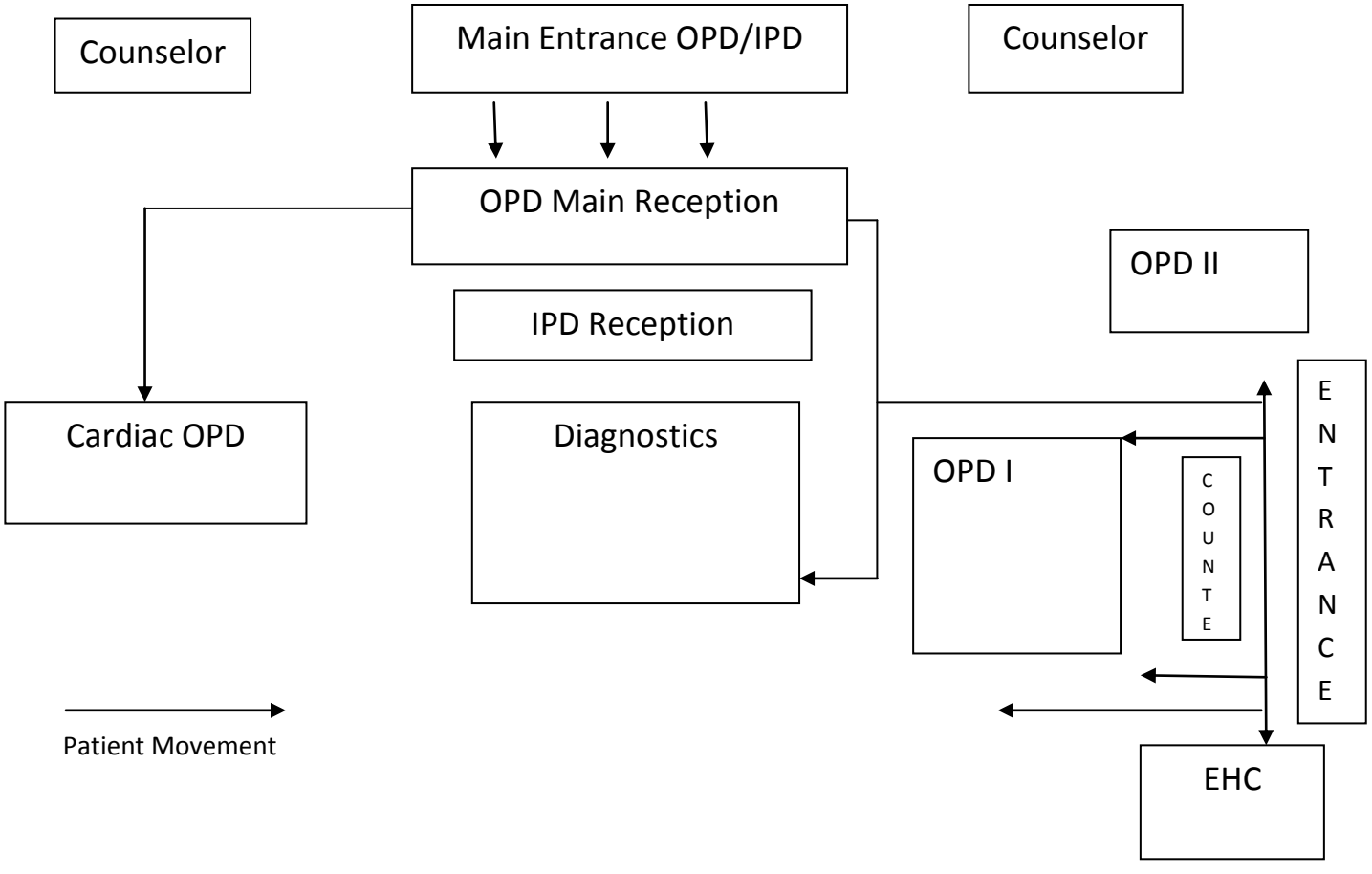
1. House keeping & Laundry
2. Pharmacy
3. Medical Records
4. Food & beverages
5. Security
6. Central stores
7. Training and development

OPD WORKING:

Outpatient services in hospitals have evolved in line with patient needs demands and expectations from a limited service offering basic & minor clinical services to highly evolved & organized services. It is the

first point of contact between patient's, their relatives & hospital & its staff. It is referred to as "shops window of the hospital".

Layout of OPD Patient flow:



Roles & Functions :

- To provide community a major source of specialist diagnostic medical opinion
- To treat on ambulatory & domiciliary basis all cases which can be treated.
- To refer patients for admissions to the hospital
- To carry out after care & medical rehabilitation after discharge

IPD WORKING:

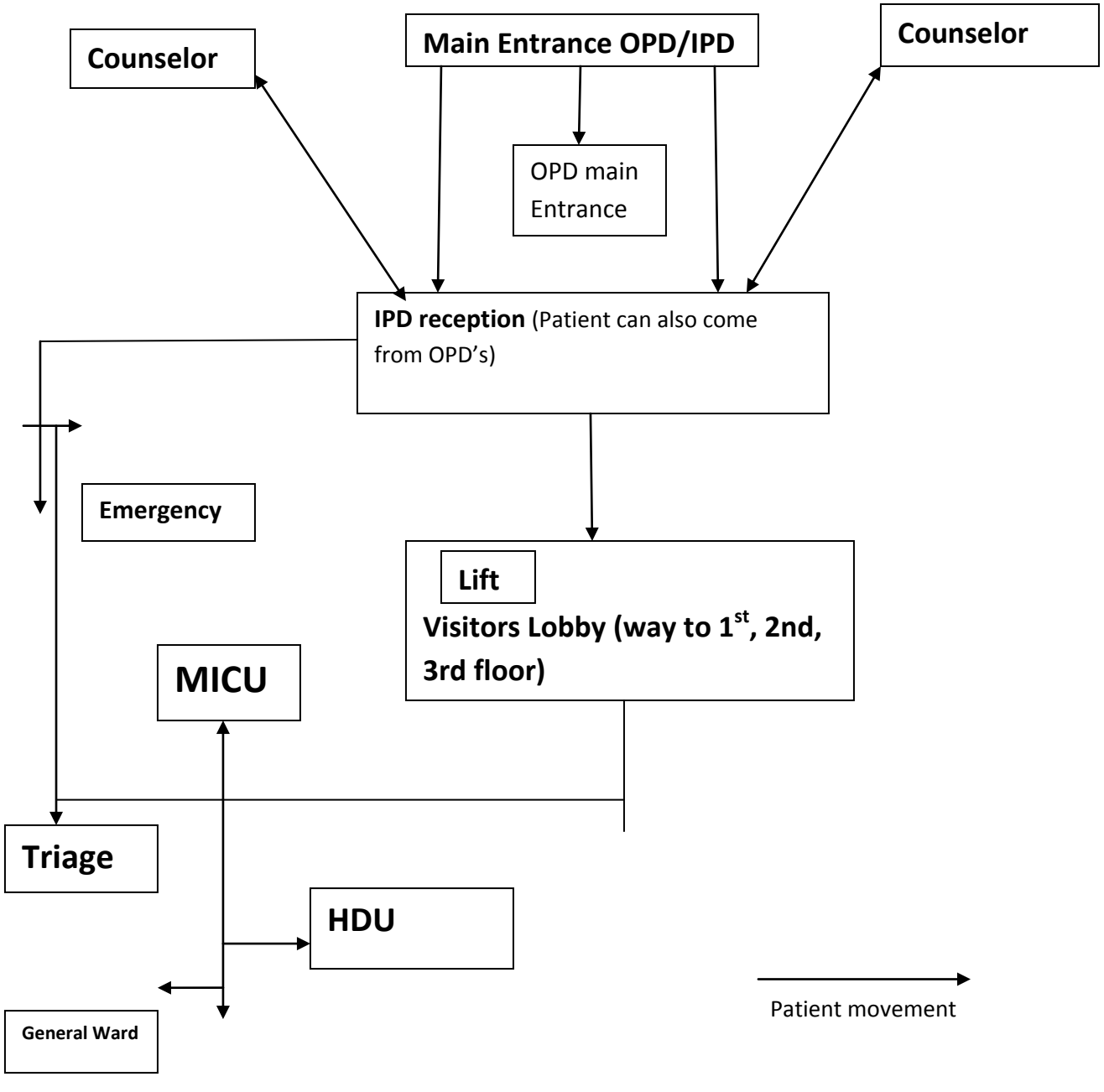
Inpatient services are Hospital services and items furnished to an inpatient of a hospital by the hospital, including bed and board, nursing and related services, diagnostic and therapeutic services, and medical or surgical services. Indoor services are also known as " Nursing Services " and provided to such patients who have been admitted in the hospital , either for observation , investigation or treatment.

Roles and functions:

To provide highest possible quality of medical and nursing care for the patients

To furnish most desirable environment substituting as temporary home for the patient

Layout of IPD patient flow:



DEPARTMENT INFORMATION:

The organization comprises of the clinical and non clinical departments. Each department has its own operations.

