Managing the Denial Rate and Turnaround Time of Mediclaims at GMC Hospital, Ajman, UAE

Internship Training
at
GMC Hospital & Research Centre, Ajman, UAE

By
Arjun Kubsad

Under the guidance of
Dr. Neetu Purohit

Post Graduate Diploma in Hospital & Health Management
2012–14

Institute of Health Management Research
Jaipur
2014

INSTITUTE OF HEALTH MANAGEMENT RESEARCH
1, Prabhu Dayal Marg
Sanganer Airport, JAIPUR - 302 029, INDIA
Tel. : 3924700, 2791431-32
Fax : 91-141-3924738
E-mail : iihmr@iihmr.org
URL : http://www.iihmr.org
Gram : HEALTHINST

TO WHOMSOEVER MAY CONCERN

This is to certify that Dr. Arjun Kubsad student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from Institute of Health Management and Research, Jaipur has undergone internship training at GMC Hospital Ajman from 1st March 2014 to 20th May 2014.

The candidate has successfully carried out the study designated to his during internship training and his approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirement.

I wish him all the success in all his future endeavors.

Dr. Ashok Kaushik
Dean, Academics and Student Affairs
IIHMR, Jaipur

Dr. Neetu Purohit
Associate Professor
IIHMR, Jaipur

مستشفى جي إم سي
GMC HOSPITAL
"Healing through knowledge and wisdom"

ثومبي
THUMBAY

May 21, 2014

To Whom It May Concern

This is to certify that **Dr. Arjun Kubsad** holder of Indian Passport Number J9328758 was working in our institution as Management Trainee from 1st March 2014 till 20th May 2014, as a part of dissertation of his P.G.D.H.M program. He has completed the assigned project.

We wish him all the best.

For **GMC Hospital and Research Centre, Ajman**

GMC HOSPITAL & RESEARCH CENTRE
GMCH

THUMBAY MOIDEEN
President

P. O. Box: 4184, Ajman, United Arab Emirates
Tel.: +971 6 7463333 • Fax: +971 6 7464444
Email: gmchrc@emirates.net.ae
Web: www.gmchospital.com, www.thumbay.com

INSTITUTE OF HEALTH MANAGEMENT RESEARCH, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "Managing the denial rates and turnaround time of mediclaims at GMC Hospital, Ajman, U.A.E." and submitted by Dr. Arjun Kubsad Enrolment No. IIHMR/PGDHM/2012-14/17-1297 under the supervision of Dr. Neetu Purohit for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from 1st March 2014 to 20th May, 2014 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Signature:

Date: 26 May, 2014

ABSTRACT

Title: Managing the denial rate and turnaround time of mediclaims at GMC Hospital Ajman, UAE

Name of author: Dr Arjun Kubsad

Introduction: Standards of health care are considered to be generally high in the United Arab Emirates, Compulsory health insurance is emerging in UAE. Health insurance is insurance against the risk of incurring medical expenses among individuals. By estimating the overall risk of health care and health system expenses among targeted group, an insurer can develop a routine finance structure

Health Insurance works based on mainly 2 types of policies

- Group policies
- Individual policies

There are 4 major players in Health Insurance system

- Payer
- Provider
- Insured
- TPA

A health care provider is an individual or an institution that provides preventive, curative, promotional or rehabilitative care services, hospital has a dedicated department to offer quality and affordable specialized superior medical care to the members of most of the insurance companies through Insurance department.

Many times patient have to pay out of pocket in spite of having health insurance coverage due to the rigid process followed by the healthcare provider to take approval from insurer. When the claim process is rigid, many times it ends up with increased turnaround time and high denial rate leading to decreased efficiency of provider. Hence planning the process is very necessary in order to fight the above said challenges.

Aim of the study:

- To reduce turnaround time
- To decrease rejection rate
- To smoothen the approval process
- To increase efficiency

Objective:

- To identify the reasons behind high turnaround time and rejection of mediclaim in GMC Hospital
- To identify the policy level ambiguities leading to high mediclaim rejection
- To suggest measures to reduce turnaround time and rejection rate of mediclaims in GMC Hospital

Methods: For the purpose of study, primary data was collected through Daily approval request tracker to track the number of approval requests received, their average turnaround time and rejection rate. Secondary data was collected through Receipt settlement summary report from finance department for data of latest 5 months rejection rate and through reconciliation platform for the reasons of rejections. A detailed Value Stream Mapping was prepared to mark all the value added and non value added process, value added and non value added time was noted.

Results and recommendations: After analyzing turnaround time, rejection rate, reasons of rejection and common causes for high turnaround time and rejection rate recommendations were made for Process improvement through Upgrading HMIS, Manpower planning and Insurance department redesigning. Result of which, the turnaround time can be reduced to $1/4^{th}$ and the rejection rate can be reduced to 1/2.

Conclusion: Turnaround time and the rejection rat are the important measures for insurance department in a hospital. As per IRDA any hospital having rejection rate less than 2% is considered to have good practice of claim process management. Hence hospitals having high turnaround time and rejection rate should work on process improvement.

ACKNOWLEDGEMENTS

I take this opportunity to express my profound gratitude and deep regards to Dr S.D.Gupta (Director, IIHMR), Dr Ashok Kaushik (Dean, IIHMR). I also take this opportunity to express my profound gratitude and deep regards to my Guide Dr Neetu Purohit(Associate Professor) and mentor Prof. Rahul Ghai(Associate Professor) for exemplary guidance, monitoring and constant encouragement throughout the internship.

I also take this opportunity to express a deep sense of gratitude to Mr. Thumbay Moyeddien(President, Thumbay groups), Mr. Akbar Thumbay Moyeddien (Director,GMC Hospital and research centre) Dr. Yasmin Jumma (HOD, Insurance, GMC Hospital and research centre, ajman, UAE) Dr. Manveer Singh (Medical Director, Thumbay Group) Dr. Gurjeet Singh Monga(Asst. Medical Director), for their cordial support, valuable information and guidance, which helped me in completing this task through various stages. The blessing, help and guidance given by them time to time shall carry me a long way in the journey of life on which I am about to embark.

I am obliged to staff members of GMC Hospital and research centre for the valuable information provided by them in their respective fields. I am grateful for their cooperation during the period of my assignment.

Lastly, I thank almighty, my parents, brother, sisters and friends for their constant encouragement without which this assignment would not be possible.

Dr Arjun Kubsad

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF SYMBOLS AND ABBREVIATIONS

1	GMC	Gulf Medical College
2	UAE	United Arab Emirates
3	JCI	Joint Commission International
4	TPA	Third Party Administrator
5	NGO	Non Government Organization
6	HMIS	Hospital Management Information System
7	AMA	American Medical Association
8	VSM	Value Stream Mapping
9	Min	Minutes
10	Hr	Hour
11	Avg	Average
12	AED	Arab emirate dirham
13	MRD	Medical Records Department
14	LAB	Laboratory
15	HOD	Head Of Department
16	IRDA	Insurance Regulatory and Development Authority

LIST OF APPENDICES

DISSERTATION REPORT

1. INTRODUCTION

In current times medical costs are sky rocketing, and not having or having inadequate amount of health insurance cover can prove to be a huge financial disaster. If an individual is unable to afford proper health care it could lead to poor health.

1.1 Health insurance

Health insurance is insurance against the risk of incurring medical expenses among individuals. By estimating the overall risk of health care and health system expenses, among a targeted group, an insurer can develop a routine finance structure, such as a monthly premium or payroll tax, to ensure that money is available to pay for the health care benefits specified in the insurance agreement.

According to the Health Insurance Association of America, health insurance is defined as "coverage that provides for the payments of benefits as a result of sickness or injury. Includes insurance for losses from accident, medical expense, disability, or accidental death and dismemberment"

Standards of health care are considered to be generally high in the United Arab Emirates, resulting from increased government spending during strong economic years. Health care currently is free only for UAE citizens. UAE has seven Emirates.

Compulsory health insurance is emerging in UAE, The aim of the Law is to create an integrated health system for UAE, based on a sustainable financing system that supports the competiveness of Dubai and protects the rights of all participants

The implementation of the health insurance is linked to various socio-economic factors such as ensuring the entire population with minimum coverage at reasonable costs, guaranteeing the healthcare services and infrastructure capacity, safeguarding the system from all abuses and fraudulence, and empowering the financial base with sufficient flow of funds.

