

Internship Training

at

Vipul medcorp pvt. Ltd.

TO ANALYSE AND DEVELOP A WEB PORTAL FOR APPOINTMENT SYSTEM

By

Name MILIND ASWAL

Enroll No. PG/14/033

Under the guidance of

Mr. SURENDRA TYAGI

Post Graduate Diploma in Hospital and Health Management

2014-16



**International Institute of Health Management Research
New Delhi**

VMA Vipul Med Corp TPA Private Limited

Corporate Office : 515 Udyog Vihar, Phase V, Gurgaon-122016
Tel. : +91-124-2438270-75, 4699600 Fax : +91-124-2438276, 4699611/12
E-mail : info@vipulmedcorp.com
An ISO 9001:2008 Company

The certificate is awarded to

Miind Aswal

In recognition of having successfully completed his Internship in the department of

Business Development

and has successfully completed his Project on

To Analyze and develop a web portal for appointment system

1st Feb, 2016 – 31st April, 2016

Vipul Medcorp TPA Private Limited.

He comes across as a committed, sincere & diligent person who has a
strong drive & zeal for learning.

We wish him all the best for future endeavors.



Training & Development



Zonal Head-Human Resources

Regd. Office : Flat No. 219, 2nd Floor, Ansal Chamber-11, Bhikaji Cama Place, New Delhi-110066
Tel. : +91-11-46074578-81, +91-11-4165983, E-mail : info@vipulmedcorp.com

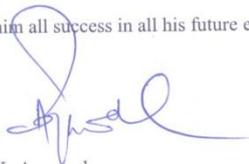
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The Candidate has successfully carried out the study designated to him during internship training and his approach to the study has been sincere, scientific and analytical.

The Internship is in fulfilment of the course requirements.

I wish him all success in all his future endeavours.



Dr. A.K. Agarwal
Dean, Academics and Student Affairs
IIHMR, New Delhi



Mr. Surendra Tyagi
IIHMR, New Delhi

Certificate Of Approval

The following dissertation titled "GAPS IN ONLINE APPOINTMENT AND SCHEDULING SYSTEM FOR CORPORATE CLIENT" at "VIPUL MED CORP PVT. LTD." is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name

Surjeet Thakur
Dr. Anandji Lamadade
Surendra Tyagi

Signature

[Signature]
[Signature]
[Signature]

Certificate from Dissertation Advisory Committee

This is to certify that **Mr. Milind Aswal**, a graduate student of the **Post- Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. He/ She is submitting this dissertation titled "TO ANALYSE AND DEVELOP A WEB PORTAL FOR APPOINTMENT SYSTEM" at "Vipul Medcorp Pvt. Ltd." in partial fulfilment of the requirements for the award of the **Post-Graduate Diploma in Health and Hospital Management**.

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.



Mr. Surendra Tyagi,
Asst. Professor,
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Dr. Rashmi Yadav
AGM
Vipul Medcorp Pvt. Ltd.

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH,
NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation TO ANALYSE AND DEVELOP A WEB PORTAL FOR APPOINTMENT SYSTEM. And submitted by MILIND ASWAL Enrollment No. PG/14/033 under the supervision of Mr. SURENDRA TYAGI for award of Postgraduate Diploma in Hospital and Health Management of the Institute Carried out during the period from 1 FEB 2016 to 1 MAY 2016 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

FEEDBACK FORM

Name of the Student: Milind Aswal

Dissertation Organisation: Vipul MedCorp TPA Pvt. Ltd.

Area of Dissertation: Wellness Services

Attendance: 100%

Objectives achieved: To analyse and Develop a web portal for Appointment System

Deliverables: Service, planning & Implementation of online program

Strengths: Skillfull, Methodical

Suggestions for Improvement: Inter-organization Communication skill



Signature of the Officer-in-Charge/ Organisation Mentor (Dissertation)

Date: 23/5/16

Place: churgaon

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ABSTRACT

Background behind the Study: Health insurance in India is emerging as a booming field in today's world where health is at stake for the accomplishment of the busy life schedules we lead. TPA has a major role in the health insurance industry, helping to settle the claims which are raised against the services being provided to the insurers by the health care service providers. Market analyses its financial year data to check on what business is it achieving as well as what strategies are to be taken to increase the market share.

The current study is an Observation and Analysis of market for Vipul GROUP in the field of healthcare services. The data collected is based on secondary data. Random Sampling method has been used in the study to meet the objectives. Sample size is vastly located PAN India. Target population is ABC pharmaceuticals employees and their dependents.

In the end we conclude appointment scheduling via web portal is much more effective & time saving both for providers as well as patients.

ACKNOWLEDGEMENT

Any attempt at any level cannot be agreeably completed without the support and guidance of learned people. I owe a great obligation to all the professionals at VIPUL MedCorp TPA Private Limited Gurugram, Haryana for sharing generously their knowledge and time, which inspired me to do our best during my internship training.

I would like to express my immense thankfulness to, CEO of VIPUL MedCorp TPA Private Limited, Gurugram , VIPUL MedCorp for its excellent guidance, constant support and encouragement without which the successful completion of this project would have been a distant reality. His critical approach, guidance, and encouragement have helped me to bring this subject to a successful completion

I am glad to acknowledge Prof. Dr. Anandhi Ramachandran, IIHMR for incorporating right attitude into me towards learning and for helping and supporting whenever required. His tireless pursuit for perfection and professional insight were source of constant inspiration to me.

I would like to extend my sincere thanks and profound gratitude to, Senior Manager - Corporate Marketing, and VIPUL MedCorp for providing me with a good environment and facilities to complete this project.

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LIST OF ABBREVIATIONS

TPA	Third Party Administrator
TAT	Turnaround Time
SMO	Second Medical opinion
EMRM	Electronic Management Record Management
OPD	Out-patient department
IVR	Interactive voice response

CHAPTER 1

INTERNSHIP REPORT

ORGANIZATIONAL PROFILE

INTRODUCTION

VIPUL MedCorp TPA Pvt. Ltd, a company promoted by VIPUL group is engaged in the managed healthcare facilitation & has obtained a license from IRDA for TPA activities (Health) and offers its clients a wide array of services and products in the following areas:

- Third Party Administration (Health) services (TPA)
- Cashless Medical Services
- Claims Handling, Management & Back office operations
- Enrolment of Data and Health card
- Healthcare Assistance Services
- Outpatient healthcare facilitation & Management
- Second Medical Opinion
- Cost Containment Services
- Preferred Service Provider (PSP) Networks
- Online assistance

PROMOTERS & MANAGEMENT

Promoters

VIPUL MedCorp TPA Pvt. Ltd. has been promoted by VIPUL Group. VIPUL Group (consisting of VIPUL Motors Ltd., VIPUL Infrastructure Developers Ltd) is promoted by Mr.vinit beriwala and Mr .punit beriwala, third generation entrepreneurs

The promoters have a long-term vision of providing Complete Health and Medical Insurance products to the largely untapped Indian population.

Management

The Company has appointed, Mr.RajanSubramaniam, a Management graduate and a qualified Insurance professional, as its CEO. He has wide experience in the TPA Industry and is assisted by qualified professionals from the field of Insurance and Healthcare.

VIPUL MEDCORP TPA - PRODUCT VISION

- To increase medical care capacity
- To augment the existing Product/Service
- To provide the client with in 24 hrs. Service
- To provide one stop shopping for all medical needs
- To resolve the medical problem in a fast, efficient and convenient manner (improve employee productivity).
- To render cost containment services to our clients on their medical claims
- To offer total Health & Intermediary Insurance & administrative solutions.

VIPUL MedCorp TPA - Infrastructure

- Headquartered in Gurugram with branch offices in New Delhi, Noida, Faridabad, Brindavan Jaipur, Mumbai, Kolkata, Bangalore, and Chennai & Cochin.
- Medical Network of over 6000 + hospitals/Nursing Homes.
- Operates a 24/7 Assistance Centre.

- Tailor-made software developed in-house with full web-based access for Claims Tracking, On-Line Access and Querying.
- Professional manpower presenting our clients with benefits derived from our knowledge & experience of the medical network, TPA & Insurance fields.