Non clinical departments:

1. QUALITY ASSURANCE DEPARTMENT

Goal: Headed to maintain and perk up the standards.
Quality assurance, or QA for short, is the activity of providing evidence needed to establish quality in work, and that activities that require good quality are being performed effectively. All those planned or systematic actions necessary to provide enough confidence that a product or service will satisfy the given requirements for quality.

Documents maintained:
Standard Operating Procedure (SOP‟ s)

Policies

Manuals

Plans

Committees

Quality Indicators

Internal Audit

Medical Audit

Training Record

QA Programmes

Clinical Guidelines

2. HUMAN RESOURCE DEPARTMENT

Goal: To ensure availability & retention of quality talent to meet organization goals and objectives. Overall growth & development of employee's orientation & functional training.

Departmental Structure (Unit)
Head- HR
Assistant Manager-Training
Executives-2
Junior Executives-2
Data Entry Operator-2

Scope of Services:

- Manpower Planning
- Recruitment Process
- Internal job posting process
- Pre Employment Health Check-up
- Trainings
- Attendance & leave management
- Appraisal & Promotion Process
- Statutory compliances
- Medical Benefits
- Employee Welfare Programs
- Disciplinary Action
- Grievance Handling
- Medical by laws
- Payroll Management
- Budgeting

3. MEDICAL RECORDS

Goal: Medical Records Department is the custodian of all the discharged/ expired health record charts. The Medical Records Department staff ensures the confidentiality, preservation, storage and retention of the documents of the patients.

Departmental Structure:
Executive, Medical Records: Reporting to Medical Director

Document maintained by the department:

- IPD/OPD Files receive register
- IPD file dispatch register
- OPD file dispatch register
- Death register

- Birth register

Scope of Services:

The workflow of the department can be broadly divided into following steps:

1. Record collection
2. Analytical Evaluation
3. Codification
4. Assembly / storage
5. Retrieval
6. Data generation

4. PHARMACY

Goal: The Goal of the Pharmacy is to procure and provide the Medicines to the patient.

Functions of the Department

a. Receipt of Material (centralized receipt at Receiving Bay)

b. Issue of Material to patients and various Departments (Centralized dispensing from Main Stores)

c. Physical Stock Verification

Departmental Structure

OPD Pharmacy ⟶ 2 Pharmacist, 1 GDA in Shifts
IPD Pharmacy ⟶ 1 In charge, 3 Pharmacist, 1 Accountant, 1 GDA, 1 Housekeeping.

Scope of Services:

The scope and complexity of services provided by this department is to give services of all range of medicine and surgical Items to the patient and the ward and OTs. The types & areas served are all the Department of the Hospitals like General ward, ICUs, OTs and Bio-Medical.

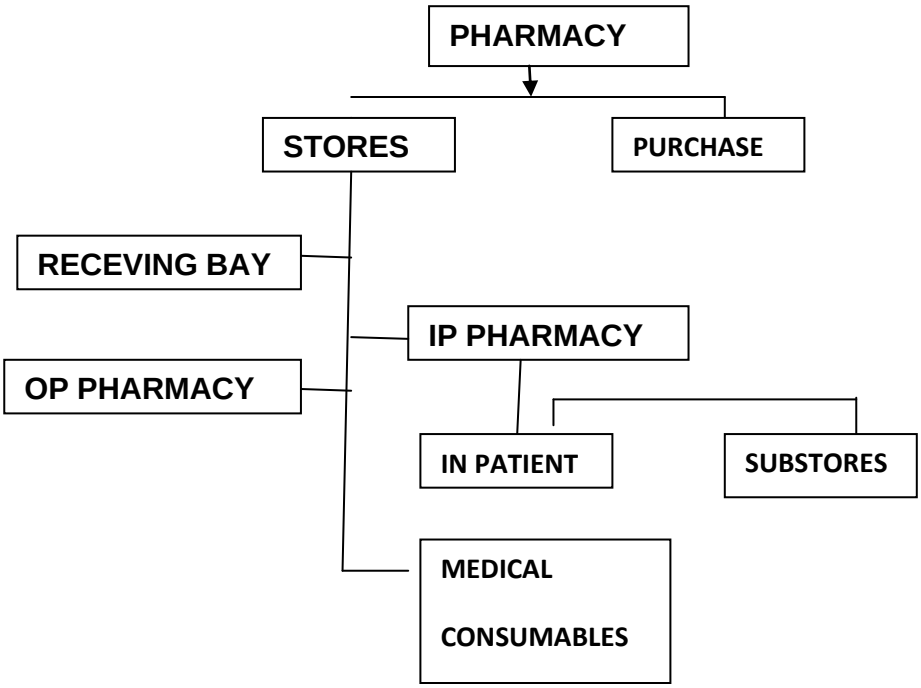
Services include:

a. Procuring and providing the genuine medicine to the patient.

b. Deliver the medicine to the Wards and OTs.

c. Discharge Summery of patient (medicine issued)

Process Flows:



5. HOUSE KEEPING

Goal: To achieve defect free room with 100% hygiene and cleanliness. To maximize patients satisfaction with minimum cost.

Departmental structure:
Head of Department, Supervisors, Contractual Supervisors, GDA and Cleaning Staff.

Scope of Services:
The scope and complexity of services provided by this department is:

- Cleaning of all areas.
- Providing water
- Providing room amenities
- Providing services like glass cleaning , pest controlling , horticulture and in house laundry
- Waste disposal

6. LAUNDRY

Goal: To deliver spotlessly clean and hygiene linen and uniforms to the user departments.

Departmental Structure:

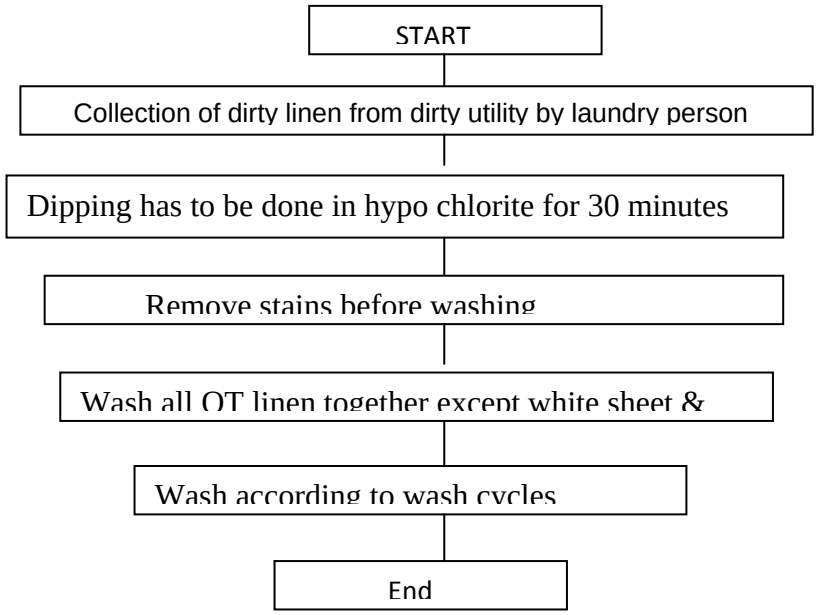
Supervisor, Contractual Supervisor, Contractual Attendants, GDAs, Tailor
At lower level it comprises of: 2 Laundry Supervisor, 2Contractual supervisor, 2 Washing man , 2 Iron man and 3 Helpers.

Document maintained by the department:

- Cloth incoming register
- Cloth outgoing register
- New Linen stitch register
- Alteration register

Scope of services:
The scope and complexity of services provided by this department is to provide:

- Providing clean linen and uniforms
- Treat infected/ contaminated linen
- Treat heat labile linen



7. MARKETING:

Goal: Marketing department is responsible for the revenue generation through Brand building, Retail Sales, Corporate Marketing PR & Media Communications & liaison with Government. Some of key activities of the department are Brand Awareness, Events Management, Corporate Social Responsibility, and ensures Business & Growth in line with Organizational Objectives.

Functions of the Department

The department works together in cohesion as a team to achieve following Objectives

1. To achieve Financial Budgets for the Unit.

2. To outgrow competition in dynamic market by strong presence through Contact programs & Events.

3. To position Brand Fortis as Leading Healthcare Service Provider with Patient Centric approach to Medical Fraternity.

4. Design and implement growth tools and plan for Annual and Medium term Strategy for Unit in line with Organization Objective

5. Planning of Events like CME‟ s, Camps, Preventive Medicine Lecture, and Friends of Fortis for patient interface with Unit.

6. Plan and conduct events based on with Corporate Social Responsibility.

Departmental Structure:
The department has three Area Sales Executives, on duty 24*7 principle.

Documents maintained by the department:

- Tariff Maintenance
- Media Report

8. FINANCE

Goal: To provide accurate relevant and timely financial information necessary in making right business plan and decisions.

Departmental Structure:
Finance Controller, Asst. Manager-Finance, Executive-Finance, Jr. Executive Billing – 2, Account Officer – 2, Account Assistant – 2, Billing Asst. – 5
Scope of Services:

The scope & complexity of service provided by this department is:

- Business building insights.

- Areas for lowering cost & improve profitability.
- Updating of bills on daily basis for IPD patients.
- Customer (Patient's Attendant) satisfaction for billing concern.