1.2 Basics of Health Insurance

Health Insurance works based on mainly 2 types of policies

- Group policies - Insurance that covers a group of people, usually who are the members of societies, employees of a common employer, or professionals in a common group.
- Individual policies – Policies bought by individuals to cover the expenditure of one’s own health

The health care expenditure is covered through these policies by purchasing through premiums; premium is the amount you pay for the coverage. The range of coverage for expenses varies depending on the type of plan. You can purchase the insurance directly from the insurance company through an agent or through an independent broker but most people get their insurance coverage through employer-sponsored programs.

Aside from premiums, there are other costs associated with health insurance coverage.

Deductible: The amount that you pay out of pocket. Generally, the higher the deductible, the lower the premiums.

Co-insurance: The percentage of covered expenses paid by the medical plan. The co-insurance amount is per family per calendar year.

Co-payment: Sometimes referred to "co-pay", this is a set cap amount that you will pay each time you receive medical services. The co-payment and the coinsurance are not one in the same. If the share of insurer and insured is 80:20 respectively then 80 is coinsurance and 20 is copayment.

1.3 Framework of Health Insurance

There are 4 major players in Health Insurance system

- Payer
- Provider
- Insured
- TPA

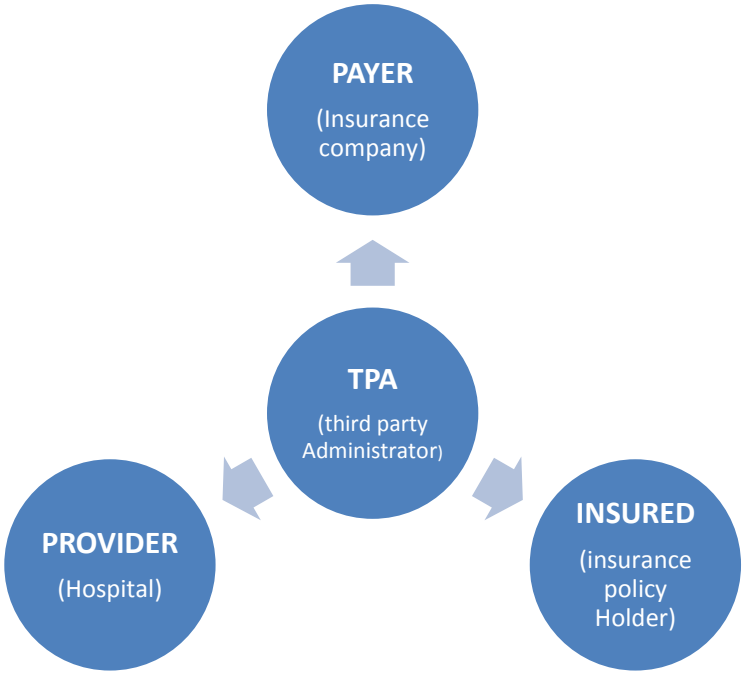


Figure: 1
Framework of Health Insurance

Payer/Organizer/Insurer

The insurer is the entity that manages the fund and takes the risk. The insurer develops the product and manages the risk, so that the insured get their benefits. The main role of payer is to orchestriate the various stakeholders and takes responsibility for the operations. This would include creating awareness, collecting and pooling revenue, purchasing healthcare, reimbursing claims and monitoring the entire program. It plays a dual role of governance and administrator.

TPA (Third Party Administrator)

A Third Party Administrator is an organization that. This can be viewed as "outsourcing" the administration of the claims processing. It could be an entity with government or it could be a Para state body or an NGO. It acts as a broker between provider, payer and Insured.

Insured

A person whose interests are protected by an insurance policy; a person who contracts for an insurance policy that indemnifies him against loss of life or health etc.

Major Health insurance companies in UAE

Provider/Hospital

A health care provider is an individual or an institution that provides preventive, curative, promotional or rehabilitative care services in a systematic way to individuals, families or communities. These may be public or private healthcare providers.

2. HOSPITAL INSURANCE DEPARTMENT

The hospital has a dedicated department to offer quality and affordable specialized superior medical care complemented by a warm and personalized human touch to the members of most of the insurance companies through Insurance department.

This Department is staffed by a team of expert professionals who assist in administering to the needs and queries of patients holding insurance cards.

Roles and Responsibilities

- Communicating and guiding the patients regarding the Insurance process
- Coordinating with insurance companies for initial cashless approvals
- Coordinating with various departments and doctors for handling the queries of insurance companies
- Verification of the documents before submission for claims
- Coordinating with finance department for billing process
- Justifying the rejected claims for reconsideration
- Negotiation with different insurance companies for the tariff and price list of different procedures
- Maintaining all the patient documents with confidentiality
- Maintaining the documents of hospital related to insurance

2.1 Process flow of insurance department

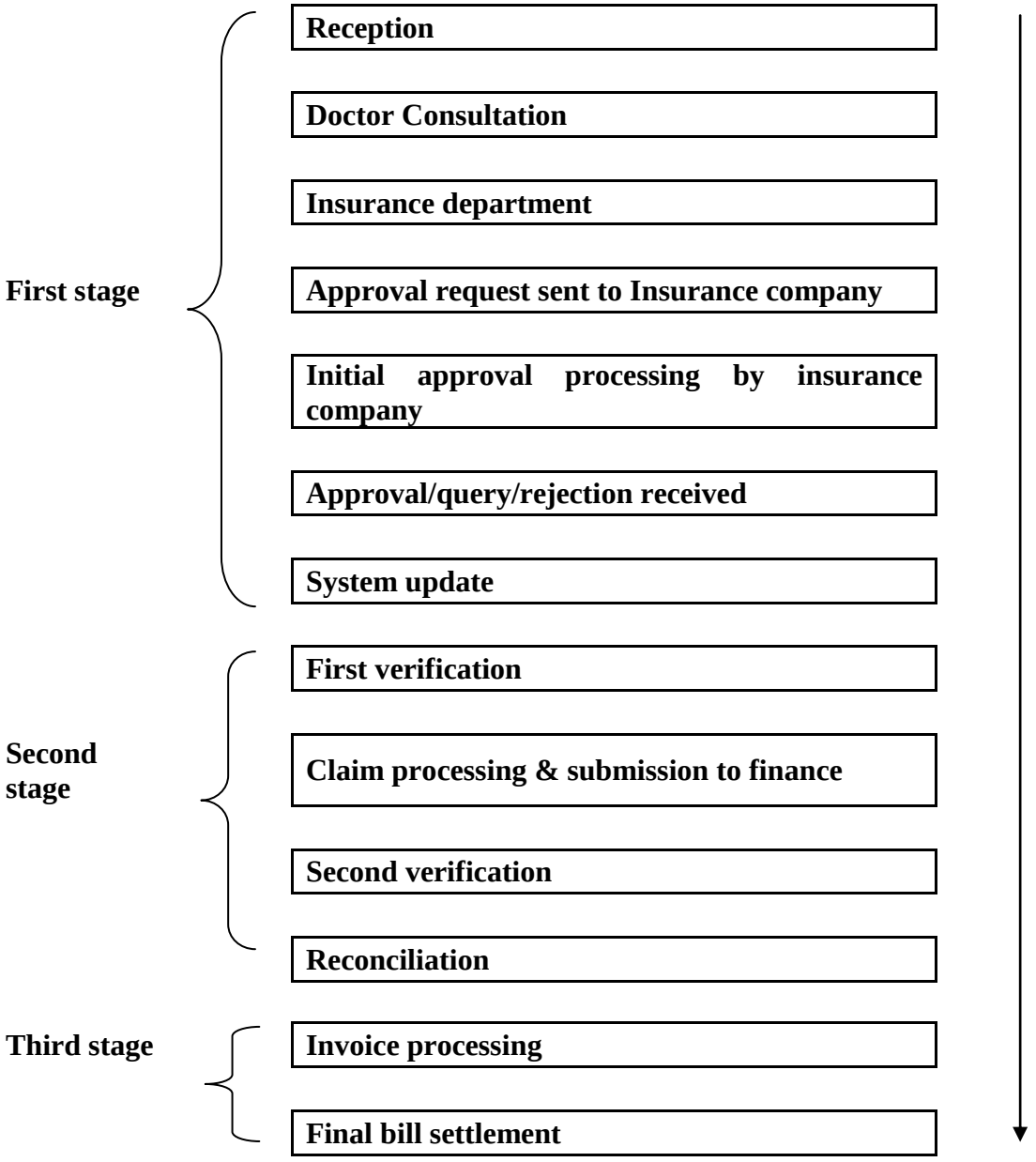


Figure: 2
Insurance department Process flow

2.2 Process of Insurance Claim

The process flow of the Insurance claim can be divided in to 3 major headings

Stage 1: Approval Process

The patient entering the hospital are of 2 types – Out patient/Inpatient, Patients with valid Insurance card are guided to Hospital reception to generate the unique hospital Id, followed by insurance department in case there is need of approval for consultation or else he is directed to the consultation, depending up on the prescription of doctor the request is generated.