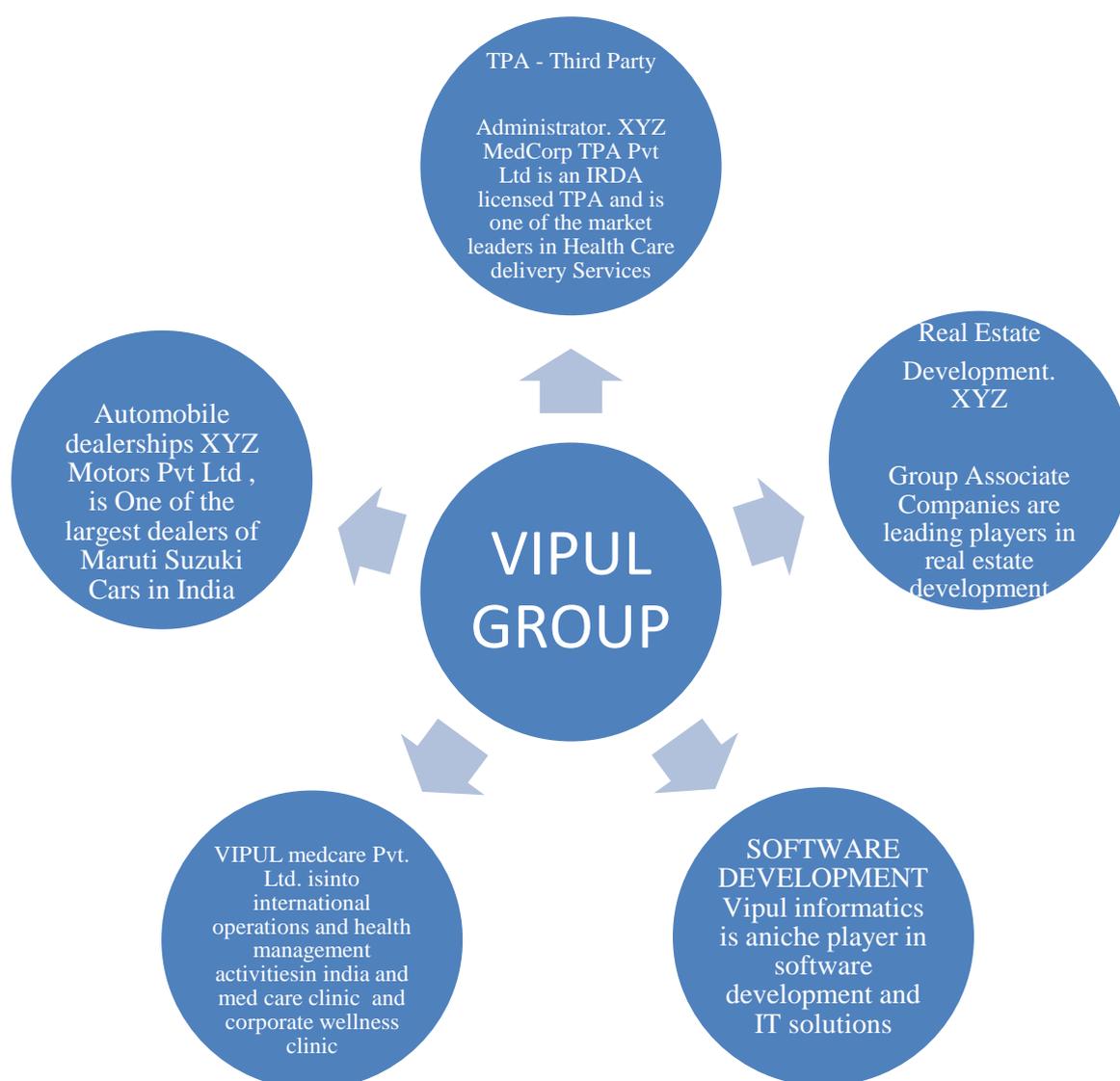


FIG-1-STRUCTURE OF ORGANIZATION

MASS POLICIES

VIPUL MedCorp TPA is one of the leading players in servicing mass policies (RSBY/UHIS)

And offers following services

- Finalisation of enrolment and transaction software
- IEC/Scheme campaign and mobilisation.
- On site personalisation and issuance of smart cards
- Hospital empanelment and Transaction software installation and training
- Cash less benefit to Insured.
- Data Upload/MIS
- 24/7 help and maintenance of Distt. Offices/Kiosks
- VIPUL MedCorp TPA was given the best Data Management award for RSBY Gujarat in 2010

RTS Rural Technologies Solution Pvt. Ltd., (An Associate of VIPUL Medicare Pvt Ltd) is providing IT based solutions to Govt. bodies, Health Insurer, TPA's and other Healthcare

Service Providers. The Company is a QCI Accredited Smart Card Service Provider (SCSP) and is primarily working in rural areas /RSBY/Financial Inclusion, Domain and is involved in following activities;

- Enrollment & on site personalization

- Database Management,
- Software Development & Testing,
- Distt Kiosk Management,

IT base solutions, /Web base Process

- Process Audit, /Claim control

HOSPITAL NETWORK

•VIPUL MedCorp TPA is currently having 8500 Providers in its network, which is one of the largest amongst existing TPAs.

Network Provider Accreditation Norms

VIPUL MedCorp TPA has shortlisted hospitals and Nursing Homes as per the

Minimum norms prescribed under Medclaim Policy, that is --

- Hospital / Nursing Homes established for Indoor Care / Treatment of sickness & Injuries
- Either registered as a hospital or nursing home with local authority and under supervision of registered & qualified medical practitioners, OR, Should have at least 15 IP beds [10 beds in class C town]
- Fully equipped OT, wherever surgical procedure is carried out
- Fully qualified Nursing Staff – round the clock

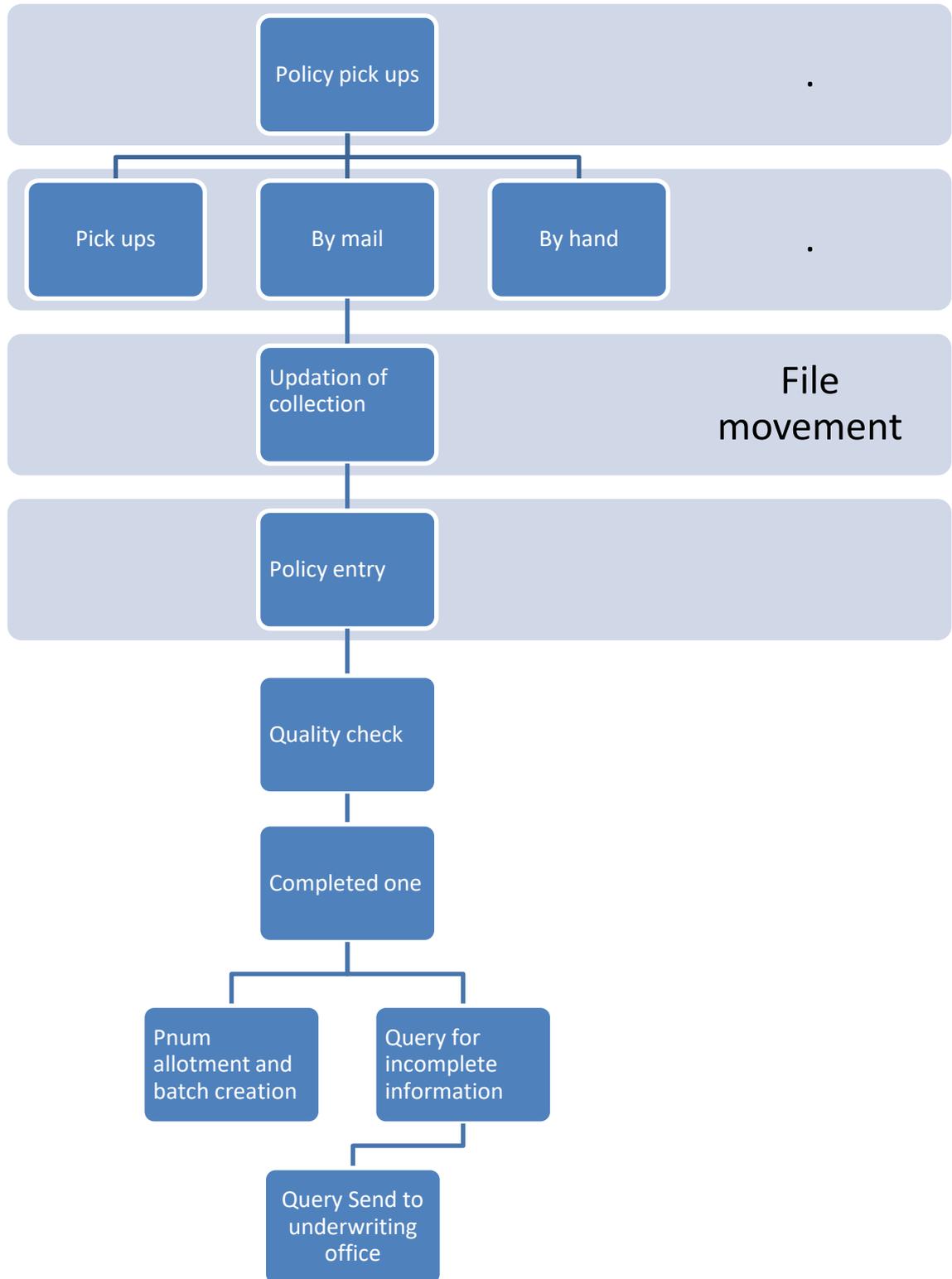
The steps involved in our empanelment process are the following:

1. Screening of PSP & Introduction letter
2. PSP Application Form duly filled in by the PSP and submitted along with rate list, doctors bio data & various facilities offered by them
3. MOU with the PSP after rate negotiation
4. On site assessment of the PSP
5. Monthly/Yearly feedback system in order to decide on renewal

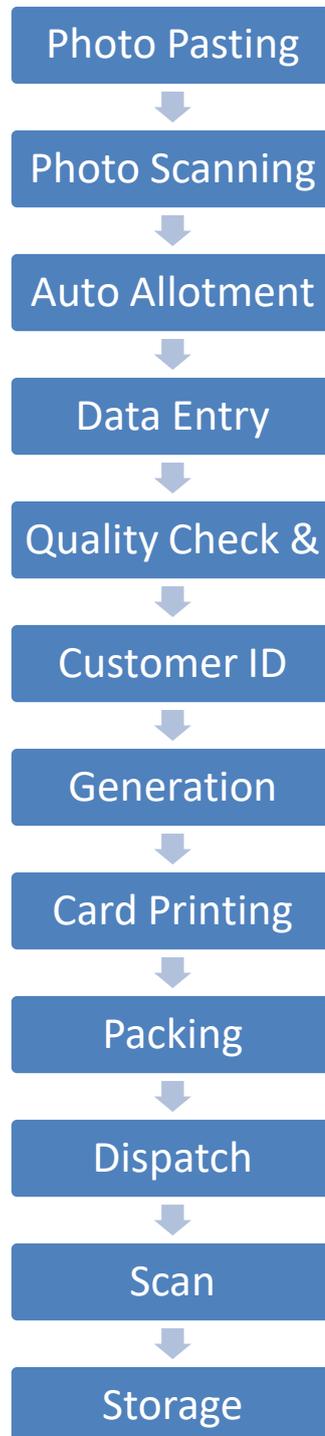
While empanelling a PSP, we also look at the following criteria:

- Infrastructure & Facilities available
- Quality of Service rendered
- Patient care background
- Bed-strength and availability
- Management background and past track record

ENROLLMENT PROCESS FLOW STAGE 1. INCOME BOOKING

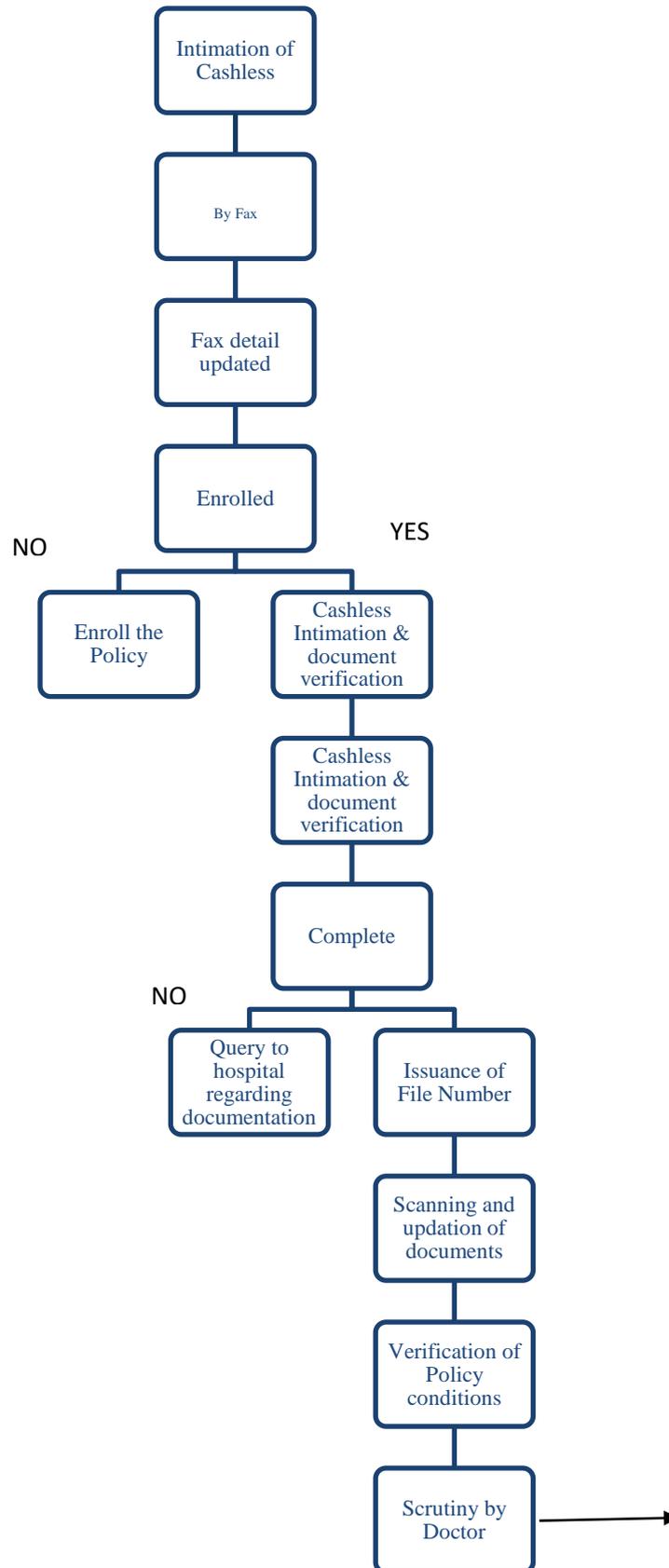


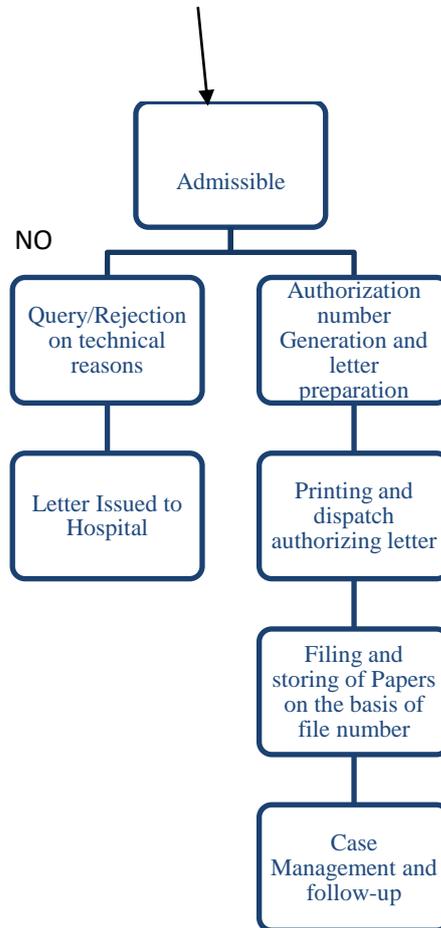
STAGE-II CARD PROCESSING



CASHLESS DEPARTMENT:

Cashless Process Flow





BUSINESS DEVELOPMENT DEPARTMENT:

Prospecting, researching and developing relationships with potential clients

Developing the marketing message and assist in the design of the marketing material that effectively communicates the VIPUL MedCorp ideal logistics

Conducting presentations for business clients for sales purpose

Providing value-added services to the corporate like wellness programs and wellness calendars, etc.