The Billing staff has overall responsibility for coordination of various functions (Pharmacy, Wards etc.) and daily basis report for admission , Collection to higher management and Administration of the department, and they maintain a log of all the problems that arise on day to day basis and provide the necessary solution as deemed proper and reasonable.

Department serves all departments for finance & billing aspect.

9. INFORMATION TECHNOLOGY

Goal: Provide IT Value to end users with respect to their day to day function.

Departmental structure:
The four members IT Team have a team leader, one for Software and three for IT infrastructure and communication system.

Scope of Services:
The scope and complexity of services provided by this department is Application Software (Medtrack & Prodigious)

- IT Infrastructure
- Hardware & Network
- Anti Virus Services
- Internet Services
- Email Services

10. FOOD & BEVERAGE

Goal: To provide food and beverages and fulfill the needs and desires of our esteemed customers.

Functions:

1. Daily auditing of stores and kitchen area.
2. Take rounds of the entire service area with and after the service timings.
3. Shift wise briefing and de briefing of the contractual staff to ensure smooth and flawless functioning.
4. Monitoring of services and sales at various outlets like Coffee shops, Executive/Doctor‟ s dining hall.
5. Regularly maintain the departmental reports.

Departmental structure:
1 – HOD, 2 – Sr. Supervisor, 1 – Supervisor (3), 72 – Contractual Staff

11. ENGINEERING

Goal: To manage all engineering equipment and machines & supervising day to day hospital maintenance work and ensuring smooth functioning of all facilities of hospital.

Functions of the Department:

1. Responsible for managing plant engineering equipment, utilities, spares and consumables like Diesel generator, Plumbing, Pipeline, Ventilation, Air conditioning, Carpentry, Sewage treatment, Water treatment etc

2. Responsible for controlling consumption / provisions of power, water etc

3. Address and resolve escalated complaints and grievances from the user departments.

4. To ensure planned & timely progress and completion of commissioning activities and take proper handover from the project team regarding the engineering works.

Department Team:
Chief Engineer (1), Shift In charge (3), Shift supervisor (1), Electrician (7), Plumber (4), Gas manifold (3), HVAC (3), Fitter (1)

Scope of Services:

The scope and complexity of services provided by this department is to coordinate with various department medical and non medical so that there is no hindrance in day to day work of all facilities.
The department monitor all the facilities such that diesel generator, steam boiler, hot water boiler, firefighting equipment, air conditioning chiller plant ,sewage treatment plant, RO plant, soft water plant, tube well, all plumbing work, carpentry work etc.

12. PATIENT WELFARE DEPARTMENT

Goal: To make and position the hospital as a "Center of Excellence" by ensuring customer satisfaction through personalized customer care , following the guiding principles of empathy, care and compassion to make the patients feel cared for.

Functions of the Department:

1. To maintain a good relation with the patients / attendants in the hospital through personalized service.

2. Managing patients/ attendants expectations as well as keeping the interests of the organization alive.

3. To enhance the value of services being provided by making the patient and the attendant comfortable and acquainted to the hospital.

4. To improve the quality of service from the patients‟ perspective through their feedback.

5. To look beyond the patients‟ / attendants‟ grievances, to identify loopholes in our existing system and the factual problems of the patients.

6. Networking within the organization for the benefit of the patient / attendant and to ensure the action on the feedback.

Departmental Structure: Three Patient Welfare Officers

Scope of Services:

The scope and complexity of services provided by this department is to enhance the customer satisfaction.The types and ages of patients served are patients of all age group.

13. BIOMEDICAL ENGINEERING:

Goal: To install, commission and maintain all medical equipments in an efficient and cost effective way and make technical appraisal and recommendation for purchase of new equipments.

Functions of the Department

1. To administer and ensure timely maintenance of all medical equipment

2. To ensure timely trouble shooting of technical faults of the medical equipment

3. Provide inputs to commercial department about new / renewal of contracts with equipment supplier including annual maintenance / comprehensive maintenance contracts.

4. Ensure that the downtime of the equipment is the lowest

5. Audit all processes related to the delivery of medical gases

Departmental Structure:
Bio medical Engineer (1), Technician (2)

14. SECURITY

Goal: To provide a proactive, competent service, to protect the life and property of every individual present in our premises.

Objectives: The Security departments' responsibilities can be broadly classified into three basic categories:
a. To protect and conserve the hospital’s property and prevent pilferage.
b. To prevent any action or situation that might result in an injury or death when a patient/ attendant/visitor/ employee are lawfully on the hospital premises.

Departmental structure:

Chief security officer (1), Supervisors (4) (pay roll), Contract supervisors (4), Guards

Documents maintained:

- Audits
- Mock drills
- Complaint register

Scope of services:

- Security against intrusion, theft & robbery
- Transport & parking control
- Investigation & corrective action
- Informing the police for any ML cases
- Access control
- Key Management
- Disaster & Fire management
- Mortuary Management

CLINICAL DEPARTMENTS:

Goal: To provide medical care and treatment to patients with all types of diseases.

Scope of services:

OT

All types of Cardio-thoracic and vascular surgeries are performed here.
High Risk surgeries are also performed with Heart Supporting system & advanced Perfusion techniques.

SICU-CTVS and general surgery, CCU and general ward:

Services include:

- Invasive Monitoring
- Patient assessment (Physician, nursing, dietary and physiotherapy)
- Personal needs
- Dietary needs
- Bed-side x-ray, physiotherapy
- Transfer to ward
- Patient and family education

CSSD

Provide clean & sterile supplies which help in reduction of Infection & improve the Quality of care.

Infection control:

- To educate staff on biomedical waste segregation and management.
- To review epidemiological surveillance data and identify areas of intervention.
- To identify patients and or staff with communicable/potentially communicable infections and institute appropriate measures in such cases.

Dialysis

Removing waste and excess water from the blood and is used primarily to provide an artificial replacement for lost kidney function in people with renal failure.

Pediatric, NICU

To provide world class tertiary level management of critically sick babies & children. Specialized services will include Pediatric surgery, Neurosurgery, Physiotherapy & child Psychology.

Labor Delivery Room (LDR)

Outpatient care for patients coming to the OPD.
Includes- Obstetrics consultation, investigations and referrals and opinions from other departments, if required.

Physiotherapy:

Facilities in Department of Physiotherapy
Electrotherapy, Diagnostic, Mechanical, Manual Mobilization Therapies, Exercise Therapy, Chest Physiotherapy, Gynae/Obstetric, Fitness, Post Operative Cardiac Surgeries, For Neurological Disorders and Geriatrics

HDU, Triage and ICU

The role of all three is to some extent same.
They provide intensive nursing care and monitoring. Patients with critical medical problems are treated in this highly focused specialized environment, featuring the best intensive care medical personnel and cardio-pulmonary monitoring equipment available. Procedures performed
Included bronchoscopes, central venous lines, peripherally inserted line, arterial line, pulmonary artery catheter, Temporary pacemakers, Percutaneous tracheotomies, PEG placement and chest tube placement.

Cathlab:

The range of services includes all the elective and emergency procedures across the whole spectrum of Cardiology. CAG‟ s, PTCAs, BMV‟ s, Device closures, EP studies, RF ablations, Pacemaker implantations, Peripheral stentings, Rota ablation and many other cardiology procedures are performed in the Cath Lab.

Dietics:

Dieticians provide an array of patient care services, including, nutritional assessment, counseling services, and enteral and parenteral feeding recommendations. The food service section of the department is committed to provide all IPD patients with fresh hygienic food. Menus are planned to take advantage of seasonal foods and changing patient preferences.

Laboratory:

The Department of Lab Medicine offers a comprehensive menu of more than 3000 regular and specialized tests performed through state- of- the- art equipment and based on more than 95 technologies.

Project: Assessment of Hospital Facilities According to the NABH Standards

Objective of the Project:

To study the present status of various departments according to the two most important NABH standards of Care Of Patients (COP) and Management Of Medication (MOM).

Specific Objective:

- To study the organizational structure
- To study the functioning of the concerned departments
- To audit documentations, policies, and procedures of the concerned departments
- To find out the problems and suggest possible remedies

Introduction:

The organization provides uniform care to all patients different settings. The different settings include care provided in outpatient units, various categories of wards, intensive care units, procedure rooms and operation theatre. When similar care is provided in these different settings, care delivery is uniform. Policies, procedures, applicable laws and regulations guide emergency and ambulance services, cardio-pulmonary resuscitation, use of blood and blood products, care of patients in intensive care and high dependency units.

Policies, procedures, applicable laws and regulations also guide care of vulnerable patients (elderly, physically and/or mentally-challenged and children), high-risk obstetrical patients, paediatric patients, patients undergoing moderate sedation, administration of anaesthesia, patients undergoing surgical procedures, patients under restraints, research activities and end of life care.

Pain management, nutritional therapy and rehabilitative services are also addressed with a view to providing comprehensive health care.

The standards aim to guide and encourage patient safety as the overall principle for providing care to patients.