Patient brings the request to insurance department, the request is received and the approval process is initiated. Request is approved based on the terms and conditions of the respective insurance policies, viz some are directly approved as the price of request is less than the limit of approval required.

Requests of outpatients and inpatients are as follows

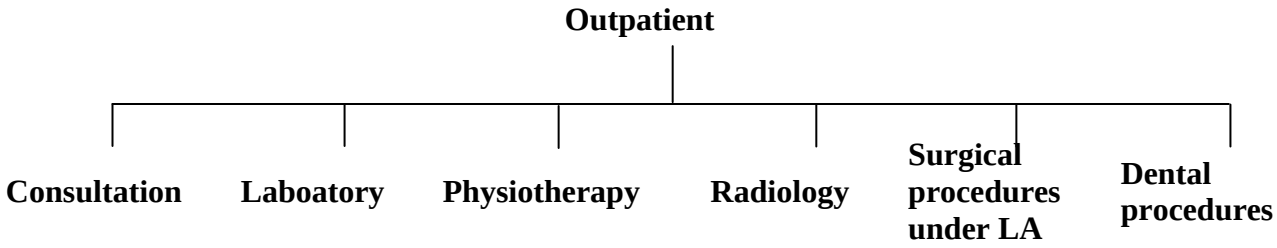


Figure: 3
Outpatient requests

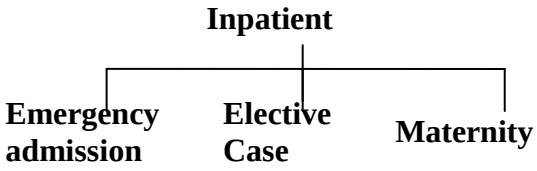


Figure: 4
Inpatient requests

Those requests which require approval are processed verbally or through written approval

Verbal approval: Those which need verbal approval are processed by calling insurance company, explaining the case, mentioning the requested prescriptions, mentioning the total amount in turn taking approval/rejection and updating the same in the HMIS

Written approval: Those requiring written approval are kept for processing by taking the phone number of patient for intimating the status, patient is given a time of 2 days and the documents are sent to insurance company through mail/fax/online platforms, insurance company replies back either for query/ rejection/ approval. Queries are replied by referring to medical records or doctors etc where as rejections and approvals are updated in the HMIS and patient is given a call for collecting the document and procedure for the procedure the doctor has prescribed.

The time taken for this initial cashless process has huge variation of 30 min to 3days depending on the insurance companies.

Stage 2: Verification & Reconciliation

The process of verification and reconciliation is to decrease the rejections from insurance companies.

The process has 3 basic steps

- First verification
- Claim processing
- Second verification and reconciliation

First verification: The documents processed by initial approval process are verified for the approval code/ written approval copy, in the absence of which the document is sent for approval and approval code/ written approval copy is taken.
Claim processing: In this process all the documents are confirmed before sending to finance department for claiming the bill.
Second verification & Reconciliation: The rejections and the reasons for rejections are verified accurately and replied back to the insurance company with proper justifications to reconsider and approve the rejected amount.

Stage 3: Invoice processing and Final bill settlement

This process is more related to the accounts and finance department, where in all the bills and invoices are gathered, verified and sent for insurance company for final settlement of the claimed amount.

Background of challenges & problems

Challenges faced are of long waiting period for the patients, patients wander between departments for the process, rejections due to improper submission and improper justification of the approval request, untimely intimation of the status of approval request to the patient, time spent in checking the status of the approval request, time spent in referring the records of patient, time spent in collecting the medical report/justification of the request from doctor

The reason for the above said challenges are rigid approval process and improper work distribution which ultimately leads to increased tat or rejection.

2.3 Problem statement

In current times medical costs are sky rocketing, and not having or having inadequate amount of health insurance cover can prove to be a huge financial and health disaster. Many times patient still have to pay out of pocket in spite of having health insurance coverage due to the rigid process followed by the healthcare provider to take approval from insurer.

When the claim process is rigid, many times it ends up with increased turnaround time and high denial rate leading to decreased efficiency of provider. Hence planning the process is very necessary in order to fight the above said challenges.

2.4 Aim

- To reduce turnaround time
- To decrease rejection rate
- To smoothen the approval process
- To increase efficiency

2.5 Objective

- To identify the reasons behind high turnaround time and rejection of mediclaim in GMC Hospital
- To identify the policy level ambiguities leading to high mediclaim rejection
- To suggest measures to reduce turnaround time and rejection rate of mediclaims in GMC Hospital

3. Literature review

Comparatively Health insurance coverage is high in developed countries like USA, UAE, Canada, but there are very few reports and work done on the rejection rate and process improvement of Health Insurance claim processing. Few of the literatures worked on rejection rate and process improvement are as follows.

A reporter of Kiser Health news (Galewitz P) through his report has given overview of rejection rates of different insurance companies in America - Kentucky, Columbia. The findings of the report in this context are the denial rates of different insurance companies, comparison between the policies, reasons for the variations in rejection rates, as per the report the reason for variation is difference in claims process adopted between the payers and providers.

A similar study conducted in 2011 (Carmel P.W) gives details about the denial rates, comparative data of before and later stages, and the reason of betterment in America. The key findings of report are health insurers shows that claims denial rates in 2011 are dramatically lower than in previous years. Billions of dollars per year are saved by eliminating administrative waste, by processing the claims timely, accurately and specifically. Health insurers' claims-payment processes are still littered with inaccuracies and inefficiencies. Claim process campaign was introduced; campaign's goal is to spur improvements in the industry's billing process.

Accumed Pm is a TPA; it works on the gap between healthcare providers and service payers. The report made by accumed pm says the gap between health care providers and service payers has been well established and clearly defined in the United States, Canada and Europe, this relationship has yet to mature in the Middle East. The result is lost money and poor business management. As per the report In the UAE it is estimated that up to 15% of claims submitted to insurance companies by private practices are rejected. Another 15% of claims are delayed because of inappropriate processing of claim forms and supporting documents. The average claim payment cycles are between 90 and 120 days. The report works on medical coding, billing, insurance validation, financial and business management through assisting healthcare providers by optimizing healthcare delivery and operational processes.

A report (by Xerox) made aggressive 75 days study with data capture services of over 250000 claims per week. Report gave solution through a smart system to auto-adjudicate claims, processing cycle time was accelerated by 75 percent, from 10 days to 60 hours. Report worked on Implementation of state-of-the-art technology to perform all claims processing services, including full mailroom services, data entry, storage and retrieval, digital imaging, x-ray processing, online updating and Intelligence Queue/Data Cleansing.

4. METHODOLOGY

4.1 Study design and methods

- Type of study – Descriptive cross sectional study
- Location of study – GMC Hospital, Ajman
- Study subjects – All Approval requests received between 1st march 2014 to 20th may 2014
- Sample size – All Approval requests processed for initial approval, claim process, reconciliation - 7326
- Data collection method
  Technique - qualitative research technique

Primary Data	**Secondary Data**
Daily approval request tracker	Receipt settlement summary report
	Reconciliation platform for Rejection reasons