Coordinating with staff of different department like operations, information technology and customer service to address client requirements and ensure client satisfaction

Increasing business volumes while ensuring that the Port's core mission of servicing marine-related material handling requirements is optimized • Securing new business as well as maintaining and growing current accounts • Continuously seeking to upgrade the client mix to achieve long-term revenue growth and set the foundation for on-going investment

CORPORATE DEPARTMENT

The basic responsibility of this department is :-

They are responsible for handling claims of corporate having group mediclaim policy

They act as a relationship manager between corporate and tpa .

Responsible for providing additional services for good relationship .

CHAPTER 2

DISSERTATION

REPORT

INTRODUCTION

In this fast driven society, where the current climate in the healthcare sector demands efficiency and patients' satisfaction in medical care delivery. The numbers of missed appointments, unnecessary waste of patient's appointment time have caused an impending problem for healthcare institutions. Hence, there is need for integrated healthcare system to intervene and provide seamless care for both inpatients and outpatients. Therefore, an appointment booking system lies at the intersection of providing efficient and timely access to health services. Outpatient appointment booking is a subject of great interest to hospitals and other medical institutions.

An appointment system is a trade-off between doctors' and patients' waiting times. Although outpatient clinic's average internal waiting times are long, doctors frequently have idle time. Patients who do not show up or who are late for their appointments cause idle time for doctors, leading to temporary underutilization of the outpatient clinic's capacity. Gaps in the appointment schedules also cause under utilization of the hospital services.

The word "appointment" indicates duration of time apportioned. Appointment arrangement can be categorized into two, Dynamic and Static. In later category appointment reservation accord must be made earlier to the onset of the sitting, which is the prevailing appointment system in hospitals. This is implementable when patient shows up to the clinic space so that they can be coordinated dynamically, which broadly comprises of patients previously admitted to a clinic or hospital. The prosperity of

exercising this system will reach everybody who took part in the scheduling process. Staffs and administrators can handle their duties further accurately and efficiently, while patients have the capability to fix their reservations and appointments conveniently and more quickly. Online appointment fixing and scheduling system is by which an end user or directly, a patient can approach the website or web application and connect hospitals across India , and by the online software system, the patient can conveniently book their appointments. Along with that, patient can also contribute supplementary details to the medical practitioner, composing the doctor more familiar of their position and offering the doctor duration to draw up the significant data for when the patient's visits or appears. In this way, online appointment reservation and scheduling system can help the patients. There are considerable online scheduling tools in the internet, only a few of which are able to help.

Research on outpatient clinics shows that waiting times are patients' main dissatisfaction with hospital services. According to doctors and personnel, overtime and peak workloads are potential threats for the quality of care and the quality of labour, because they increase stress and time pressure. This research focuses on outpatient scheduling as a means to solve these problems for outpatient clinics. Access time is the time between the patient's request for an appointment and his arrival at the outpatient clinic. A patient's internal waiting time is the period between the scheduled starting time and the actual starting time of his consultation. Waiting time due to a patient's early arrival is extracted from the internal waiting time, since it is not a consequence of the appointment system creates a user friendly environment for patients to use. The aim is to empower the patient to book and manage their own appointments at their convenience, shortening the unnecessary waiting time for consultation.

What is a Market Analysis?

Market analysis is anything but empty lingo. It's really exactly what it sounds like: determining the characteristics unique to your particular market and analyzing this information, which will help you make decisions for your business. By conducting a market analysis, you will be able to gather valuable data that will help you get to know your customers, determine appropriate pricing, and figure out your competitors' vulnerabilities.

SCOPE OF STUDY

- The market analysis will help the e-commerce industry to understand the market for their business
- This will help the organization understand the expectation of clients who are going to book appointment from online portal

PROBLEM STATEMENT

The success of any online portal depends on how effectively it has been used by the clients/ end users. This is reflected not only in the user traffic also on the feedback and satisfaction expressed by the users. To have an

effective and useful online portal it is important to understand the problems faced by the users while using the portal so that they can be removed. This can be done either by collecting the feedback from the users or by analyzing the issues raised by the users while working on the portal. Though there are few studies that highlight benefits of online portal for registration of appointment at hospitals there are negligible studies and reports that talk about the issues related to online scheduling. The current study is a small step adopted in closing this gap.

OBJECTIVES

- To gather information regarding functionality of online portal and compare it with traditional appointment system.
- To analyse information why the appointment's is being missed by the patient.
- To understand the perception of the patients (clients/ end users) regarding the services offered by online scheduling system.

LITERATURE REVIEW

Waiting Time

Waiting time simply means a period of time which one must wait in order for a specific action to occur, after that action is requested or mandated. Patients' waiting time has been defined as "the length of time from when the patient entered the outpatient clinic to the time the patient actually received his or her prescription". It is defined as the total time from registration until consultation with a doctor. There were two waiting times, the first is time taken to see a physician and the second is time to obtain other services like tests, reports & paper deals with the waiting time to see physicians.

Long waiting times are a serious problem for patients. Appointments had no benefits for patients not seeing doctors or collecting repeat medication. There was, however, an overall increase in patients' waiting times after introducing the system, mainly due to one typical day in the follow-up study. Patients were enthusiastic about the appointment system at all stages.

Patients' Appointment System

A patient appointment system or appointment schedule for health care centre started long time ago. Management of patients' appointments has earlier works and has developed simplified queuing models and fairly static scheduling conditions. Another attempt was made to traditionally the appointment system has considered that the doctor time is more important than patient time. So an appointment system was designed to minimize the doctor idle time but current designing of an appointment system is based on decisive factors with respect to both the patient and doctor.

The patient appointment system has complex structures because it represents the patient appointment time in the healthcare centre and controls the patient waiting time based on the type and the period of patient appointment.

Appointment Delay

Past research shows that the longer the appointment delay which is defined as the time between the day a patient requests an appointment and her actual appointment date, the higher the chances that he/she will cancel or not show up. This suggests an obvious way of minimizing no-shows and cancellations: this is done by asking the patients to come right away or make appointment requests on the day they want to be seen. This is called an open access (OA) or advanced access policy.

Managing Patients' Appointment system

Managing patient appointment system using computer application aim to manage and reduce the patient waiting time in the health care centre. Some health care centres do not use any appointment system. So it has a longer average patients' waiting time than the health care centre that adopts the patients' appointment system. While patients can wait for more than one hour to be attended to by a physician in a health care centre, they also can feel that they are being disregarded and treated unfairly. So when patients are given the time of appointment in a health care centre, they can evaluate the quality of service in the centre.

Hence, developing patients' appointment process for health care centres necessitates the use of a sophisticated queuing model that captures much of the real system's features (saving time, reducing idle time, etc). Therefore the appointment schedule represents the real situation in the health care centre faced by patient appointment schedulers. On the other hand, the standard practice for scheduling and processing patient appointments are based on the nature of treatments of the patients and that better approaches more sensitive to patient needs are desirable .

Online Booking System

An online system is also known as a web based system. A web is made up of page that is commonly known as web page or web site, and a web site is a computer program that runs a web server that provides access to a group of related web pages. A system is a set of independent components working together to achieve a common objective. Therefore a web based system is a system that is accessible over the internet by a user in order to achieve a particular task for a given purpose. The Internet is a system that is use to connect computers and computer networks. It helps to link millions of computer networks all over the world and it allows the users to get information stored on other computers from a long distance. The public demand for better healthcare system and the alarming number of missed appointments have forced the healthcare sector to recognize how they deliver care services. With the advance of IT technology today and seen healthcare system as a critical System, appointment booking system lies at the intersection of delivering efficient, dependable and timely access to health services. The conventional way of appointment booking is via fax, phone or email. But with the growing internet penetration, healthcare industry is moving towards the use of an online appointment booking system.