Hospital Accreditation-

Hospital Accreditation is a public recognition by a National Healthcare Accreditation Body, of the achievement of accreditation standards by a Healthcare Organization, demonstrated through an independent external peer assessment of that organization's level of performance in relation to the standards.

In India, Heath System currently operates within an environment of rapid social, economical and technical changes. Such changes raise the concern for the quality of health care. Hospital is an integral part of health care system. Accreditation would be the single most important approach for improving the quality of hospitals. Accreditation is an incentive to improve capacity of national hospitals to provide quality of care. National accreditation system for hospitals ensure that hospitals, whether public or private, national or expatriate, play there expected roles in national heath system.

Confidence in accreditation is obtained by a transparent system of control over the accredited hospital and an assurance given by the accreditation body that the accredited hospital constantly fulfills the accreditation criteria.

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 programme 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, have full functional autonomy in its operation.

NABH provides accreditation to hospitals in a non-discriminatory manner regardless of their ownership, legal status, size and degree of independence.
International Society for Quality in Healthcare (ISQua) has accredited "Standards for Hospitals", 2nd Edition, November 2007 developed by National Accreditation Board for Hospitals & Healthcare Providers (NABH, India) under its International Accreditation Programme for a cycle of 4 years (April 2008 to March 2012). The approval of ISQua authenticates that NABH standards are in consonance with the global benchmarks set by ISQua. The hospitals accredited by NABH will have international recognition. This will provide boost to medical tourism.

ISQua is an international body which grants approval to Accreditation Bodies in the area of healthcare as mark of equivalence of accreditation program of member countries.

NABH is a member of ISQua Accreditation Council.

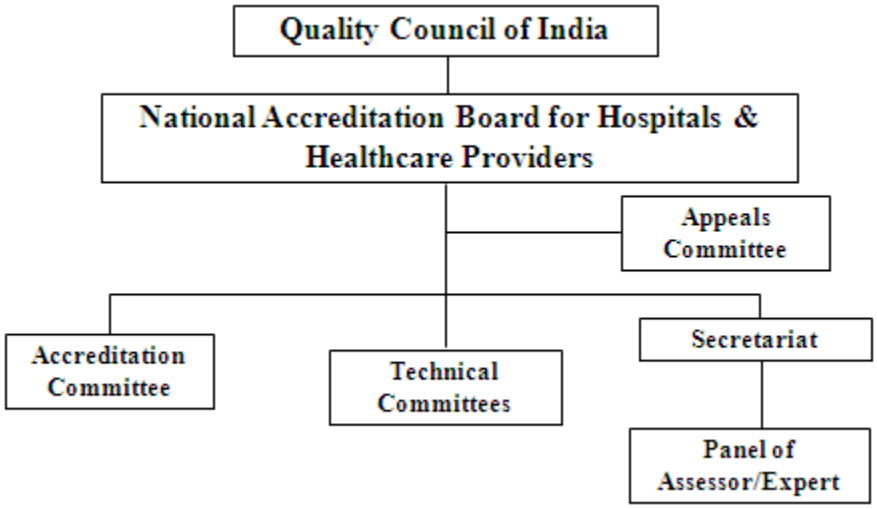
NABH is an Institutional Member as well as a member of the Accreditation Council of the International Society for Quality in HealthCare (ISQua). NABH is the founder member of proposed Asian Society for Quality in Healthcare (ASQua) being registered in Malaysia.

NABH is a member of International Steering Committee of WHO Collaborating
Centre for Patient Safety as a nominee of ISQua Accreditation Council

International Linkage

- NABH is an Institutional Member as well as a Board member of the International Society for Quality in Health Care (lSQua).
- NABH is a member of the Accreditation Council of International Society for Quality in Health Care (ISQua).
- NABH is on board of Asian Society for Quality in Healthcare (ASQua).
- NABH is a institutional member of International Spa Association (ISPA)

Structure



Benefits of Accreditation

Accreditation

"A public recognition of the achievement of accreditation standards by a healthcare organisation, demonstrated through an independent external peer assessment of that organisation's level of performance in relation to the standards".

Accreditation benefits all stake holders. Patients are the biggest beneficiary. Accreditation results in high quality of care and patient safety. The patients get services by credential medical staff. Rights of patients are respected and protected. Patient satisfaction is regularly evaluated.

The staff in a accredited health care organization are satisfied lot as it provides for continuous learning, good working environment, leadership and above all ownership of clinical processes.

Accreditation to a health care organization stimulates continuous improvement. It enables the organization in demonstrating commitment to quality care. It raises community confidence in the services provided by the health care organization. It also provides opportunity to healthcare unit to benchmark with the best.

Finally, accreditation provides an objective system of empanelment by insurance and other third parties. Accreditation provides access to reliable and certified information on facilities, infrastructure and level of care.

NABH Standards for Hospitals

NABH Standards for hospitals, 2nd Edition, November 2007 has been released. This standard has been accredited by International Society for Quality in Healthcare (ISQua). The approval of ISQua authenticates that NABH standards are in consonance with the global benchmarks set by ISQua. The hospitals accredited by NABH will have international recognition. This will provide boost to medical tourism.

The standards provide framework for quality assurance and quality improvement for hospitals. The standards focus on patient safety and quality of care. The standards call for continuous monitoring of sentinel events and comprehensive corrective action plan leading to building of quality culture at all levels and across all the functions.

NABH Standards for hospitals prepared by technical committee contains complete set of standards for evaluation of hospitals for grant of accreditation.

The standards provide framework for quality of care for patients and quality improvement for hospitals. The standards help to build a quality culture at all level and across all the function of hospital. NABH Standards has ten chapters incorporating 100 standards and 514 objective elements.

The 10 chapters in the standard reflect two major aspects of healthcare delivery i.e. patient centered functions (chapter 1-5) and healthcare organization centered functions (chapter 6-10).

Outline of NABH Standards :

Patient Centered Standards

- 1. Access, Assessment and Continuity of Care (AAC).
- 2. Care of Patients (COP).
- 3. Management of Medication (MOM).
- 4. Patient Rights and Education (PRE).

- 5. Hospital Infection Control (HIC).

organization Centered Standards

- 6. Continuous Quality Improvement (CQI).
- 7. Responsibilities of Management (ROM).
- 8. Facility Management and Safety (FMS).
- 9. Human Resource Management (HRM).
- 10. Information Management System (IMS).

Each of the concerned department was visited for a minimum of two days and a detailed review of the Standard Operating Procedures (SOPs), policies, documentation and patient files was done. Detailed discussions with the clinical and Para-clinical staff were carried out and the compliance of the SOPs and various guidelines were checked.

CARE OF PATIENTS

S. No.	OBJECTIVE ELEMENTS	REMARKS
COP.1	**Care of patients is uniform and is guided by the laws and regulations.**	
1a.	Care delivery is uniform when similar care is provided in more than one setting.	Yes, same quality of care is provided throughout the organization for similar health problems.
1b.	Uniform care is guided by policies and procedures.	Yes, according to the organization's SOPs.
1c.	These reflect applicable laws, regulations and guidelines.	Yes.
1d.	The organization adopts evidence based medicine and clinical practice guidelines to guide uniform patient care.	Yes.
COP.2	**Emergency services are guided by documented policies, procedures and applicable laws and regulations.**	
2a.	Policies and procedure for emergency care are documented and are in consonance with the statutory requirements.	SOPs are present in Triage for management of various emergency conditions like poisoning.
2b.	Policies also address handling of medico-legal cases	Yes
2c.	The patients receive care in consonance with the policies.	Yes
2d.	Documented policies and procedures guide the triage of patients for initiation of appropriate care.	Yes, a qualified team is present in triage which consists of competent Doctors & Nurses.
2e.	Staff is familiar with the policies and trained on the procedures for care of emergency patients.	Yes, periodic training programmes for BLS & ACLS are conducted with certificate courses.
2f.	Admission or discharge to home or transfer to another organization is also documented	Yes. It is done through a Discharge Handover Form.
2g.	In case of discharge to home or transfer to another organization a discharge note shall be given to the patient.	Yes
COP.3	**The ambulance services are commensurate with the scope of the services provided by the organization.**	
3a.	There is adequate access and space for the ambulance(s)	Yes, adequate access and space is available for the ambulance to turn and move quickly.

3b.	Ambulance attached to statutory requirements.	Yes
3c.	Ambulance(s) is appropriately equipped	Yes. All the necessary equipments are present.
3d.	Ambulance(s) are manned by trained personnel	Yes
3e.	Ambulance(s) are checked on a daily basis	Yes, using a checklist.
3f.	Equipments are checked on a daily basis using a checklist.	Yes
3g.	Emergency medications are checked daily and prior to dispatch using a checklist.	Yes
3h.	The ambulance(s) have a proper communication system	Mobile Phones are provided.
COP.4	**Documented policies and procedures guide the care of patients requiring cardio-pulmonary resuscitation.**	
4a.	Documented policies and procedures guide the uniform use of resuscitation throughout the organization.	Yes, proper SOPs are available as documented policies and procedures.
4b.	Staff providing direct patient care is trained and periodically updated in cardio pulmonary resuscitation	Yes, through various training programmes and certificate courses.
4c.	The events during a cardio-pulmonary resuscitation are recorded	Yes, all events are recorded in a file.
4d.	A Post-event analysis of all cardio-pulmonary resuscitation is done by a multidisciplinary committee.	Yes, a CODE BLUE team is present in the hospital which analyzes all the cardio-pulmonary resuscitation instances periodically.
4e.	Corrective and preventive measures are taken based on the post-event analysis.	Yes.
COP.5	**Documented policies and procedure guide nursing care.**	
5a.	There are documented policies and procedures for all activities of the nursing services.	Yes. Proper guidelines are present.
5b.	These reflect current standards of nursing services and practice, relevant regulation and purposes of the services.	Yes, nursing practice is in accordance with the accepted standards.