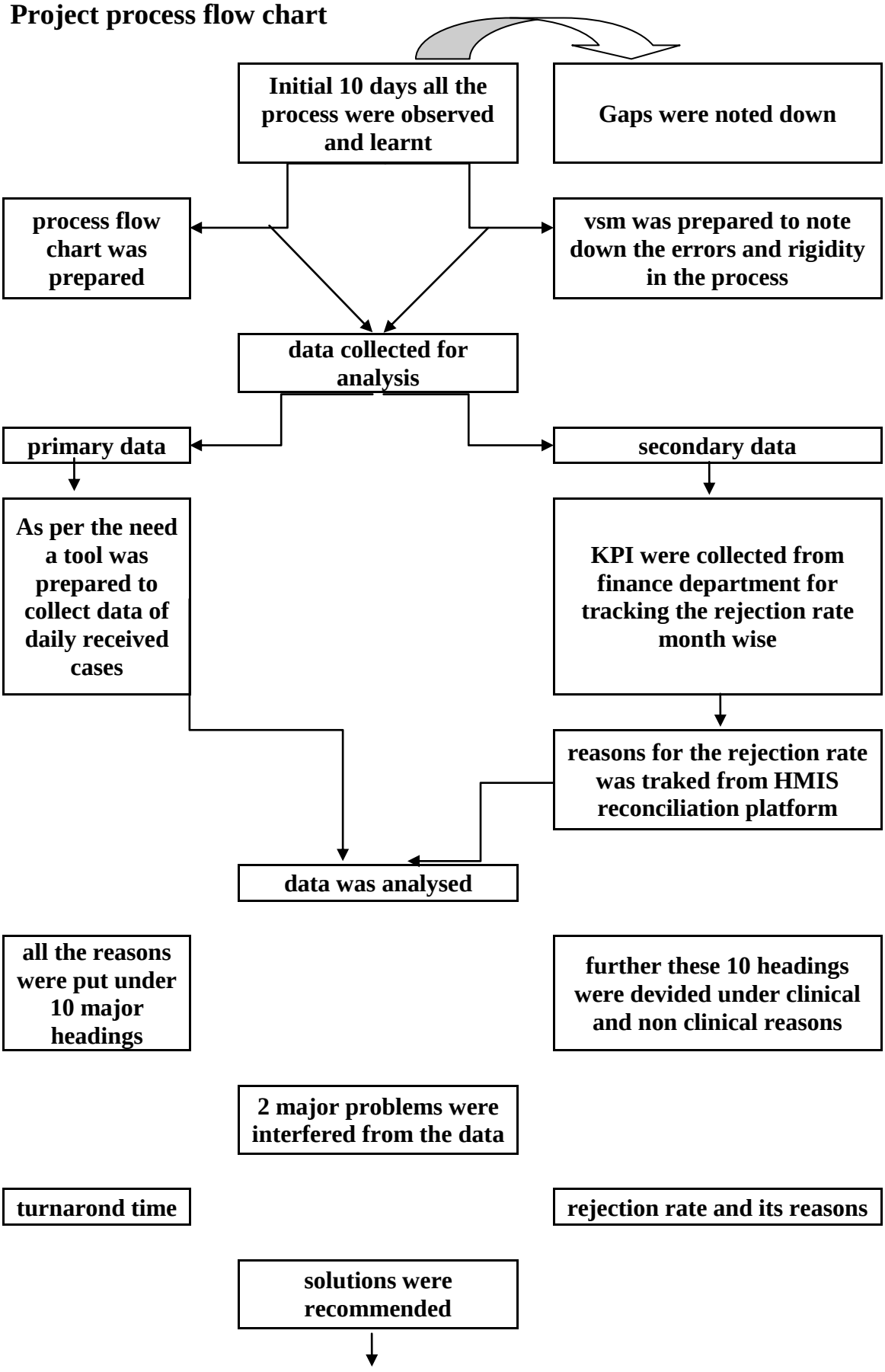
Table: 1

Data collection method and tools

- Study period - March 1 to May 15

4.2 STUDY PLAN

Project process flow chart



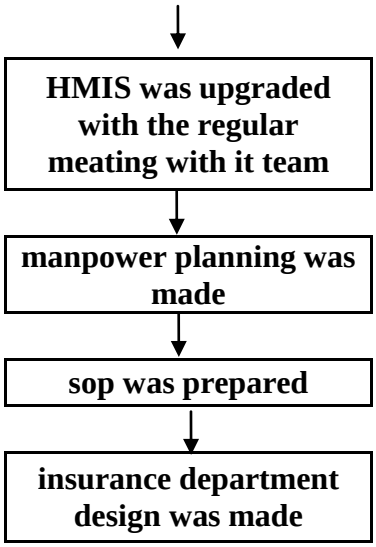


Figure: 5
study plan

Initial 10 days, with the assistance and guidance of the existing staff the process of insurance was observed and learnt, the gaps were noted down, a process flow chart was made for clear understanding of the process of insurance department, out of which a deep study was made through value stream mapping to explore the problems and rigidity of process in each minute steps of the process. Out of the need for the same a tool was made to collect the data of daily received approval request and the cases were tracked for the turnaround time and rejection rate and their reasons. Causes were identified in the process, probable solutions were recommended for improving the process, reducing turnaround time and rejection rate.

4.3 Interpretation

As per the data collected, total new approval requests received between 1st March 2014 to 30th April 2014 were 7326, on average 140 new Outpatient approval requests were received every day.

All the new approval requests processed were either for verbal approval or for written approval.

Verbal approval is by calling the insurance company, giving the insurance card number to verify the policy terms and condition and explaining the medical condition and requesting the approval for prescription of doctor and taking the approval code and updating in HMIS. Written approval is processed either through online or offline, viz, online is sending the requests directly through the available platforms of insurance companies and offline is through scanning the approval request document and sending through email or fax.

Insurance companies processed online and offline are as follows

Sl.No	Offline Processing Insurance companies	Sl.No	Online Processing Insurance companies
1	ADNIC INSURANCE	1	ALICO INSURANCE
2	AETNA GOOD HEALTH INSURANCE	2	NAS INSURANCE
3	AFIYA MEDICAL INSURANCE		
4	AL BUHAIRA NATIONAL INSURANCE		
5	AL DAFRA INSURANCE		
6	AL KHAZNA INSURANCE		
7	ALMADALLAH INSURANCE		
8	AMITY COMERCIAL BROKER LLC		
9	ARAB ORIENT INS CO ALLIANZ WORLDWIDE CARE		
10	ASCANA INSURANCE		
11	AXA INSURANCE		
12	DAMAN INSURANCE COMPANY		
13	DUBAICARE INSURANCE COMPANY		
14	FMC NETWORK UAE		
15	GLOBALNET TPA LLC		
16	GLOBMED GULF FZ-LLC		
17	INAYAH TPA		
18	INTERGLOBAL LIMITED		
19	MAXCARE LLC		
20	MEDNET INSURANCE		
21	MSH INSURANCE		
22	NEURON INSURANCE		
23	NEXTCAR INSURANCE		
24	NGI INSURANCE		
25	NOW HEALTH INTERNATIONAL		
26	OMAN INSURANCE		
27	PENTACARE INSURANCE		
28	WAP MED INSURANCE		

Table:2

Insurance companies processed online and offline

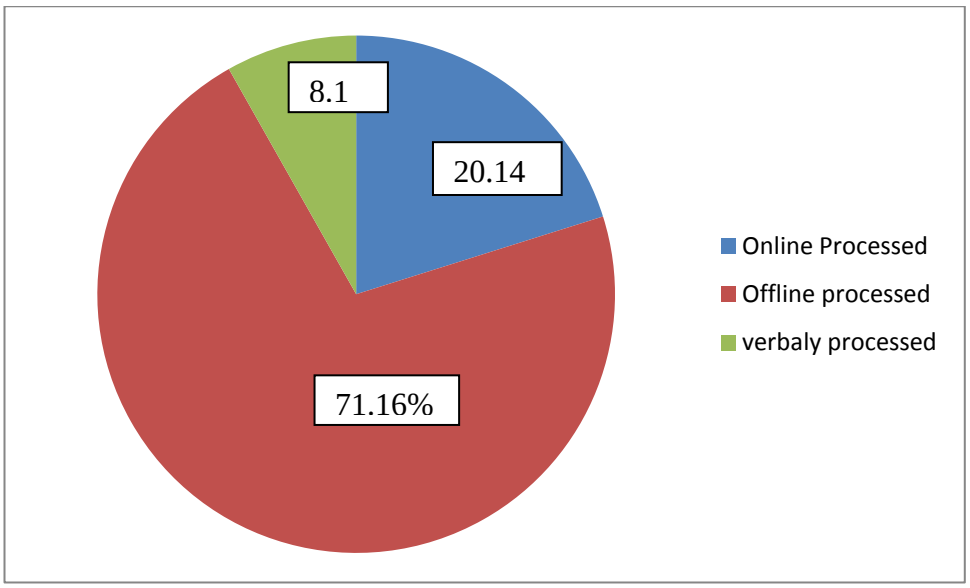


Figure: 6
Approval process of insurance companies

Out of the data collected mainly 2 things were inferred

- Turnaround time
- Rejection rate

4.4 TURNAROUND TIME

Through the VSM, all value added and non value added process in the process of approval were noted down, the average time of approval has a huge variation of 30 minutes to 3 days.