. The Internet provides a wide range of technologies that enable hospitals to communicate with their patients. Recently, as the prevalence of Internet increasing, many hospitals initiated the website appointment system. Electronic patient-provider communication promises to improve efficiency and effectiveness of clinical care.

Existing Hospital Appointment Schemes

One application developed to manage patients' appointment scheduling has used exponential enter arrival times. This model assumes that the exponential enter arrival times could not be directly validated by date, and it is limited due to the nature of the appointment scheduling. Since appointments are scheduled in the future, the exact model of call arrivals will only have limited impact on measures related to the time between the call and the appointment time. For this reason, the challenge for making appointment system is designing a suitable system based on the health care procedure environment. Hence, the appointment provider in the health care centre can schedule a patient into an appropriate time slot on a given day.

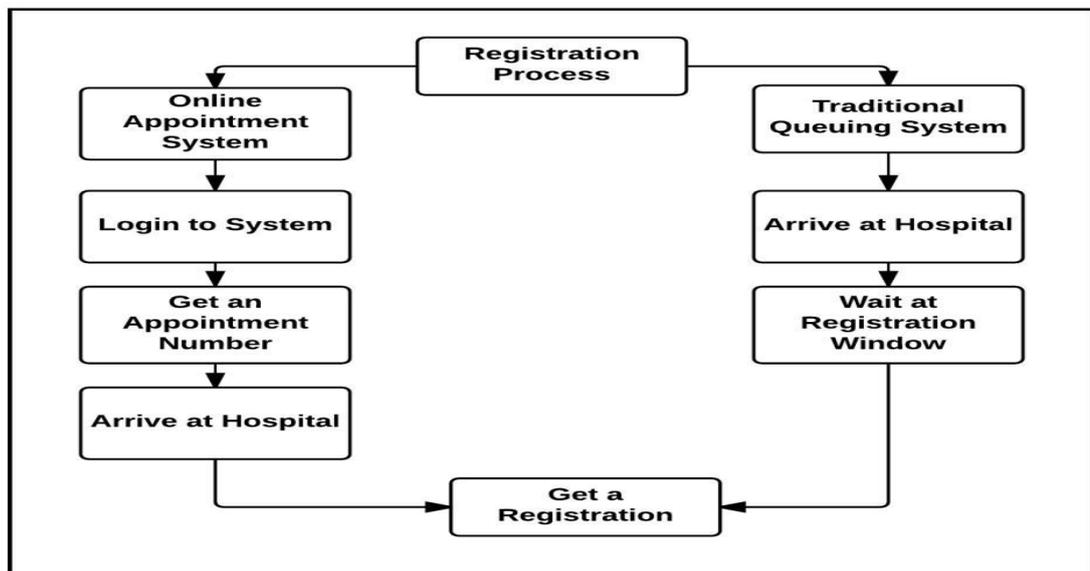
Study between Traditional and Online Appointment Reservation and Scheduling System

In classical system patients has to go to the hospital and wait in a queue at the appointment desk to make the reservation and get an appointment. But they generally finish up waiting endlessly for very long time intervals. The patient might choose to fix an appointment, but this choice is not possible at all times and does not likely work well for all people involved in the system. People involved are as follows: The medical

personnel, the hospital and the patient. The patient longs for effortlessly convenient and accessible times.

When they cannot discover a quick enough appointment they feel like waiting endlessly (Duration between scheduling and the appointment being made available).The patient also expects to be seen all of a sudden or within few minutes of their visit to the hospital or clinic (whether an appointment has been scheduled earlier or not).

The duration a patient waits from the given time of their schedule to the time that they must actually receive the service is known as direct waiting time. The patients use this technique and waste much waiting time just by standing in queue at the registration counter to make sure a successful registration of the appointment has been made with a certain doctor.

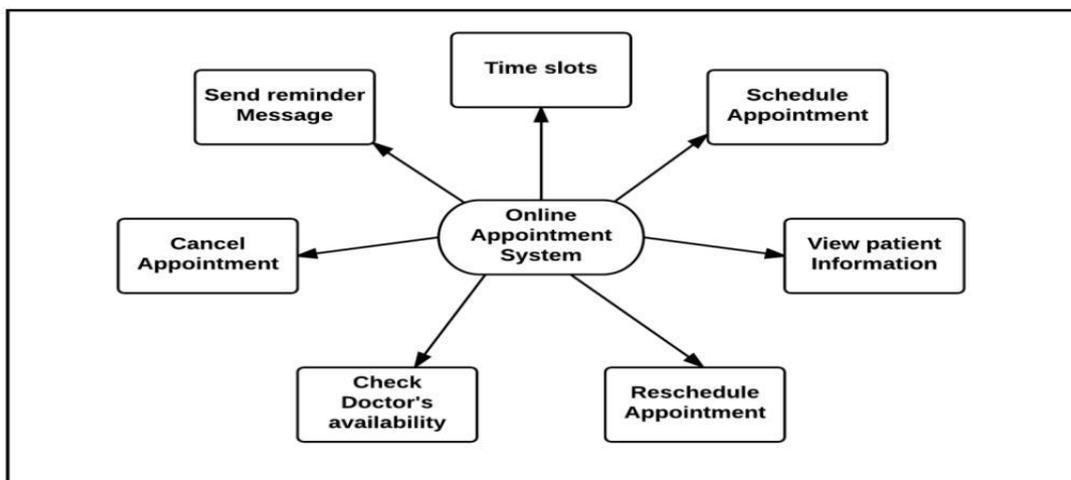


At the nominated appointment time, patients reach at the hospital and get the registration that is allotted to their appointment number. These patients need not queue at the registration place. In this way both reduced and hospital's expensive resources can be idolized readily.

The registration can be either done by traditional queuing system or by online. In order to book through traditional system we need to arrive at the healthcare facility and wait near registration window. While online saves time so we can book appointment on the go by simply using handheld devices. These are two known ways to get an appointment in hospital.

Software Architecture for Online Appointment Reservation and Scheduling System

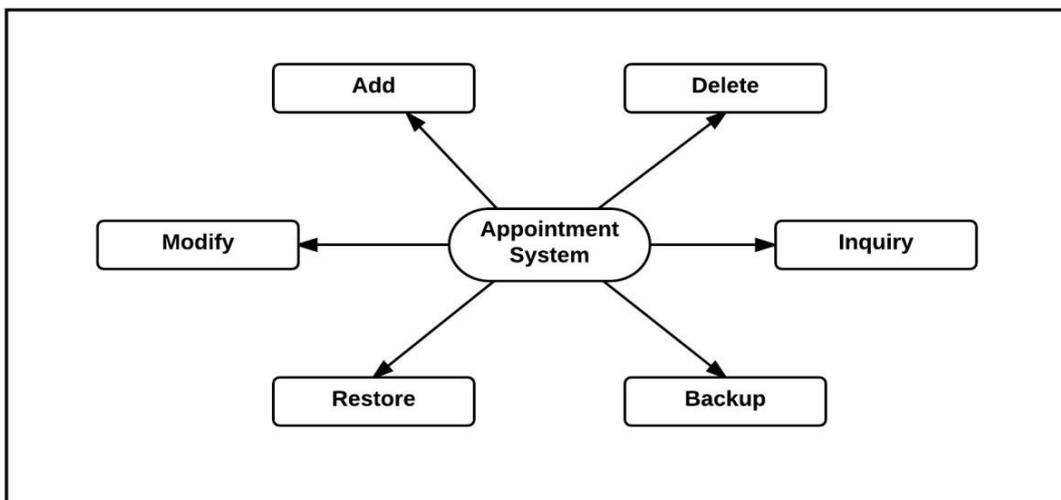
Features of Online Appointment System:



As per Server/Browser exemplary an Online Appointment Reservation And Scheduling System contains of two sets of activities .The first set of activities are online registration activity along with register and login selection of service, date and other registration booking activities. It provides options to choose preferred time slots, choose hospital on our preference; we can cancel or reschedule the appointment according to our convenience.