5c.	Assignment of patient care is done as per current good practice guidelines.	Yes
5d.	Nursing care is aligned and integrated with overall patient care.	Yes
5e.	Care provided by nurses is documented in the patient record.	Yes, through vital signs flow sheet, nursing care plan sheet & nurses investigation chart.
5f.	Nurses are provided with adequate equipment for providing safe and efficient nursing services.	Sphygmomanometers, thermometers, weighing scales are provided on every floor.
5g.	Nurses are empowered to take nursing- related decisions to ensure timely care of patients.	Yes
COP.6	**Documented procedures guide the performance of various procedures.**	
6a.	Documented procedures are used to guide the performance of various clinical procedures.	Yes
6b.	Only qualified personnel order, plan, perform and assist in performing procedures.	Yes
6c.	Documented procedure exists to prevent adverse events like wrong site, wrong patients and wrong procedure.	The hospital allots a unique UHID no. to each patient to prevent such adverse events.
6d.	Informed consent is taken by the personnel performing the procedure, where applicable.	A consent form is filled by the patient or the attendant and is signed.
6e.	Adherence to standards precautions and asepsis is adhered to during the conduct of the procedure.	Aseptic techniques are used during the procedure.
6f.	Patients are appropriately monitored during and after the procedure.	Yes, by peri-operative & post-operative record sheet.
6g.	Procedures are documented accurately in the patient record.	Yes
COP.7	**Documented policies and procedures define rational use of blood and blood products.**	
7a.	Documented policies and procedures are used to guide rational use of blood and blood products	SOPs for blood bank are present.
7b.	Documented procedure governs transfusion of blood and blood products.	Yes
7c.	The transfusion services are governed by the applicable laws and regulations	Yes
7d.	Informed consent is obtained for donation and	Yes

	transfusion of blood and blood products.	
7e.	Informed consent also includes patient and family education about donation	They are educated about all the aspects of transfusion of blood and blood products.
7f.	The organization defines the process for availability and transfusion of blood/blood components for use in emergency.	Organization has its own blood bank facility. SOPs are present.
7g.	Post-transfusion form is collected; reaction if any identified and is analyzed for preventive and corrective actions.	Yes, a post-transfusion form is filled, and if any adverse reaction is identified then it is documented.
7h.	Staff is trained to implement the policies.	Yes, training programmes are organized from time to time.
COP.8	**Documented procedures guide the care of patients in the Intensive care and high dependency units.**	
8a.	Documented policies and procedures are used to guide the care of patients in the intensive care and high dependency units.	Well documented guidelines and SOPs are present in ICU and HDU.
8b.	The organization has documented admission and discharge criteria for its intensive care and high dependency units	Yes
8c.	Staff is trained to apply these criteria	Periodic trainings are organized for nurses.
8d.	Adequate staff and equipment are available	Yes.
8e.	Defined procedures for situation of bed shortages are followed	A bed allotment process is available. Consent by MS is taken in emergency situations.
8f.	Infection control practices are documented and followed	Hospital has an Infection Control Committee and documented SOPs.
8g.	A quality assurance program is implemented	Yes, it is timely monitored and implemented.
COP.9	**Documented policies and procedure guide the care of vulnerable patients (elderly, physically and/or mentally-challenged and children).**	
9a.	Policies and procedures are documented and are in accordance with the prevailing laws and the national and international guidelines	Yes

9b.	Care is organized and delivered in accordance with the policies and procedures	Yes
9c.	The organization provides for a safe and secure environment for this vulnerable group	Yes
9d.	A documented procedure exists for obtaining informed consent from the appropriate legal representative.	Yes
9e.	Staff is trained to care for this vulnerable group	Yes. The staff is trained periodically.
COP.10	**Documented policies and procedures guide obstetric care.**	
10a.	There is a documented policy and procedure for obstetric services.	Yes, SOPs are present in Labor room.
10b.	The organization defines and displays whether high risk obstetric cases can be cared for or not	Yes. Displayed in emergency area.
10c.	Persons caring for high risk obstetric cases are competent	Yes
10d.	Documented procedures guide provision of ante-natal services.	Yes, there is an ante-natal card for every such patient.
10e.	Obstetric patient's assessment also includes maternal nutrition	Yes. Nutritional counseling is usually done by a Doctor.
10f.	Appropriate pre-natal, peri-natal and post-natal monitoring is performed and documented.	Yes, through a card.
10g.	The organization caring for high- risk obstetric cases has the facilities to take care of neonates of such cases	Yes, NICU Level lll is present.
COP.11	**Documented policy and procedure guide pediatric services.**	
11a.	There is a documented policy and procedure for pediatric services.	Yes.
11b.	The organization defines and displays the scope of its pediatric services.	Yes. Displayed in paediatric OPD.
11c.	The policy for care of neonatal patients is in consonance with the national/ international guideline.	WHO Guidelines are followed in the organization.

11d.	Those who care for children have age specific competency.	Yes.
11e.	Provisions are made for special care of children.	No, there is no playroom facility for special care of children.
11f	Patient assessment includes detailed nutritional, growth, psychosocial and immunization assessment.	Yes, this is done through a history sheet.
11g.	Documented Policies and procedures prevent child/ neonate abduction and abuse.	Yes, through CODE PINK.
11h.	The children's family members are educated about nutrition, immunization and safe parenting and this is documented in the medical record.	Yes. They are educated about the growth chart and immunization chart.
COP.12	**Documented procedures guide the care of patients undergoing moderate sedation.**	
12a.	Documented policies and procedures guide the administration of moderate sedation.	SOPs for sedation are present.
12b.	Informed consent for administration of moderate sedation is obtained.	Yes, taken by the doctor but not signed by the doctor in every file.
12c.	Competent and trained persons perform sedation.	Performed usually by a nurse.
12d.	The person administering and monitoring sedation is different from the person performing the procedure.	Yes.
12e.	Intra-procedure monitoring includes at a minimum the heart rate, cardiac rhythm, respiratory rate, blood pressure, oxygen saturation, and level of sedation.	All the parameters are monitored on a case to case basis.
12f.	Patients are monitored after sedation and the same documented.	Monitored and documented properly in every 2 hrs.
12g.	Criteria are used to determine appropriateness of discharge from the recovery area.	Yes.
12h.	Equipment and manpower are available to rescue patients from a deeper level of sedation than that intended.	Yes, emergency resuscitation equipments are available in the department for such conditions.
COP.13	**Documented policies and procedures guide the administration of anesthesia.**	

13a.	There is a documented policy and procedure for the administration of anesthesia.	Yes, proper SOP is present in the department and is followed.
13b.	Patients for anesthesia have a pre-anesthesia assessment by a qualified anesthesiologist.	Pre Anesthetic Check-up is done by an anesthetist.
13c.	The pre-anesthesia assessment results in formulation of an anesthesia plan which is documented.	Anesthesia plan is present in the record but not filled in every file.
13d.	An immediate pre-operative re-evaluation is documented.	A pre operative checklist is filled by the staff nurse.
13e.	Informed consent for administration of anesthesia is obtained by the anesthesiologist.	Yes, but not signed by the doctor in every file.
13f.	During anesthesia monitoring includes regular and periodic recording of temperature, heart rate, cardiac rhythm, respiratory rate, blood pressure, oxygen saturation and end tidal carbon dioxide.	Documented in anesthesia record but regular temperature recording was not filled in every file.
13g.	Patient's post-anesthesia status is monitored and documented.	Yes, post-operative condition is noted in the anesthesia record.
13h.	The anesthesiologist applies defined criteria to transfer the patient from the recovery area.	Yes, order was written with time and signed by the doctor.
13i.	The type of anesthesia and anesthetic medication used are documented in the patient record.	Yes
13j.	Procedure shall comply with infection control guidelines to prevent cross-infection between patients.	Yes. An allergy / alert column is present in the record.
13k.	Adverse anesthesia events are recorded and monitored.	Yes.
COP.14	**Documented policies and procedures guide the care of patients undergoing surgical procedures.**	
14a.	The policies and procedures are documented	A well documented SOP is present.
14b.	Surgical patients have a preoperative assessment and a provisional diagnosis documented prior to surgery	Pre-operative checklist is available and filled by the nurse.
14c.	An informed consent is obtained by a surgeon prior to the procedure.	Consent form is present in every record but not signed by the doctor in every file.
14d.	Documented policies and procedures exist to prevent adverse events like wrong site, wrong patient and wrong surgery.	Proper guidelines are present and regularly followed.