As per the VSM, the value added process and the non value added process are as follows

Sl.no	Process	Value added function	Time in min	Non value added function	Time in min
1	**Initial process of approval request receiving**	Receiving document and initiation of sending approval request	5	Seeking information weather can be verbally approved or what is the limit for no need of pre approval	15
				Phone number taken and document is put in the tray for	240

				sending the approval request	
2	**Written pproval**	Patient mrd is referred	2	Access to multiple platforms of hmis to view pt mrd	8
		Preparing the document to be sent to insurance company	5	Preauth and claim forms are filled manually, necessary lab/radio reports attached, scanned and sent to insurance	15
3	**Verbal approval**	Patient lab/radio reports are referred	3	Access to multiple platforms of hmis to view pt reports	5
		General and medical details of patient is explained on phone to the insurer	5		
4	**Rejection**	Policy is verified with insurance company, trying to make corrections and reply back for reconsideration, system update	10	Sending documents to treating doctor for required documents, preparation of hard copy, scan and send for reconsideration	300
5	**Query**	Refer mrd for lab/radio/other details, taken a prin out and query is replied	3	Access to multiple platforms of hmis to view pt reports	10
				Manual process to reply for the query	10
		Sending the medical report/justification/answer to query from doctor	15	Documents sent to doctor through office boy for medical report or to answer query, once doctor resends it, query is answered	300
6	**Updating**	Update on the system	2		

	the reply from insurance	Approval copy is printed and kept in the tray	3		
		Files are segregated from tray, and transferred to file	5		
7	**Status check and information**	Pt is informed about the status	1	Patient is given call to inform status	5
		Patient comes to collect, file is checked and respective documents are handed over	5	Searching the document to handover to pt due lack of information about the status	5
		Checking the status in system, file, email, fax	5	Searching through hard files, searching for missing documents	15
8	**Verification**	Search and note down the available approval code on system	2	Submitting documents for approval request those which does not have code or approval	10
9	**Claim processing**	Check for available documents online, print out, attach and file	5	If reports not present online, staff will go to respective department each time to collect the required report/document	120
				The document/reports are selected individually and printed	5
	Total in min		76 min		1063 min
	Total in hr		1 hr 16 min		17 hr 43 min

Table: 3

Value added and non value added process

Through the above table, Value added process, non value added process, total time, total value added time and total non value added time for the process can be noted down, and the total non value added time is taken for the analysis for mapping the causes.

The turnaround time for different processes followed for approval requests are as follows

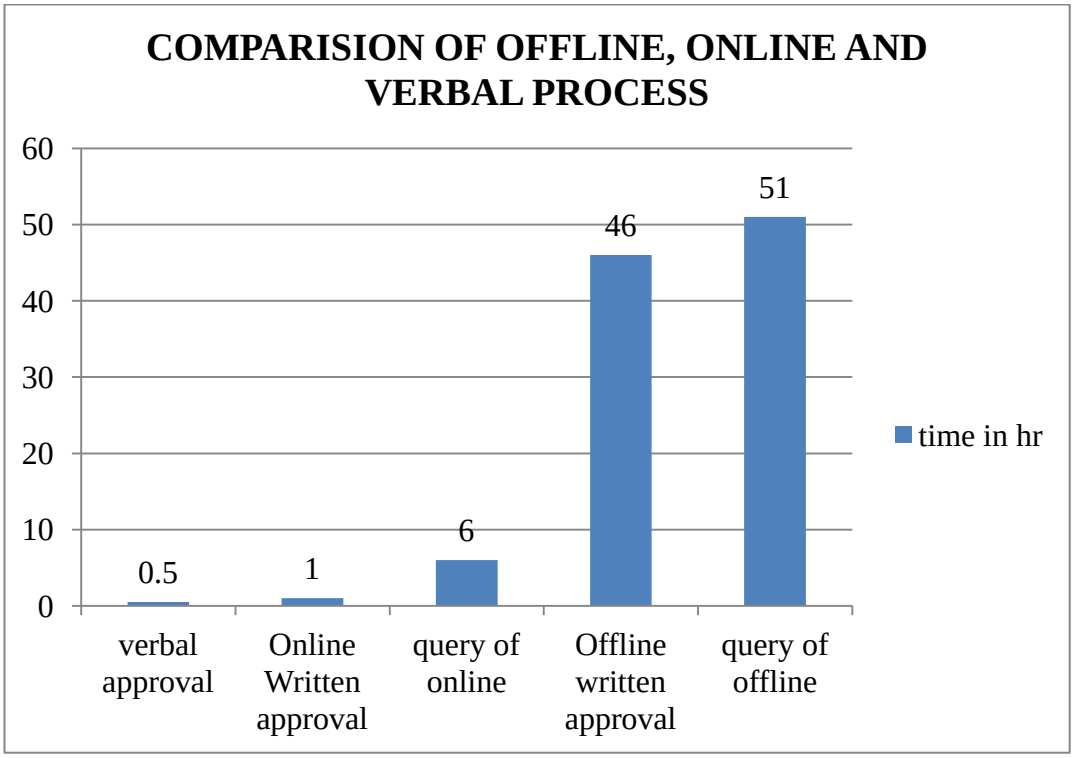


Figure: 7
Comparative representation of different process of approval request

The above graph shows the huge variation of time between the approval processes, the least time consumed is through verbal approval process and online processing of the approvals where as the approval request processed manually i.e, offline takes highest amount of time.

4.5 REJECTION RATE

After the process of approval request and claim processing, the invoice/bill that are generated are submitted to respective insurance companies. By verifying policy terms and conditions, insurance companies send the request back by rejecting the amount not justified and the reason of rejected amount. The reconciliation team verifies the reasons and replies back with the proper justification to reconsider the rejected amount.

The total number of cases received in between the month of march and April were 7326, in the month of march 3301 new approval requests were received, in the month of April 4025 new approval requests were received.

The avg rejection rate before reconciliation is 4.28%, and the rejection rate after the process of reconciliation is below 2%

On an average 140 new requests are processed every day, consecutively the processed case are claimed for the bill settlement through Finance team, the amount claimed in the month of march and april are 2696010.50 AED and 3668404.54 AED out of which the rejected amount was 162174.47 AED and 152782.78 AED respectively.

For the comparative rejection rate the KPI data of last 5 months were collected, following table shows the rejection rate between dec 2013 to apr 2014.