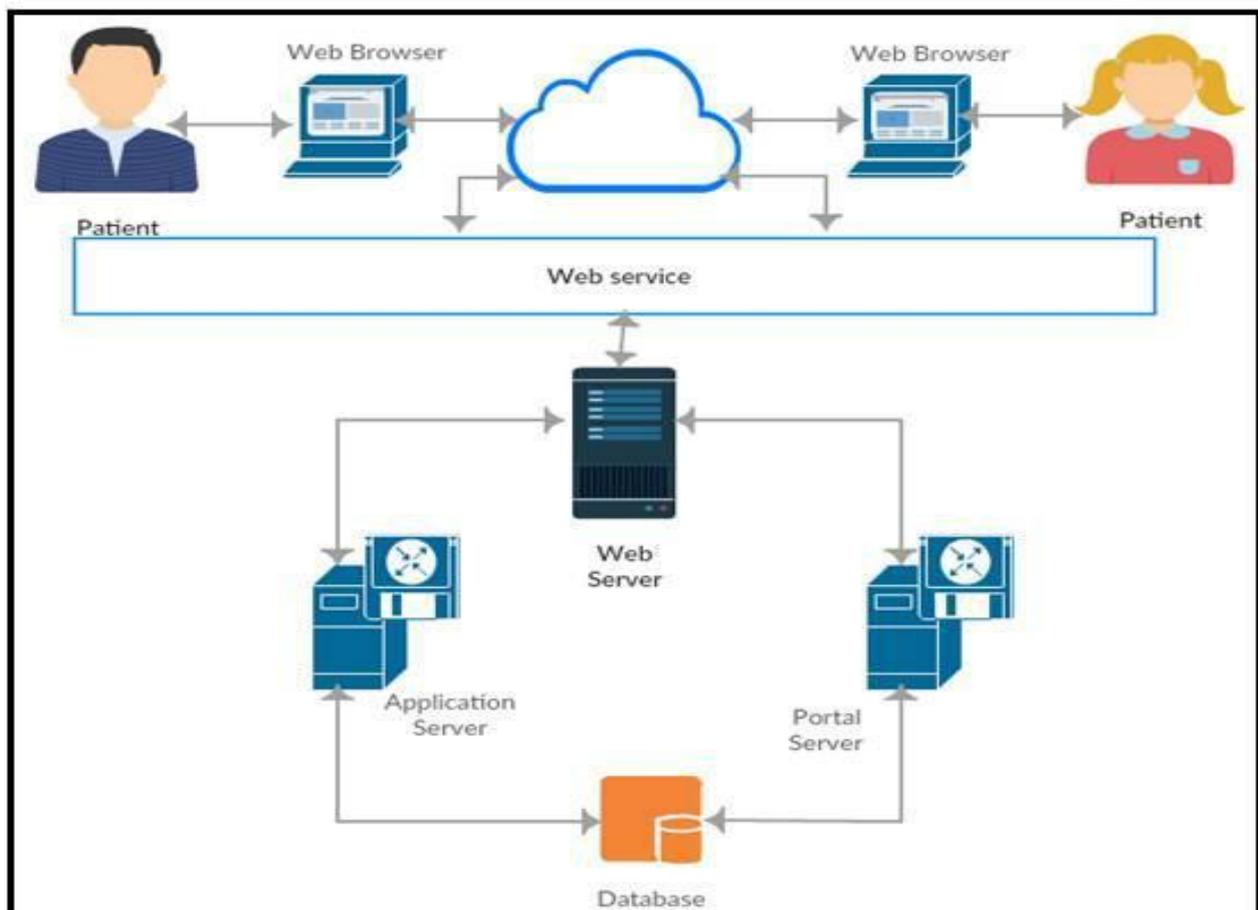
Other grade service are managing data services avowing the database executive for adding, deleting, modifying, inquiring, restoring and backing up of data. Adding, deleting, modifying and inquiring are primitive exertion of managing data. They can efficiently uphold the liability of database that helps to meet the definite demand. Backup and recovery of data allows enhancement of data and security provided to the system

Functionality of the appointment system:



Making an appointment with preferred date and timings is the main feature of provider-patient system. A well-integrated online appointment reservation and scheduling technique enables the software to run on different platforms. The ultimate goal of the system is to integrate several scheduling procedures to achieve a consistent and easily accessible web-application. Web application works on all platforms and does not consume more storage space

Data travelling through the system:



METHODOLOGY

- Study design - Retrospective Analysis
- The data collected is based on secondary data (appointment) and primary data collection through telephonic survey
- Study area – 53 locations pan India & 153 providers
- Sample size – 578 appointments
- Target population – ABC employees & their dependents

RESULT

OBJECTIVE 1

ONLINE MEDICAL APPOINTMENT BOOKING SYSTEM

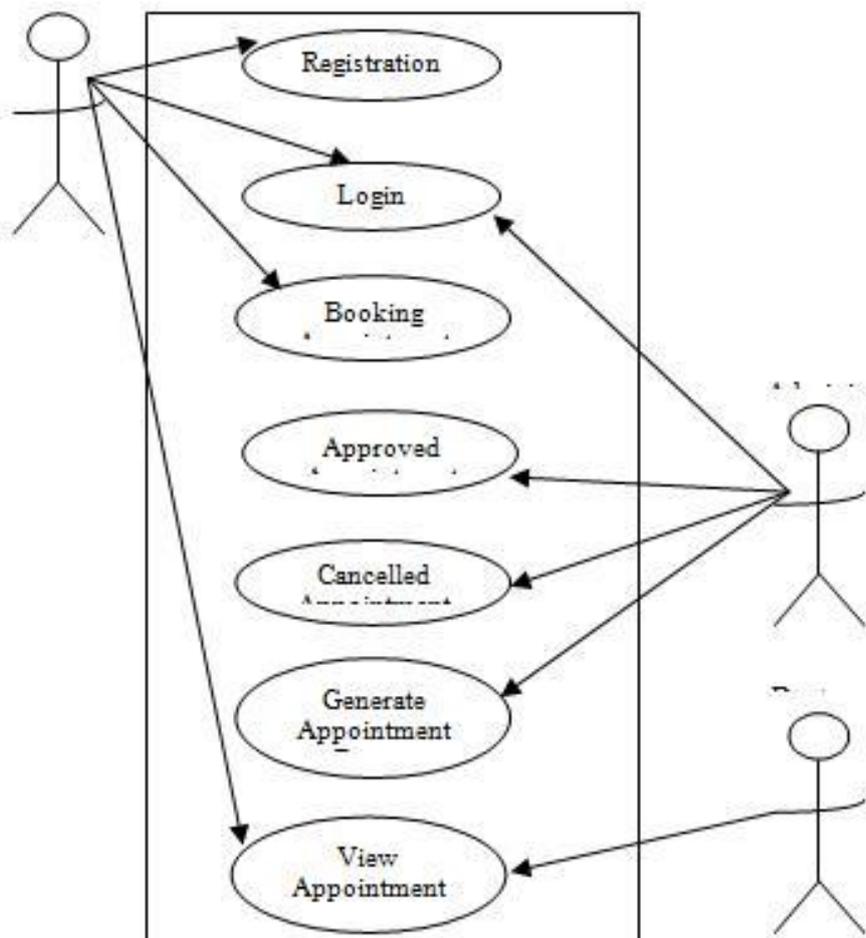
We have launched a wellness programs for our leading corporate client, under their International Wellness Program. Corporate has over 30,000 members, who would be availing the services at various centres and we would like to avail following activities.