14e.	Persons qualified by law are permitted to perform the procedures that they are entitled to perform.	Yes.
14f.	A brief operative note is documented prior to transfer out of patient from recovery area.	Yes, a brief operative summary is written.
14g.	The operating surgeon documents the post-operative plan of care	Yes, a proper post-operative plan is documented and followed.
14h.	Patient, personnel and material flow conforms to infection control practices.	Yes, there is a separate room for sterile and unsterile materials.
14i.	Appropriate facilities and equipments/ appliances/ instrumentation are available in the operating theatre.	Yes, operation theatres are adequately equipped with advanced instruments, lighting facilities and sterilization facilities.
14j.	A quality assurance program is followed for the surgical services.	Yes, there is a proper documented quality assurance program.
14k.	The quality assurance program includes surveillance of the operation theatre environment.	Yes, surveillance activities include monitoring of humidity and temperature two times a day.
COP.15	**Documented policies and procedures guide the care of patients under restraints.**	
15a.	Documented policies and procedures guide the care of patients under restraints.	Yes, guidelines are present.
15b.	These include both physical and chemical restraint measures.	Yes. Physical restraint measures include boxer's bandage, cuffs etc. Chemical restraints include sedatives like Lorazepam.
15c.	These include documentation of reasons for restraints.	A physical restraint order form is filled & signed by the doctor mentioning the reason and type of restraint to be used.
15d.	These patients are more frequently monitored.	Monitored every 2 hrs & documented in the form with name, initials & ID no. of the attending nurse.
15e.	Staff receives training and periodic updating in control and restraint techniques.	Yes, training is provided periodically to the nursing and paramedical staff.
COP.16	**Documented policies and procedures guide appropriate pain management.**	

16a.	Documented policies and procedures guide the management of pain.	Proper guidelines are present.
16b.	All patients are screened for pain.	A pain rating scale is used in nursing admission assessment form which is rated from 0-10.
16c.	Patients with pain undergo detailed assessment and periodic re-assessment.	Yes.
16d.	The organization respects and supports management of pain for such patients.	Yes, the organization has adequate medical, surgical and anesthetic facilities.
16e.	Patient and family are educated on various pain management techniques, where appropriate.	Yes.
COP.17	**Documented policies and procedures guide appropriate rehabilitative services.**	
17a.	Documented policies and procedures guide the provision of rehabilitative services.	Yes.
17b.	These services are commensurate with the organizational requirements.	Yes.
17c.	Care is guided by functional assessment and periodic re-assessment which is done and documented by qualified individual(s).	Yes.
17d.	Care is provided adhering to infection control and safe practices.	Yes.
17e.	Rehabilitative services are provided by a multidisciplinary team.	Yes, the team has a treating doctor, a rehabilitation therapist, rehabilitation nurses and professional experts.
17f.	There is adequate space and equipment to perform these activities.	Yes.
COP.18	**Documented policies and procedures guide all research activities.**	

18a.	Documented policies and procedures guide all research activities in compliance with national and international guidelines.	Yes.
18b.	The organization has an ethics committee to oversee all research activities.	Yes.
18c.	The committee has the powers to discontinue a research trial when risks outweigh the potential benefits.	Yes.
18d.	Patient's informed consent is obtained before entering them in research protocols.	Yes.
18e.	Patients are informed of their right to withdraw from the research at any stage and also of the consequences (if any) of such withdrawal.	Yes.
18f.	Patients are assured that their refusal to participate or withdrawal from participation will not compromise their access to the organization's services.	Yes.
COP.19	**Documented policies and procedures guide nutritional therapy.**	
19a.	Documented policies and procedures guide nutritional assessment and reassessment.	Guidelines for nutritional assessment are present.
19b.	Patients receive food according to their clinical needs.	Yes, patients are provided with diabetic diet, high-protein diet, and total parenteral nutrition according to their requirement.
19c.	There is a written order for the diet.	Yes, a proper order is written.
19d.	Nutritional therapy is planned and provided in a collaborative manner.	Yes.

19e.	When families provide food, they are educated about the patient's diet limitations.	Yes.
19f.	Food is prepared, handled, stored and distributed in a safe manner.	Yes, separate dedicated food preparation areas are present; adequate food service trolleys are present in food and beverage department.
COP.20	**Documented policies and procedures guide the end of life care.**	
20a.	Documented policies and procedures guide the end of life care.	Yes, proper guidelines are present.
20b.	These policies and procedures are in consonance with the legal requirements.	Yes.

MANAGEMENT OF MEDICATION

S.No.	OBJECTIVE ELEMENTS	REMARKS
MOM.1	**Documented policies and procedures guide the organisation for pharmacy services and usage of medication.**	
1a.	There is a documented policy and procedure for pharmacy services and medication usage.	Yes, well documented SOPs are present for the same.
1b.	These comply with the applicable laws and regulations.	Yes, relevant legislations include various acts like Drugs and Cosmetic Act.
1c.	A multidisciplinary committee guides the formulation and implementation of these policies and procedures	A Pharmacy Therapeutic Committee is present. The committee should meet every 3 months, but no meeting was held in the last 8 months.
1d.	There is a procedure to obtain medication when the pharmacy is closed.	Pharmacy is open 24 hrs.
MOM.2	**There is a hospital formulary.**	
2a.	A list of medication appropriate for the patients and organization's resources is developed.	A medication list is present which is revised from time to time.
2b.	The list is developed collaboratively by the multidisciplinary committee.	Yes, updating of the list is in process.
2c.	The formulary is available for clinicians to refer and adhere to.	Yes, it is provided on the Track-Care software and is provided to the doctors also.
2d.	There is a defined process for acquisition of these medications	This is done by the purchase department by a defined process.

2e.	There is a process to obtain medications not listed in the formulary	Yes, by a Local Purchase form.
MOM.3	**Documented policies and procedures exist for storage of medication.**	
3a.	Documented policies and procedures exist for storage of medication	Yes
3b.	Medications are stored in a clean, safe and secure environment; and incorporating manufacture's recommendation(s).	Medications are not stored in a proper clean and safe environment.
3c.	Sound inventory control practices guide storage of the medications.	Last ABC analysis was done in December.
3d.	Sound-Alike and Look-Alike medications are identified and stored separately.	Marking is done and a separate list is available.
3e.	The list of emergency medication is defined and is stored in a uniform manner.	No separate area is present for emergency medications, but crash carts are available in triage and on floors.
3f.	Emergency medications are available all the time.	Available all the time in pharmacy.
3g.	Emergency medications are replenished in a timely manner when used.	Yes, replenished timely before stock-out.
MOM.4	**Documented policies and procedures guide the safe and rational prescription of medication.**	

4a.	Documented policies and procedures exist for prescription of medications.	Yes
4b.	These incorporate inclusion of good practices/guidelines for rational prescription of medications.	Clinicians are trained and sensitized about the rational prescription of medications.
4c.	The organization determines the minimum requirements of a prescription.	Yes, the prescriptions mention name of the patient, unique hospital id number, name of the drug, and route and frequency of administration of medications. Name and signature of the doctor was not present in every file.
4d.	Known drug allergies are ascertained before prescribing.	Yes; in medical records and medication management sheet.
4e.	The organization determines who can write orders.	Orders can be written only by a doctor who should at least be a MBBS.
4f.	Orders are written in a uniform location in the medical records.	Yes, orders are written in the Medication Administration Record. Daily orders are written in the Daily Progress Sheet.
4g.	Medication orders are clear, legible, dated, named and signed.	Orders are clear, legible, dated, timed but every order was not signed by the treating doctor.
4h.	Medication orders contain the name of the medicine, route of administration, dose to be administered and frequency/time of administration.	Yes

4i.	Documented Policy and procedure on verbal orders is implemented.	Yes, a doctor can give verbal orders but he has to sign on written orders within 24 hrs.
4j.	The organization defines a list of high risk medication(s).	Yes, a separate list of high risk medicines is available.
4k.	Audit of medication orders/prescription is carried out to check for safe and rational prescription of medications.	Monthly Prescription Audit system has been implemented by the organization in which every month randomly selected 100 files are audited.
4l.	Corrective and preventive action(s) is taken based on the analysis, where appropriate.	Yes
MOM.5	**Documented Policies and procedures guide the safe dispensing of medications.**	
5a.	Documented policies and procedures guide the safe dispensing of medications.	SOPs are available for the safe dispensing of medications.
5b.	The procedure addresses medication recall.	Yes
5c.	Expiry dates are checked prior to dispensing.	Yes
5d.	There is a procedure for near expiry medications.	Near expiry drugs are identified 3 months before the date of expiry and dispensed.
5e.	Labeling requirements are documented and implemented by the organization.	Yes
5f.	High risk medication orders are verified prior to dispensing.	Such medications are given on written orders only, but not cross checked by the staff.