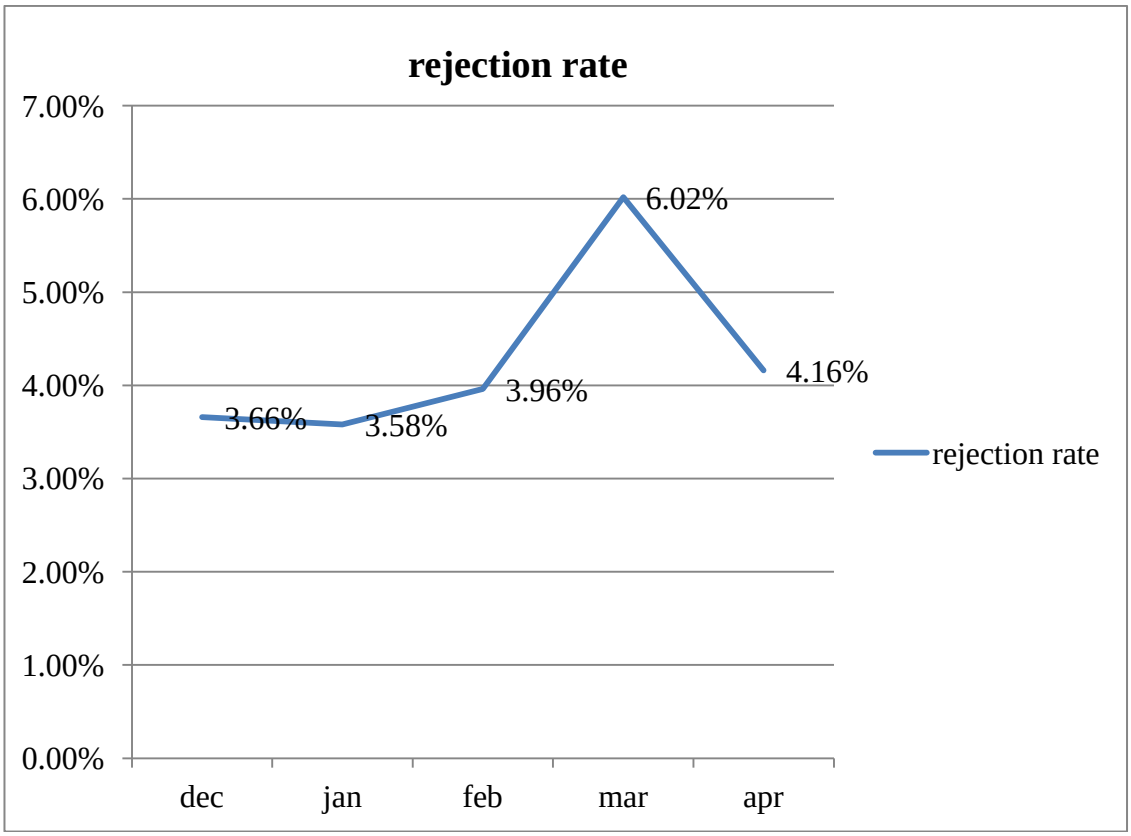


Figure: 8
rejection rate dec2013 – apr 2014

The above graph represents the rejection rate between dec 2013 to apr 2014, the rejection rate is inclined between jan and march, showing the highest rate in the month of march - 6.02%, where as we can make a note of decline in the month of april bringing the rate down to 4.16% by applying few methods of process improvement, lean six sigma, smoothening the process.

4.6 Reasons for Rejection

The reasons for above rejection rate were collected from the reconciliation platform of the HMIS and they were categorized in to 3 major headings as follows

- Clinical
- Administrative
- Non coverable

Clinical reasons

- No medical justification
- Incomplete claim form
- Unclear diagnosis
- Service performed after last date of coverage

Administrative reasons

- Co insurance not taken
- Co pay not applied properly
- Calculation discrepancies
- Provider excess charges
- No prior approval taken
- Pre authorization necessary

Non coverable reasons

- Permanent exclusions
- Screening tests
- Policy non coverable
- Not under agreed tariff

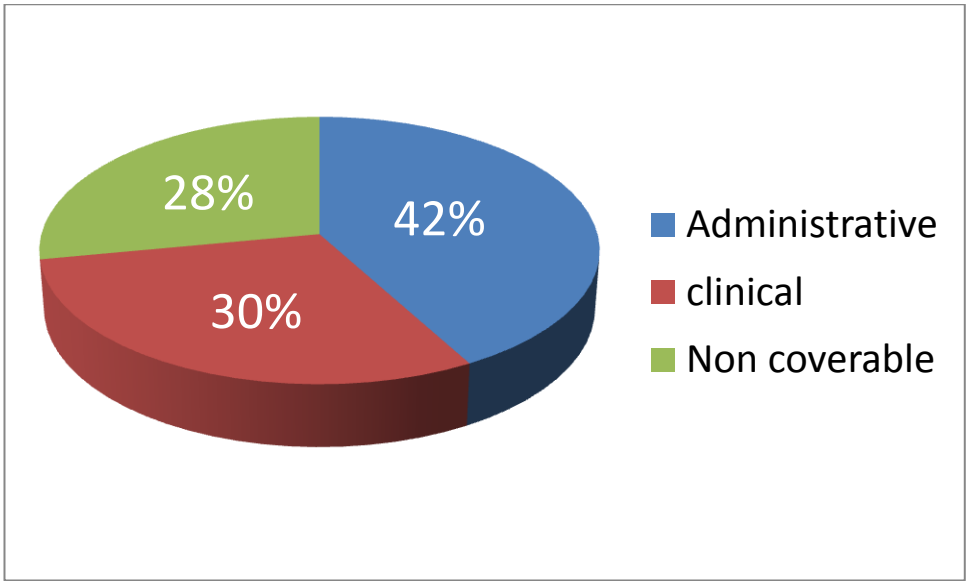


Figure: 9
Reasons of rejection rate

Out the above mentioned reasons Clinical reasons are 30%, Administrative reasons are 40% and non coverable reasons are 40% out of the total rejection rate before reconciliation.

All clinical, administrative and screening tests of non coverable reasons are justifiable and re-modifiable, where as rest of the non coverable reasons are non remodifiable as they are as per policy terms and condition. The justifiable reasons can be reduced by following the proper process flow, process improvement, HMIS upgradation, mistake proofing.

4.7 Common causes for high turnaround time and high rejection rate:

- Manual workload on the manpower
- Multiple access platforms and login ids to the MRD and Lab reports
- Incomplete clinical information on claim form
- No record of status of processed or pending cases
- There is no waiting area and queue system for the patient
- The patient needs to be called manually after the approval or rejection
- If the limit is crossed for a patient it doesn't show on the system for which each time lab or radio department is called to upload th request on HMIS to update the approval/rejection.
- There is no track system/ intimation on HMIS for the patient to be discharged, the nurse has to inform the Insurance department every time while the pt is getting discharged.

5. SOLUTION & RECOMMENDATIONS

After analyzing the data, total approval request turnover, turnaround time, rejection rate and the reasons for the high turnaround time and high rejection rate were inferred.

The solution for the above said problems were recommended through 3 measures of process improvement as follows

- HMIS Upgradation
- Manpower planning
- Insurance department layout redesigning

5.1 HMIS

Through the data analyzed it was inferred that the turnaround time of the approval requests processed online was very low compared to those processed offline, as well as considering rejection rate, the approval requests processed online were more accurate than the offline requests.

Hence most of the offline processed approval requests are converted into online process by upgrading the HMIS. Currently the HMIS has different platform for approval request, MRD, LAB report, Radiology reports (Annexure i), while processing the approval requests, the Approval request plat form(annexure ii) is logged in, the requested services are printed out, attached to claim form, MRD, LAB reports and radiology reports are printed out by logging in to respective platforms(annexure iii) and are attached with claim form as supporting documents, card copy (Annexure iv) is printed out and attached, the whole document which is prepared is sent through email or fax by scanning all the above said papers.

This entire process is making the process more rigid as there is involvement of more manual work, hence upgrading the HMIS was recommended, The salient feature of HMIS upgradation are as follows

- Bringing the multiple login system like MRD, lab reports, radiology reports card copy, claim form, other documents in to one single platform (Annexure v)
- Option of add button in front of each requested services and supporting documents
- Conversion in to Pdf document once added
- Submitting directly through HMIS through linking with email and fax system there by reducing the manual work of printing out, scanning, and sending the approval request
- Option of status and time of process show in the approval request platform
- Status of received, processed, query, pending, handed over option
- Link between the insurance department approval request platform and the treating doctor for any communications such as query reply, medical report, clinical justifications etc there by reducing the time of 5 hrs consumed in sending the document to treating doctor and collecting the justification.
- Option of automated message generation once approved/rejected/partially approved
- Discharge intimation option in HMIS
- Login expiry time to be increased

5.2 Manpower Planning

Activities		TAT / case	Total No. Of cases	Time Required	Working hour per day	Buffer time	Utilised time	Required Manpower	Present Manpower
Approval	**OP**								
	New requests(v & W)	8 mins	150	1200 mins					
	Follow up	3 mins	70	210 mins					
	Update	1 min	150	150 mins					
	Total time required per day for op approvals			26hrs	8 hrs	1 hr	7 hrs	4	2
	IP								
	New Admissions	10 mins	10	100 mins					
	Extension	9 mins	25	225 mins					
	Discharges	10 mins	10	100 mins					
	Elective new request	8 mins	20	120 mins					
	Electivefollow up	4 mins	20	60 mins					
	Elective update	4 mins	20	60 mins					
	Total time required per day for IP approvals			16 hrs	8 hrs	1 hr	7 hrs	2 + 2 hrs	1
First Verification	Dental	4 mins	20	80 mins					
	Maternity	4 mins	20	80 mins					
	Optical	4 mins	3	120 mins					
	Total time required per day for First Verification			7 hrs	8 hrs	30 mins	7 hrs 30 mins	Half Day of a person	
E claims	All	3 mins	20	60 mins	1 hr		1 hr		

Claim processing	All	4 mins	616	41 hrs	8 hr	15mins	7 hrs 45 mins	5 full day and 1 half day of an employess	4
Second Verification	O P cases	3 mins	616	31 hrs	8 hrs	15 mins	7 hrs 45 mins	4	3
	I P cases	14 mins	33	4 hrs	8 hrs	15 mins	7 hrs 45 mins	1	
						TOTAL		17	11