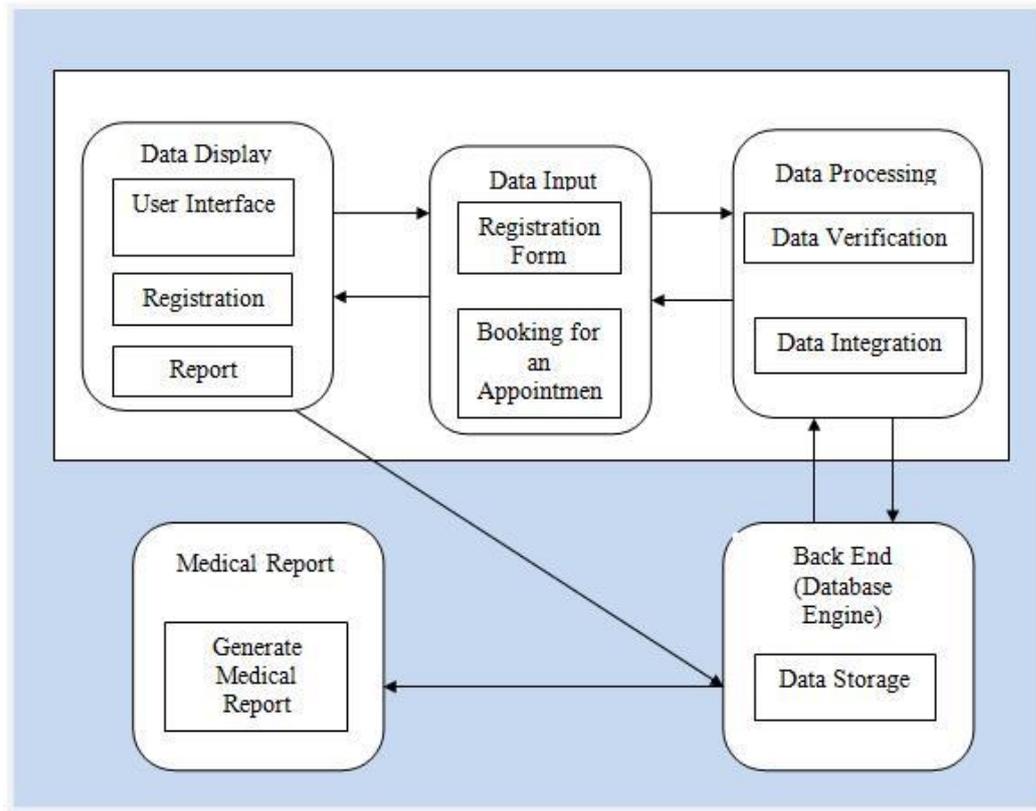
- OPD Consultation.
- Preventive Health checks (Adult + Child) as per enclosed tests.
- Vaccinations (As per enclosed list)
- Pre Natal checks as per enclosed list
- Cancer Screening Diagnostic tests – Mammography, PAP Smear, Colonoscopy, Sigmoidoscopy, FOBT, Skin specialist consultation to rule out skin related carcinomas

- Pathological investigations – Diabetes screening, Lipid screening and other blood tests.

The user interface allows the user to navigate the system and communicate with the database. The system interface design is simple enough to be the use for anyone with little knowledge of computer operation and the system is user friendly and made easy to use through the use of Windows. The inputs to the online medical appointment booking system are captured through the user interfaces available in administrator's web account and the individual patient's web account. A login Menu, which contains a user-friendly interface for capturing valid registration code, username and password, is available for each patient to logging in to their various accounts. In each patient account, data pertain to the patient and appointments booked are submitted. All these captured data are stored in the database.

All the Appointment requested automatically sends an appointment request to concerned Hospital department for confirmation of appointment. The portal also generates MIS for Back-end purpose for proper handling of things.





PORTAL LOGIN MENU

There is need for every new patient to register before they can access the system, a patient must have a username and password which they will use to login before they can book for medical appointment. Any patient that does not register will not be allowed to access appointment booking Menu because to login to the appointment Menu requires a username and a password. New user to use the system.

APPOINTMENT BOOKING PORTAL

Login to your account:

Please provide information below to proceed..

Select Company:

User Name:

Password:

Login

Forgot password for your account ? [Click Here](#)

| © 2016, All rights reserved.

IMAGE 1: login page

PATIENT ACTIVITY MENU

The patient activity Menu displays the list of link of operation that a patient can perform with the system; the following are the activities a patient can perform.

- Appointment Booking
- View Appointment Report
- Add Dependents

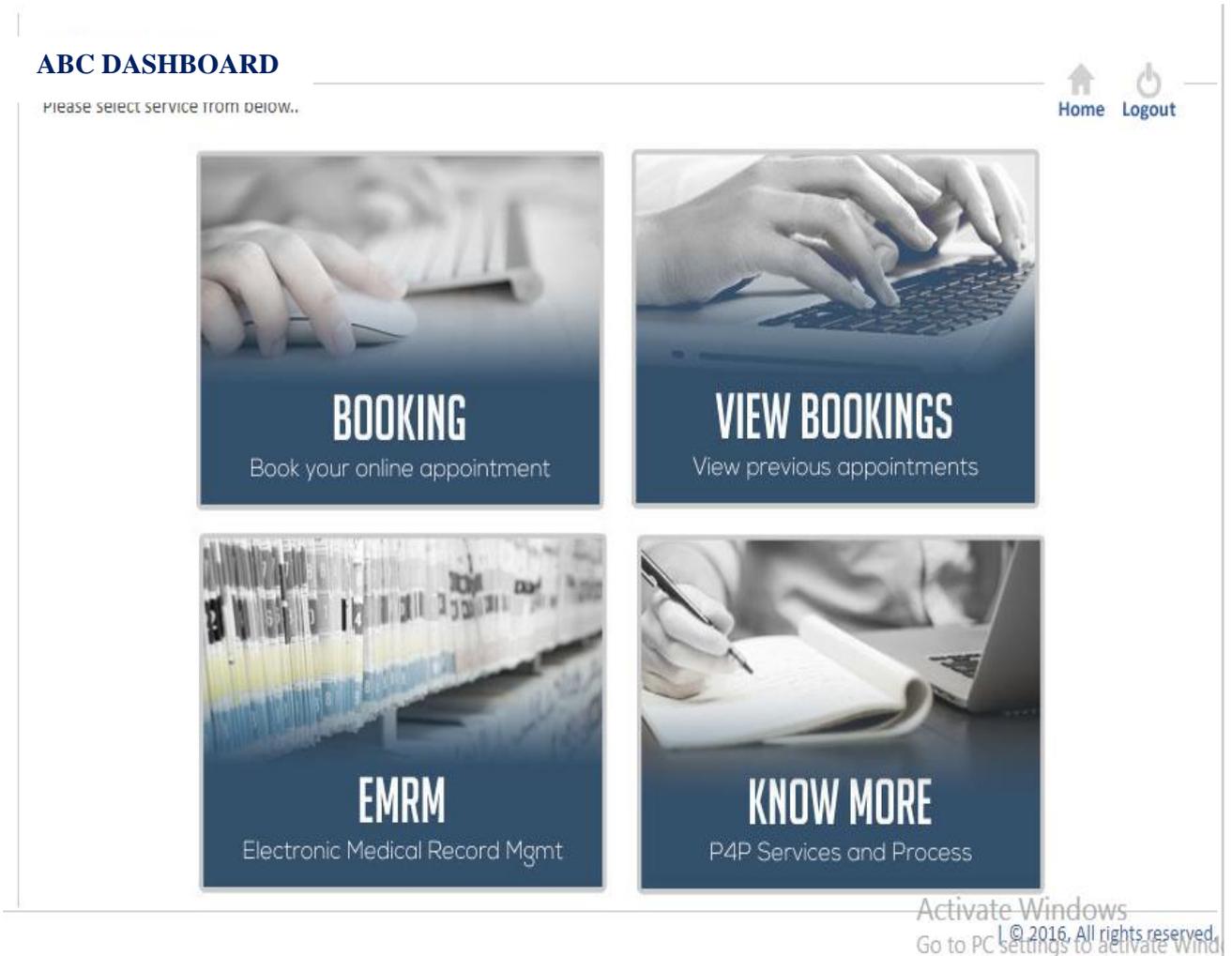


IMAGE 2; Dasgboard menu for cliens

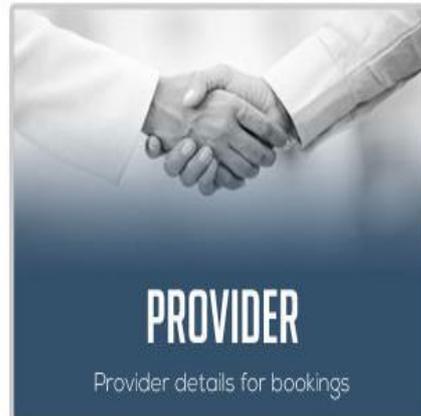
EXECUTIVE LOGIN PAGE

This is the most important aspect of online booking portal, using this we can look at the total booking that is requested. From here reasonable actions are taken for providing hassle free experience with Zero delay to the patients. From here monthly MIS can be downloaded regarding appointments.

Dashboard:

Please select service from below..

 [Change Password](#)  [Logout](#)



Activate Windows
Go to PC settings to activate Windows. © 2016. All rights reserved.