S.No.	OBJECTIVE ELEMENTS	REMARKS
MOM.6	**There are documented policies and procedures for medication management.**	
6a.	Medications are administered by those who are permitted by law to do so	Nursing staff is responsible for the administration of drugs to the patients.
6b.	Prepared medication is labeled prior to preparation of a second drug.	Yes
6c.	Patient is identified prior to administration.	Patient is identified by UHID No. before the administration of drugs.
6d.	Medication is verified from the order prior to administration.	Yes
6e.	Dosage is verified from the order prior to administration.	Yes
6f.	Route is verified from the order prior to administration.	Yes
6g.	Timing is verified from the order prior to administration.	Yes
6h.	Medication administration is documented	Yes, through Medication Administration Record, which includes name of the medication, dosage and route of administration, time, and signature of the person who administers the medication
6i.	Documented Policies and procedures govern patient's self administration of medications.	Organization does not permit the self administration of the drug by the patient.
6j.	Documented Policies and procedures govern patient's medications brought from outside the organization.	Yes

MOM.7	**Patients are monitored after medication administration.**	
7a.	Documented policies and procedure guide the monitoring of patients after medication administration.	Yes, to identify near-misses, medication errors and adverse drug events.
7b.	The organization defines those situations where close monitoring is required.	Yes, in case of high-risk medications, concentrated electrolytes and chemotherapeutic drugs.
7c.	Monitoring is done in a collaborative manner.	Yes
7d.	Medications are changed where appropriate based on monitoring.	Yes
MOM.8	**Near misses, medication error and adverse drug events are reported and analysed.**	
8a.	Documented procedure exists to capture near misses, medication error and adverse drug events.	Yes
8b.	Near misses, medication error and adverse drug events are defined.	Yes
8c.	These are reported within a specified time frame.	Yes, these are reported at the time they are identified.
8d.	They are collected and analysed.	Yes, by a multi-disciplinary committee.
8e.	Corrective and/or preventive action(s) are taken based on the analysis where appropriate.	Yes, these events are analyzed by the committee and corrective actions and decisions are taken to prevent these events in future.

MOM.9	**Policies and procedures guide the use of narcotic drugs and psychotropic substances**	
9a.	Documented policies and procedures guide the use of narcotic drugs and psychotropic substances which are in consonance with local and national regulations.	Yes, there is a well documented SOP to guide the use of narcotic and psychotropic substances.
9b.	These drugs are stored in a secured manner.	These are stored in double lock and key.
9c.	A proper record is kept of the usage, administration and disposal of these drugs	Yes, but no disposal of such drugs has been done in the last eight months.
9d.	These drugs are handled by appropriate personnel in accordance with the documented procedure.	Yes, handled by a pharmacist.
MOM.10	**Documented Policies and procedures guide the usage of chemotherapeutic agents.**	
10a.	Documented policies and procedures guide the usage of chemotherapeutic agents.	Yes
10b.	Chemotherapy is prescribed by those who have the knowledge to monitor and treat the adverse effect of chemotherapy.	Yes. It is prescribed by a medical oncologist.
10c.	Chemotherapy is prepared in a proper and safe manner and administered by qualified personnel.	Yes
10d.	Chemotherapy drugs are disposed off in accordance with legal requirements	No disposal of such drugs has been done in the last 8 months.

MOM.11	**Documented Policies and procedures govern usage of radioactive drugs.**	
11a.	Documented Policies and procedures govern usage of radioactive drugs.	Yes
11b.	These policies and procedures are in consonance with laws and regulations.	Policies are in consonance with laws and regulations but there is not much use of radioactive drugs in the hospital.
11c.	The policies and procedures include the safe storage, preparation, handling, distribution and disposal of radioactive and investigational drugs.	Yes
11d.	Staff, patients and visitors are educated on safety precautions.	Yes, through regular training programmes.
MOM.12	**Documented Policies and procedures guide the use of implantable prosthesis and medical devices.**	
12a.	Usage of implantable prosthesis and medical devices is guided by scientific criteria for each individual item and national/ international recognized guidelines/ approvals for such specific item(s).	Proper guidelines are present.
12b.	Documented policies and procedures govern procurement, storage/stocking, issuance and usage of implantable prosthesis and medical devices incorporating manufacture's recommendation(s).	Yes
12c.	Patient and his/her family are counseled for the usage of implantable prosthesis and medical device including precautions, if any.	Yes, by a doctor.

12d.	The batch and serial number of the implantable prosthesis are recorded in the patient's medical record and the master logbook.	Yes, a copy of the label of the implantable prosthesis is kept in the patient's medical record for future reference.
MOM.13	**Documented Policies and procedures guide the use of medical supplies and consumables.**	
13a.	There is a defined process for acquisition of medical supplies and consumables.	Yes
13b.	Medical supplies and consumables are used in a safe manner, where appropriate.	Yes
13c.	Medical supplies and consumables are stored in a clean, safe and secure environment; and incorporating manufacturer's recommendation(s).	These are not stored separately but are stored in the common store.
13d.	Sound inventory control practices guide storage of medical supplies and consumables.	The hospital follows ABC analysis for inventory control.

RECOMMENDATION

- In regular check-up of ambulances, the defects should be discussed with the reporting officer and in case there is no action taken on the complaint then it should be discussed with the Medical Superintendent.
- Nurses should be assigned in proper ratio.
- Maternal nutrition assessment should always be done by a dietician.
- A separate room in the pediatrics department can be used as a playroom by providing some soft toys and plastic balls.
- The temperature of the patient should always be noted down immediately in the patient file.
- The Pharmacy Therapeutic Committee should meet at least once in three months so the issues regarding the pharmacy can be addressed in time.
- Doctors should be instructed to write the prescription in capital letters only.
- Instead of signing after every drug there should be a format like all the drugs signed only once at the time of order, so it will save time and effort.
- Pharmacy in-charge should be bound to periodically analyze the inventory so that the issues regarding pilferage, out-of-stock drugs can be resolved in time.

Project- Calculation of Aristotle Score

Background:

Aristotle score is emerging as a reliable tool to measure surgical performance. We estimated the comprehensive Aristotle score for the Norwood procedure, correlated it with survival, and considered its impact on surgical management of hypoplastic left heart syndrome.

Methods:

Comprehensive Aristotle score was retrospectively calculated for 39 consecutive Norwood procedures performed from 2001 to 2004. Survival was estimated by the Kaplan-Meier method.

Introduction:

The newly introduced complexity Aristotle score is the sum of potentials for early mortality, morbidity (intensive care unit length of stay), and anticipated surgical technique difficulty (each, 0.5 to 5 points). Although still under validation, it is emerging as a useful tool to measure surgical performance, and as such, can be applied to quality improvement efforts. The comprehensive Aristotle score adds to the basic score (procedure complexity: 1.5 to 15 points) patient-adjusted complexity score (0 to 10 points). This comprises procedure-dependent factors (0 to 5 points) and procedure-independent factors (general, clinical, extra cardiac, surgical; 0 to 5 points). With a basic score of 14.5, the Norwood procedure is actually recognized as the most complex surgical intervention with the highest risk in congenital heart disease, except for hypo plastic left heart syndrome (HLHS) biventricular repair (15 points).

Patients:

All 40 patients who underwent procedure from January 2001 to December 2004 were included

Data Collection and Statistical Analysis:

Preoperative and perioperative data to estimate comprehensive Aristotle score were collected retrospectively. The "Aristotle score final nov 30 2004" version (Aristotle Institute, Denver, Colorado; available at: http://www.aristotleinstitute.org/) was used.

Aristotle Score:

- Rates the projected complexity of the surgical procedure performed.
- Used to assess quality control in congenital heart surgery because of the diversity of the procedure

The complexity score is based:

- on three subjective determinations:-

1. Potential for Mortality
2. Potential for Morbidity
3. Anticipated surgical difficulty

Calculation of complexity :

- Calculated in two phases

1. First, the basic complexity of the procedure involved is scored.
2. Second, specific value is added.

Step I :

- The basic complexity of the procedure involved is scored.
- Score ranges from 0.5-15
- Rates only the simplest form of the procedure
- Does not take into consideration of projected complexity factors.

Score	Mortality	Morbidity	Difficulty
1 pt	**<1%**	**ICU 0-24H**	**elementary**
2 pt	**1-5%**	**ICU1D-3D**	**simple**
3 pt	**5-10%**	**ICU 4D-7D**	**average**
4 pt	**10-20%**	**ICU 1W-2W**	**important**
5 pt	**> 20%**	**ICU > 2W**	**major**

Basic procedure score (max.15 points) :

N	Procedures	Total (Basic Score)	Mortality	Morbidity	Difficulty
1	PFO (Primary closure)	**3.0**	1.0	1.0	1.0
2	ASD repair (Primary closure)	**3.0**	1.0	1.0	1.0
3	ASD repair, Patch	**3.0**	1.0	1.0	1.0
4	ASD (Single atrium), Septation	**3.8**	1.0	1.0	1.8
5	ASD creation	**4.0**	2.0	2.0	1.0

Step II

- Specific value is added, based on a precise analysis of the associated pathology along with any co-morbid condition potentially present.

Procedure dependent factor

- Procedure dependent factor include anatomical variation, associated procedure and patient age and can add a maximum of 5 points to the basic score.

Procedure independent factor

- Procedure independent factor include patient characteristics which are more general, but have the potential to significantly affect the outcome.
- Procedure independent factor can add upto additional 5 points.