Table: 4

Manpower planning

5.3 Insurance Department layout Redesigning

Current layout

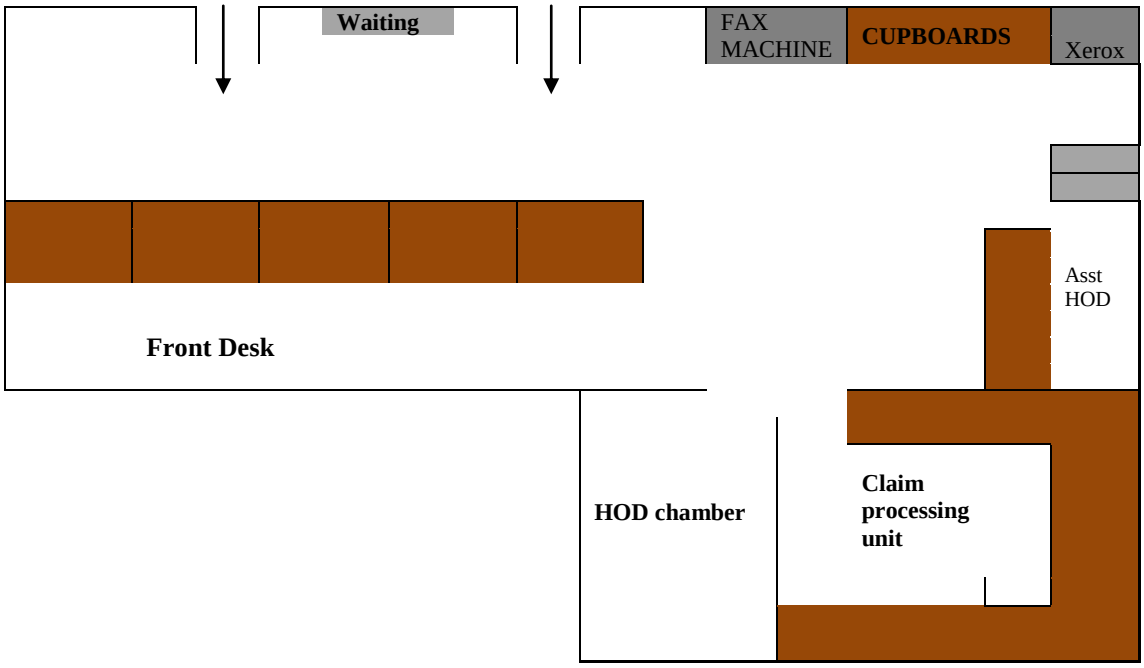


Figure: 10
Insurance department layout

Proposed layout of Insurance department

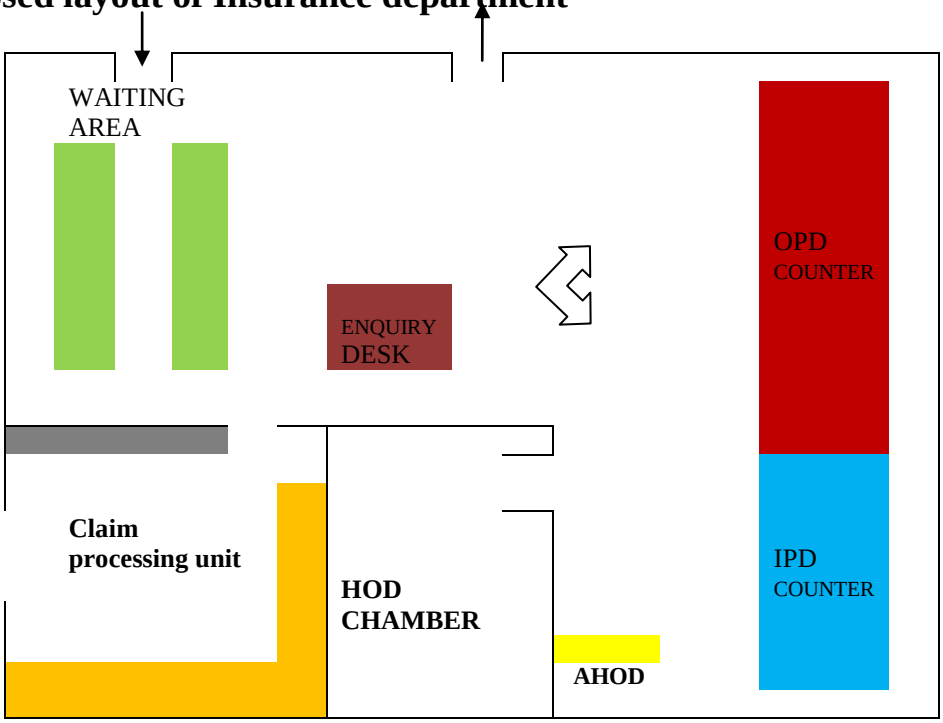


Figure: 11
Proposed Layout of Insurance department

6. RESULTS

Regular meetings were held with HOD Insurance department, Assistant medical director and IT team, the above said issues and problems were discussed, the solutions were explained and implementation of the same was initiated.

Last meeting (Annexure vi) was held on 3rd May 2014 in which the following proposal of updating HMIS was agreed and implantation process was started.

Till 15th of May

- Limit cross problem
- Discharge Intimation
- View page on single platform- Lab and radio reports
- Increase expiry page time
- Request update button

No deadline given but agreed

- View medical records of 6 months: consultant name, date, diagnosis and drugs given
- Status Change as the requests are received and processed
- Link to email and fax from the system
- Single platform module
- Option to add link of lab and radio reports
- SMS sent as soon as processed
- In patient current admission status

Through implementation of above said process improvement measures turnaround time and the rejection rate can be reduced to 3/4th.

6.1 Turnaround time

	Value added time (in min)	**Non value added time (in min)**	**Correctable Non value added time (in min)**
Verbal approval	8	15	10
Status check	5	15	15
Written approval	21	48	28
Query reply	18	350	300

Table: 5
Reducible turnaround time

- The total time taken for verbal approval is 23min+7min buffer time and correctable non value added time is 10 min, hence turnaround time for verbal approval can be reduced to 20 min
- The total time taken for written approval is 69 min and the correctable non value added time is 28 min, hence turnaround time for written approval can be reduced to 41 min
- Total time taken foe status check is 20 min and the correctable non value added time is 15min, hence turnaround time can be reduced to 5 min
- Total time taken foe query reply is 368 min, correctable non value added time is 300min, hence turnaround time can be reduced to 68 min.

6.2 Rejection Rate

	Percentage of Rejection reasons	**Correctable rejection reasons**
Administrative	42%	16%
clinical	30%	20%
Non coverable	28%	8%
toatal	100%	44%

Table: 6
Correctable rejection reasons

- The ratio of Administrative, Clinical and Non coverable reasons is 42%, 30% and 28% respectively.
- Out of the above, correctable proportion of administrative, Clinical and Non coverable reasons are 16%, 20% and 8% respectively.
- The total correctable rejection reason is 44%
- Hence by reducing these correctable rejection reasons, the rejection rate can be reduced to less than half of the current rejection rate.
- i.e Rejection rate of 4.28% can be reduced to 2 %

7. CONCLUSION

Turnaround time and the rejection rat are the important measures for insurance department in a hospital as they have the direct impact on efficiency ant the revenue generation of hospital.

As per IRDA any hospital having rejection rate less than 2% is considered to have good practice of claim process management.

Hence hospitals having high turnaround time and rejection rate should work on process improvement.

Through this study, process improvement is targeted through upgrading HMIS, manpower planning and insurance department layout redesigning in GMC hospital Ajman. Result of which, the turnaround time can be reduced to $3/4^{th}$ and the rejection rate can be reduced to 1/2.

