# FATHER MULLER MEDICAL COLLEGE

## HOSPITAL



FATHER MULLER CHARITABLE INSTITUTION

MANGALORE-575 002

KARNATAKA

## **IT DEPARTMENT MANUAL**

## NABH

FMMCH/NABH/ IT/ 22

## NAME: IT DEPARTMENT MANUAL

Verified By: Quality Manager Ms.Roopa Priyanka Dsouza Authorized By: Chief of Medical Services Dr. B. Sanjeev Rai

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## AMENDMENT RECORD

SI. No	Page No	Section/C lause/ Para/Line (as applicabl e)	Date of Amendmen t	Amendment Made	Reasons of Amendment	Signature of Quality Manager	Signature of Chief of Medical Services
1	8	Table, 1 <sup>st</sup> para	14/11/14	Staff name included	Appointment of new staff	Quijeta	Atr.
2	10	2 <sup>nd</sup> para	14/11/14	New developments added	HIS software introduced	Dijeta	Ale:
3	13	List	14/11/14	List updated	Addition of new equipments	Dijeta	Ale:
4	13	2 <sup>nd</sup> para	14/11/14	Data backup procedure added	Additions based on document review	Dijeta	Atr:
5	7	1 <sup>st</sup> table	25/08/16	The page numbers of the contents changed	Due to alignment changes in the document.	Dijeta	Ar:
6	8	Point 3	25/08/16	Technicians number increased.	Changes in staffing pattern incorporated.	Dijeta	Ale:

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7	9	2 <sup>nd</sup> para	25/08/16	Experience of staff changed	Changes in tenure included	Dijeta	Ash .:
8	10	1 <sup>st</sup> para	25/08/16	Responsibilitie s of IT manager changed	Changes in job responsibilities with the increasing demand included.	Difetter	Alr:
9	10	3 <sup>rd</sup> para	25/08/16	Quality objective modified	Needed based on document review	Difetto	Ale
10	16	2 <sup>nd</sup> para	25/08/16	Call register included in the list	Changes due to new NABH 4 <sup>th</sup> edition standards included.	Dijeta	An.
11	14	Section 10	01/01/17	Maintenance Plan for Information Technology and Net Work	Addition based on document review	Dijeta	Alle
12	10	Table -1	01/01/18	Competency matrix – Staffs name deleted and added	Appointment of new staff	Pung	Ale
13	12	Section 8	01/01/18	List of software's in the department is modified.	To match with current practice	Pung	An

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14	14	3 <sup>rd</sup> Para	01/01/18	Data backup and recovery- modified	To match with current practice	Pmg	An.
15	15	Section 10	01/01/18	Complaint handling added	To match with current practice	Phangs	Atr.
16	16	Section 11	01/01/18	Disposal Policy Added	To match with current practice	Pung	An.

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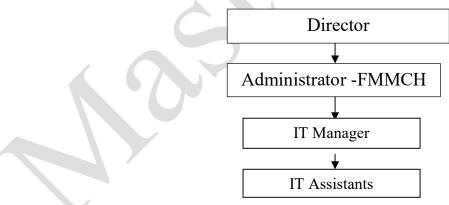
#### 1. INTRODUCTION

- Established in the year 1993
- In charge of the dept. Mr.Jagadeesh K, IT Manager.
- Floor Plan –located in the 2<sup>nd</sup> floor of the OPD block opposite to the Directors office.

#### 2. <u>SCOPE</u>

- The dept. is creative, powerful,
- supporting team environment for employees, students & clinical staff
- providing quality
- cost effective technology solutions & serving with reduced turnaround time
- Increasing all productivity & efficiency of health care.