Comprehensive score

- Comprehensive Score= Basic Score

  +

  Patient adjusted dependent factor

  +

  Patient adjusted independent factor

Results:

- Score calculated for 40 patients retrospectively.
- Score ranges from 3-13.5
- In total 40 cases only 1 death occur.
- Some very difficult surgeries were performed during the study.
- The first surgery of Rajasthan in which the pacemaker was inserted into a 3 month baby.
- After the joining Dr. Sunil K. Kaushal has done more than 70 surgeries and 3 deaths occur which shows that the surgeries performed are highly efficient.

Conclusion:

- Efforts should be devoted to improve survival of high-risk patients with a score of 20 or more.
- Routine preoperative estimation of Aristotle score will emphasize the importance of additional management endeavors to improve the outcome of HLHS neonates.

Project: Prescription audit

Objective of the Project:

To perform audit of hundred randomly selected prescriptions every month according to the NABH guidelines.

Introduction:

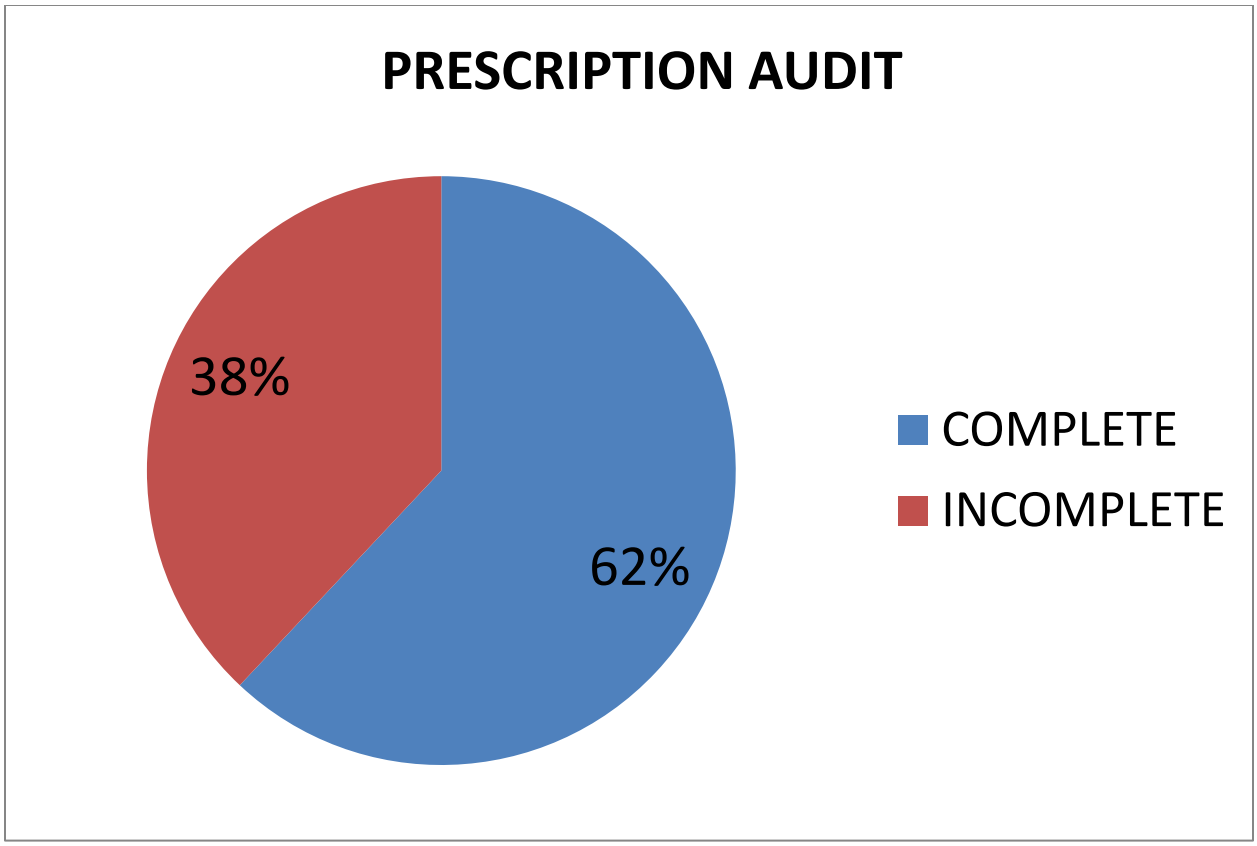
Medication prescription is a vital tool in patient care. It is imperative that it is carefully written and all data are properly filled. Hence, with a view to check whether the prescriptions are being made in the correct manner and according to the NABH guidelines, hundred prescriptions were selected randomly for the months of April and May each. The following data was taken from each patient file-

- Name of the patient
- IPID/UHID number
- Bed number and floor
- Age
- Sex
- Date of Admission
- Date of discharge
- Date of prescription
- Consultant name
- Diagnosis
- Is the name of the drug written legibly?
- Is the strength written or not?
- Is the dose of the prescribed medication written?
- Is the dosage form mentioned?
- Is the frequency of the drug prescribed?
- If the route of administration mentioned?
- Are any abbreviations used?
- Are all the drugs administered on time?
- Are any antibiotics prescribed or not; if yes then name them?
- Is the patient suffering from any adverse drug reaction?
- Total number of drugs prescribed?

Analysis and Results-

Out of 100 prescriptions,

- 62 were found to be filled completely in all respects. Rest 38 prescriptions were found incomplete in one or the other aspect.
- Drugs were written in a legible manner in 97 prescriptions.
- Strength of all the prescribed medications were written in 79 prescriptions.
- Dose of all the prescribed medications were written in 81 prescriptions.
- Dosage form of the prescribed medications were written in 98 prescriptions.
- The frequency of the drugs to be administered was written in 95 prescriptions.
- Route of administration of the medications was mentioned in 81 prescriptions.
- Abbreviations were used in a total of 4 prescriptions.
- All the prescribed medications were administered on time.
- Average number of antibiotics prescribed per patient was 1.26
- A total of 2 patients were found to be suffering from adverse drug reaction (ADR).
- Average number of drugs prescribed per patient was 9.36


PRESCRIPTION AUDIT
38%
62%
COMPLETE
INCOMPLETE

E.C.H.S. Inspection of a Private Hospital in Sikar, Rajasthan

Introduction

National Accreditation Board for Hospitals & Healthcare Providers (QCI) assesses all Hospitals empanelled with Ex Service Men Contributory Health Scheme (ECHS) under Ministry of Defense (GOI).

Ex-Servicemen Contributory Health Scheme (ECHS) was launched with effect from 01st April 2003. It has been established to provide quality medicare to Armed Forces Veterans (AFV) and their dependents through a network of ECHS Polyclinics, service medical facilities and civil empanelled / government hospitals spread across the country. The Scheme has been structured to ensure cashless transactions, as far as possible, for the patients. Treatment provided under ECHS will be as per the allopathic medical system, covering all diseases.

Ex Service Men Contributory Health Scheme (ECHS) in order to ensure quality Healthcare services to all its beneficiaries has gone into MoU with Quality Council of India (QCI) for assessment of Hospitals on behalf of ECHS for empanelment.

ECHS aspires to provide to all its beneficiaries high quality medical care services and hence has prescribed that the super-speciality hospital empanelled under ECHS would have to obtain NABH Accreditation within 18 months. And for other General Purpose Hospitals, Specialty Eye Centres, Dental Clinics, Physiotherapy Centres, Rehabilitative Centres, Diagnostic Centres and Hospices, NABH assessors would assess the hospitals /centre on behalf of ECHS. NABH will send their recommendation to ECHS for empanelment of such centres / hospitals.

ECHS will select the Multi Speciality (General Purpose Hospital), Super Speciality Hospitals, Dental Care Centers, Super Speciality Eye Care Hospitals and Diagnostic Centres which need to be assessed as per requirements specified in the application format for continuous empanelment under ECHS.

QCI based on the application format specified for empanelment under ECHS, shall evaluate the applicant Hospital/Centre.

We got a chance to go on an inspection of a private hospital in Sikar for E.C.H.S. (Ex-Service Men Contributory Health Scheme) Accreditation with our mentor Dr. Shrikant Swami (Medical Superintendent, Fortis Escorts Hospital, Jaipur). We learnt about how an inspection is conducted, and about the requirements and processes to be followed for ECHS Accreditation. It was a good learning experience, and it has enhanced our overall knowledge and understanding about the accreditation process immensely.

Specific points that were noted during the inspection were-

- Total bed strength
- Hospital land area
- Floor-wise area in square feet
- Total number of paramedical staff
- Equipments present like Defibrillator, Mode of oxygen supply, Ventilators, Infusion Pump, Monitors, Suction, and Oxygen cylinders etc.
- Presence of air-conditioners in ICUs
- Inspection of Blood Bank facility
- Bio-Medical Waste Management
- Diagnostic facilities like Ultra-Sonography, TMT, Digital X-Ray, Portable X-Ray, Pathology and Microbiology
- Total number of OT cases in last 4 months
- Total number of minor Surgery cases in last 4 months
- Total number of laboratory investigations in last 4 months

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