REFERENCES

Damodar mata., Health insurance, Medical Insurance Dubai, 2009, P. 63

Michael Bihari,MD, Fighting a Health Insurance Claim Denial - Sometimes You Win, and Your Health Plan Has to Pay All or Part of Your Claim, 2010, P.134

Latham & Watkins, Healthcare system, Healthcare regulation in UAE, 2012, P.78

By Phil Galewitz, Kaiser Health News (2011), Health insurance denial rates routinely 20%, 2011, P.82

PETER W. CARMEL, MD, Annual report, AMA (American Medical Association): Health insurers' denial rates are down, but error rates are up, 2011, P.148

AccuMED PM , Health insurance rejections and delayed process – a challenge for healthcare providers, 2013, P.67

Xerox, A health insurer needed more intelligent claims processing. We brought our IQ to the table, 2012, P.42

Insurance Regulatory and Development Authority
Available on
http://en.wikipedia.org/wiki/Insurance_Regulatory_and_Development_Authority

Health insurance
Available on
http://en.wikipedia.org/wiki/Health_insurance

APPENDIX

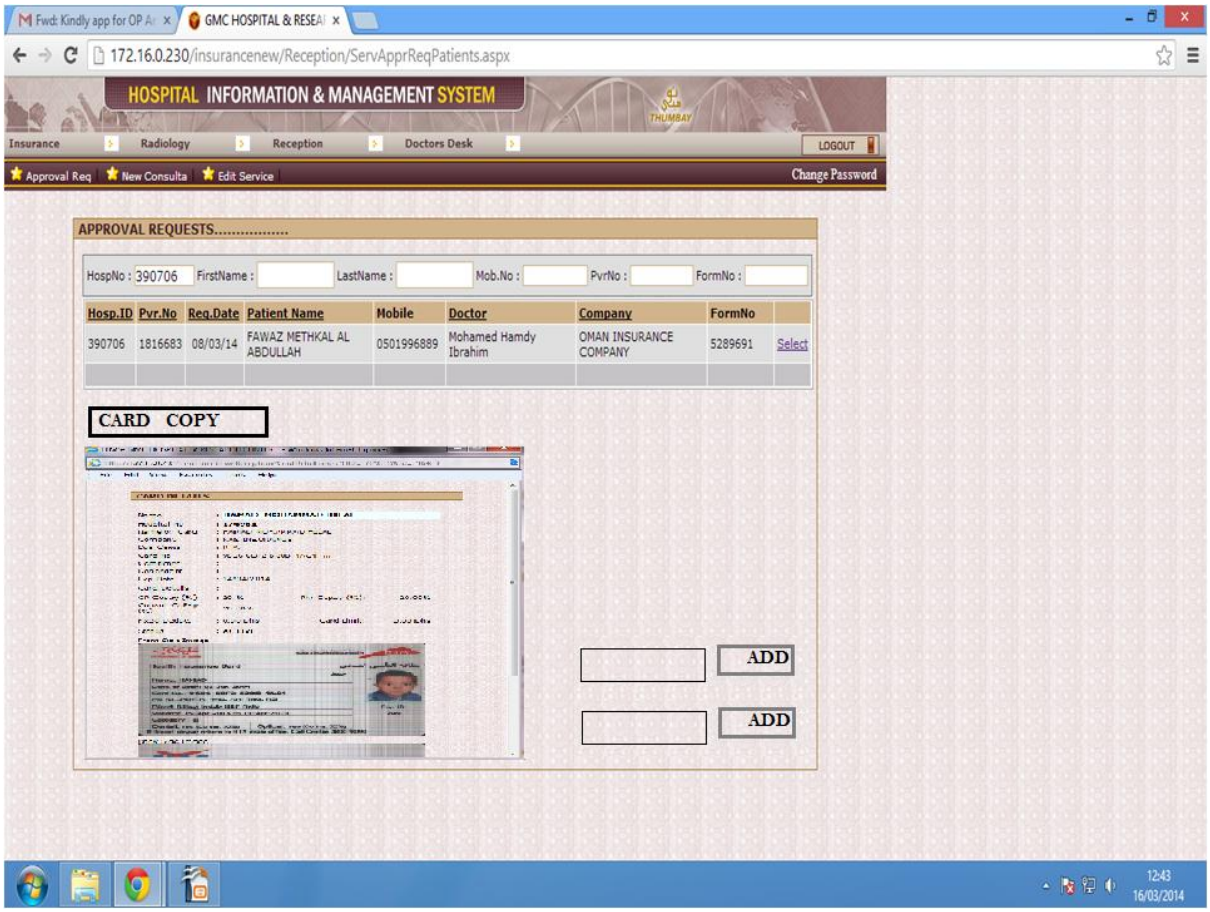
Annexure (i)

Multiple login modules of HMIS

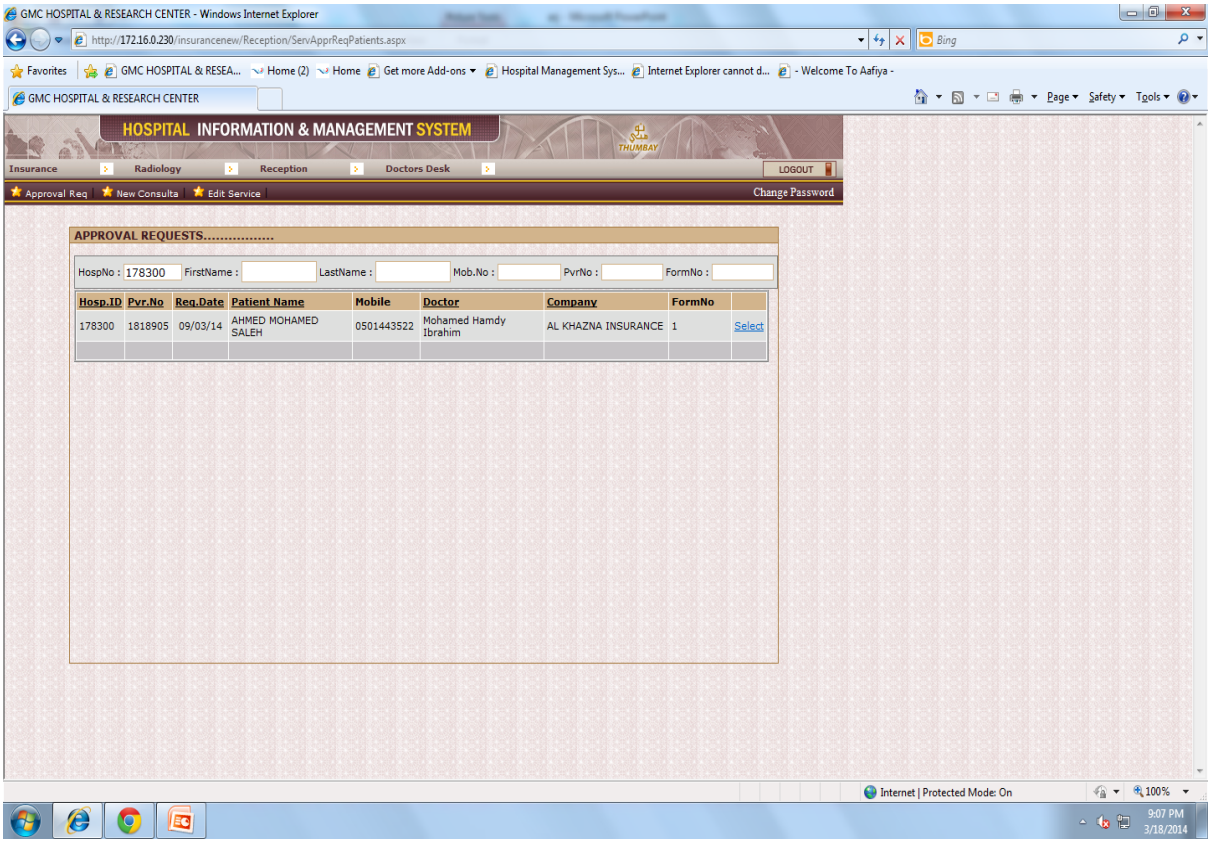
Annexure (ii)
Approval request page

Annexure (iii)
Lab/radio reports page

Annexure (iv)
Card copy page



Annexure (v)
Single platform view page



Annexure (vi)
Minutes of meeting

3rd May 2014
ATTENDIES
Insurance Department
I T Department
Medical Director

AGENDA
To discuss the problems and few changes to be made in the insurance module of HMIS
Limit cross problem
Discharge Intimation
View page on single platform- Lab and radio reports
Increase expiry page time
View medical records of 6 months
Status Change as the requests are received and processed
Link to email and fax from the system
Single platform module
Option to add link of lab and radio reports
SMS sent as soon as processed
In patient current admission status
Request update button

Approval of Proposed agenda

Till the 15th of May
Limit cross problem
Discharge Intimation
View page on single platform- Lab and radio reports
Increase expiry page time
Request update button

No deadline given but agreed
View medical records of 6 months: consultant name, date, diagnosis and drugs given
Status Change as the requests are received and processed
Link to email and fax from the system
Single platform module
Option to add link of lab and radio reports
SMS sent as soon as processed
In patient current admission status