#### 3. HEIRARCHY:



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#### **<u>4. COMPETENCY MATRIX</u>**

Sl. No.	Name	Designation	Qualification	Experience
1	Jagadeesh K	IT Manager	Bsc, PG Diploma, MA	20 Years
3	Rajesh D'Souza	IT Asst.	PUC and Diploma	3 Years
4.	Chethan Kumar	IT Asst.	PUC and Diploma	2 Years
5.	Amith Manohar Lobo	IT Asst.	PUC and Diploma	2 Years
6	Royal D'Silva	Trainee	PUC	-

## 5. <u>STAFFING PATTERN</u>

#### Total Staff Strength – 5

- 1. IT Manager Mr. Jagadeesh K, Post Graduate (23 yrs. of experience)
- 2. Hardware Technician Mr. Rajesh, Diploma holder
- 3. Hardware Technician Mr. Chethan Kumar, Diploma holder
- 4. Hardware Technician Mr. Amith Lobo, Diploma holder
- 5. Trainee- Mr. Royal D'silva, PUC

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#### 6. DUTIES & RESPONSIBILITES OF EACH STAFF

#### IT Manager:

- $\checkmark\,$  Responsible for the smooth functioning of the IT Department.
- He is also responsible for the Planning for computerization/ Server Administration/ Database Management/ Network Administration/ Wireless Connectivity / System Integration/ Internet management / Designing
- $\checkmark$  Development of the software with the team etc.

#### Hardware Technicians:

- Responsible for the trouble shooting of the desktops/ Networking/ Ups/ LCD Projectors / Installation of the Software, etc.
- ✓ Reporting to the IT Manager.

### 7. QUALITY OBJECTIVE OF THE DEPARTMENT

- The department caters to the needs of the department with a dedicated team of IT technicians serves by studying the area
- System study, Planning, Designing, Development and implementation of the software
- Managing the campus network
- Database Administration
- To Impart state of the art technology in IT
- Digitization of all the departments

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#### 8. <u>LIST OF SOFTWARES IN THE DEPARTMENTS</u>

#### <u>Hospital Information System</u>

The HIS is developed in Foxpro 2.6 and was being used till 2015. Few modules like birth registers, employee folders/ ICD Coding , wound Certificates etc still is in this old HIS software. At present this is being used to access past history of the patients. This is .working on windows 2008 server Platform and the Clients with Win 7 / XP etc.

#### New Developments

The HIS is out sourced from a Coimbatore based company AOSTA. Which is developed in dot net as front end and sql database as DB and is working on windows 2012 server Platform and the Clients with Win 7 / 8 etc.

#### • Inventory Management System

Few modules like purchase orders and bill tracking are maintained in this system. This Consists of Purchase / issues/ Indents Modules. All the entries are based on the authentication. Reports like Purchase registers / Department wise issue Registers/Purchase Orders/ Reorder level/ Stock registers can be taken for the required period. This also being used for the past data.

#### <u>Radiology Information System</u>

Registration of the patient and entry of the reports, Statistical reports can be taken from the system. This is being used only for past data access.

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#### <u>Discharge Summary Module</u>

This module is mainly for the storing and printing of discharge details like diagnosis/ Advice/ Investigation reports etc. Once they print the discharge summary, then it will be locked. It cannot be edited without the authorization. This is also being used for the past history of the patients.

#### Health Card Management System

This is for capturing the health card data and printing of heath cards. Used for past history.

#### <u>Health checkup reporting system</u>

This is the formats used for the health check up reports. This is being used for past history

#### Lab Information System

LIS is developed in-house for the laboratory information system. All the report s will be entered with the proper user Id. Some of the biomedical equipment is interfaced with the computer. So the results will be directly imported from the machine to the computer. Once the report is authorized by the concerned doctor then the same cannot be edited by the technician. The reports are as per the NABL format. All the statistics are also can be taken from the computer. This is also being used for past history / reports.

#### Cardiology / ECHO Reporting System:

The Cardiology reporting system software is installed in the ECHO rooms. All the reports pertaining to ECHO and Cardiology are taken in this software

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**Note:** All these modules are accessed from our Hospital Server which is located in the It Department. The server is protected with Quick heal antivirus. All the external drivers are blocked to safe guard the data. Daily backups are taken in three desktops on alternate days. Regular back is taken on the second server installed in the It department. Data back is also taken in the external hard disk regularly. Daily backup is also taken in the different location like Medical Stores and Medical Records department also.

## 9. DATA BACK UP AND RECOVERY

1. Live Data stored in the IBM blade centre with RAID (Redundant Array of Independent

Disks) which provides increased storage functions and reliability through redundancy.

2. Scheduled backup: By taking scheduled backup every day, data will be copied to the back up using a script.

3. Disaster Recovery server is installed at the central library. Every day live data will copied to that server.

4. Weekly Backup: Every end of the week data will be copied on to external Hard disk and will be kept in the administrator's office.

5. Internet access and usage of external storage devices are blocked to secure Important, confidential or sensitive information.

6. Sophos Anti-virus being used for data protection.

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## 10. <u>MAINTENANCE PLAN FOR INFORMATION TECHNOLOGY AND NET</u> <u>WORK</u>

Information Technology Department will perform its regular monthly server maintenance program on the Last **Thursday** of each month starting at 7:30 PM. The monthly maintenance program is a preventive measure that is essential to providing stable and secure systems to the campus.

- Our servers are under the Annual Maintenance scheme. They regularly check the servers every month.
- Regarding the desktops and other accessories, our technical staff visits to the departments / wards every month and checks the hardware's and accessories. The repair / replacements will be done when it is necessary. If any major breakdown of the system, immediately stand by ewill be provided.
- The network will be checked every month. The cables will be replaced where ever it is required.
- Updating antivirus/ firewall will be done on regular intervals.
- All the items under IT department are checked for the performance as per the schedule.
- From the user end if there are any complaints pertaining to IT, it has to be raised on call to IT Department.

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#### 10. CONDEMNATION AND DISPOSAL:

#### **Reasons for disposal of equipment**

- **Beyond economical repair** Where equipment comes in and the cost of repairing it is considered too high after looking at the current value (taking depreciation into account), and the age of the equipment.
- Technically obsolete Parts and service support are no longer available.
- Equipment that has been damaged by contamination.

#### **Reasons for disposal in stores**

- Surplus stores
- Obsolete stores
- Unserviceable stores
- Scrap
- Empties

#### Condemnation and disposal Procedure:

- If any **equipments and electrical items** of IT department fall under the above category of disposal, respective Managers / Incharges should inspect for its status, history sheet, performance record, cost of repair, and purchased cost.
- For all the item proposed for disposal **above 7 lakh** respective Managers / Incharges should study the total cost involved in repair, for the item **below 7 lakh** list of the items to be condemned should be prepared.
- After the inspection, incharges should write official report to condemnation and disposal committee coordinator listing out all the items to be condemned by stating the reason for condemnation and disposal.

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- All items to be condemned will be discussed in the condemnation and disposal committee and decision on disposal will be taken by the committee members.
- Once the request for condemnation is approved by the committee the item is brought back to IT Department following steps are carried out.
- All the list of item condemned should be maintained by the respective Managers / Incharges

#### The item can be disposed in following ways:

- The equipment undergoes a process called cannibalization were as far as possible the spare parts are used up
- On receiving intimation from General Stores that e-waste disposal is going to take place in the institution, a list of all the equipments to be disposed is made.
- The equipments are then sent to general stores from where it is given out for disposal to the vendors authorized by the Pollution Control Board to buy e- waste.
- Sell to authorized agencies, scrap dealers, etc

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#### **<u>11. TRAINING REQUIRED</u>**

- Once a fresher joins the IT dept., he is given orientation on the whole institute by other IT staffs.
- They are provided with technical assistance until they are used to the software system installed in FMMCI.
- Usually training period will be for 6 months.
- Later probation period for a year.
- After completing 1 and ½ yrs., employee will be designated as permanent staff.

### **<u>12. LIST OF REGISTERS MAINTAINED IN THE DEPARTMENT:</u>**

- Soft copies of the hardware installations with their warranty details are maintained. Soft copy of call register is also maintained in the computer.
- A long book is maintained for the item movement register
- A call register is also maintained in the department to record all the calls.

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### **13. LIST OF EQUIPMENTS IN THE DEPARTMENT:**

#### There are:

- ✓ 4 –Rack Servers
- ✓ IBM Blade centre
- ✓ 4 -desktops
- ✓ 3- UPS
- ✓ 2 -AC
- ✓ Desktops 600
- ✓ Printers 250
- ✓ Desktop UPS 300
- ✓ Projectors -100
- ✓ Data Switches/ UTM etc

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