IMAGE 3; dashboard menu for executive

RESULT

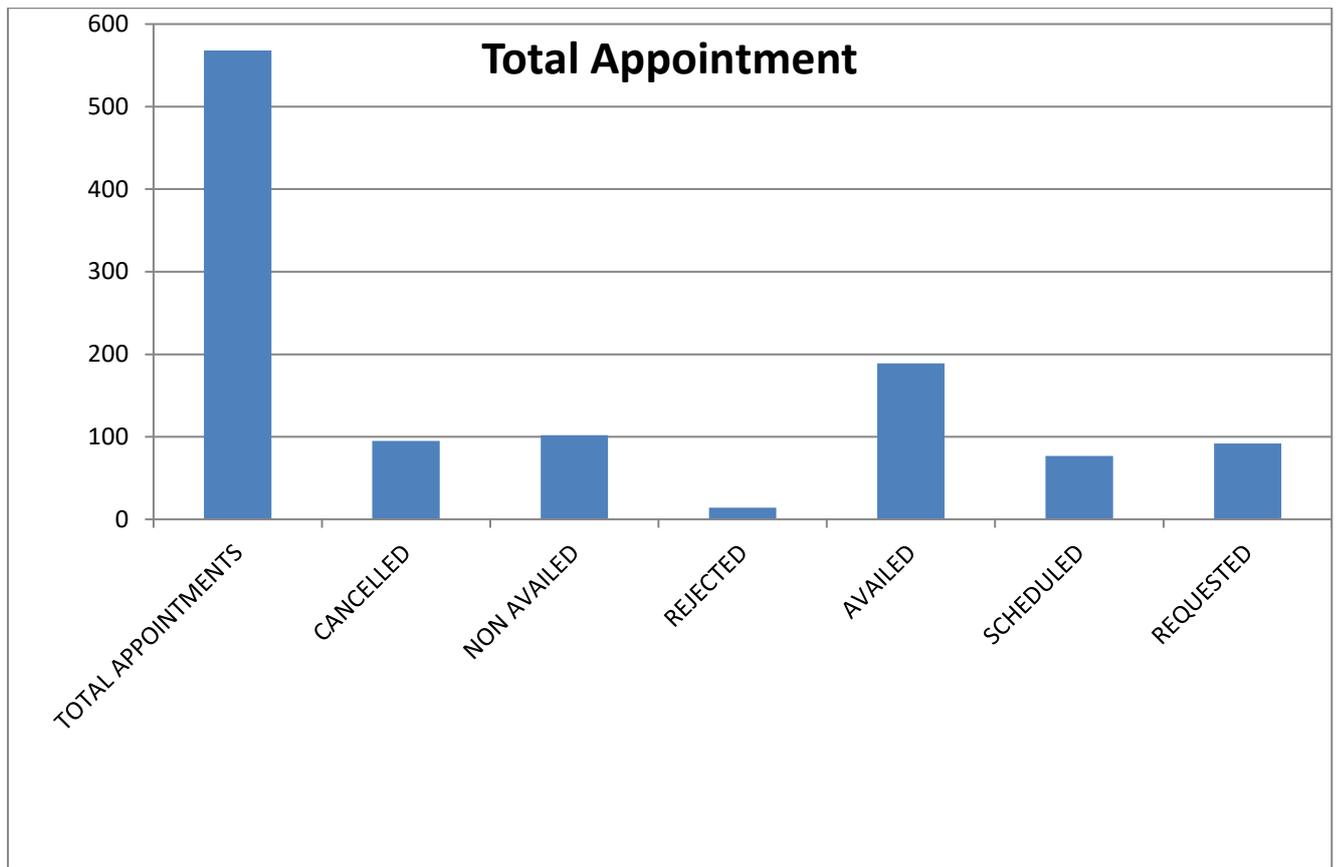
From the initial launch of web portal , around 568 request were placed . All these request are placed under various category like

- Cancelled :- appointment that are cancelled by the client
- Rejected :- appointment that are rejected by portal executive
- Aailed :- appointment that are successfully completed
- Not aailed :-appointment in which no show by client .
- Scheduled :- future appointment , already scheduled
- Requested :- future appointment ,still in requested phase

And if we compare it with walk –in appointment from observation and past studies , conversion of appointment and happiness level is quite less than .

DATA ANALYSIS AND INTERPRETATION

TOTAL APPOINTMENTS	568
CANCELLED	95
NON AVAILED	102
REJECTED	14
AVAILED	189
SCHEDULED	77
REQUESTED	92

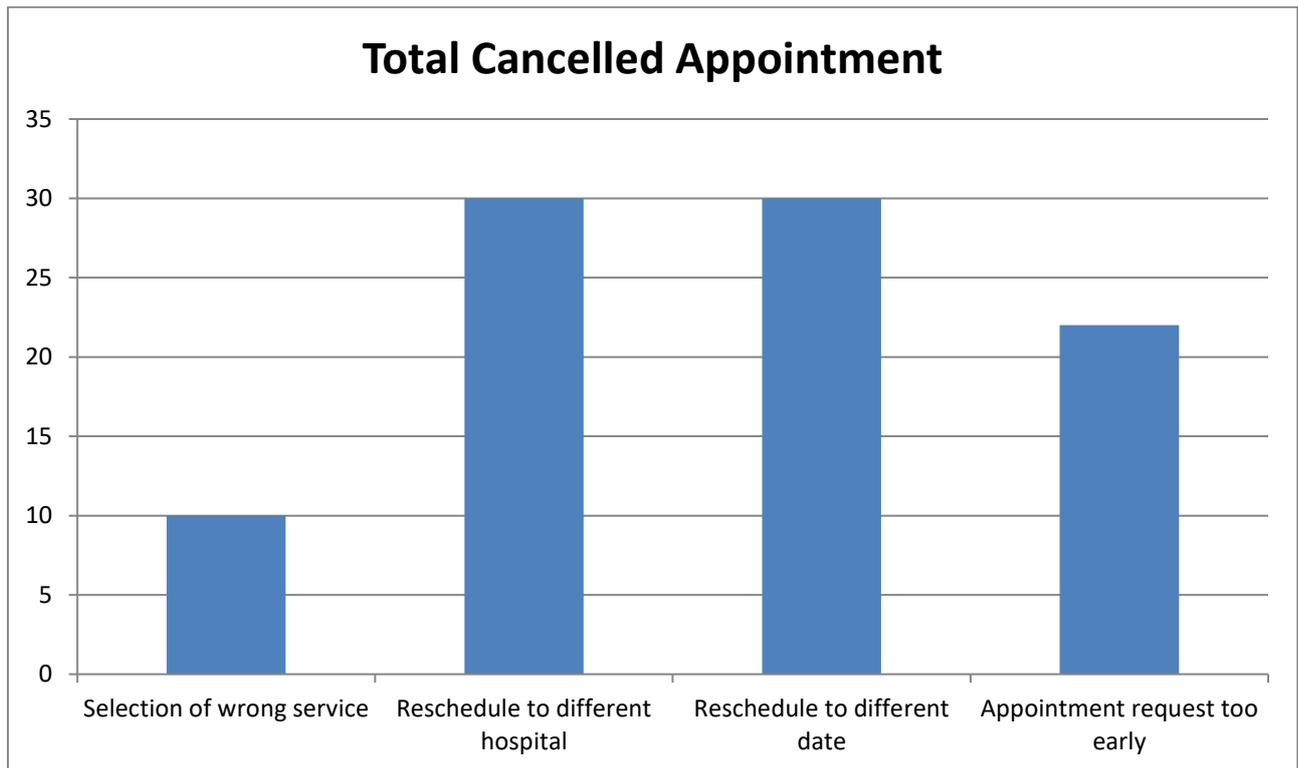


INTERPRETATION

A total of 568 request for appointment logged in the portal till 5/5/16, out of which 169 is in future. Of the remaining request 189 appointments is availed by patients. A large no. Of request i.e. 95 are cancelled by patients. 14 requested are rejected from portal side because of national holiday & 102 appointments are no-show and appointment delay.

Reasons for cancellation

Selection of wrong service	10
Reschedule to different hospital	30
Reschedule to different date	30
Appointment request too early	22

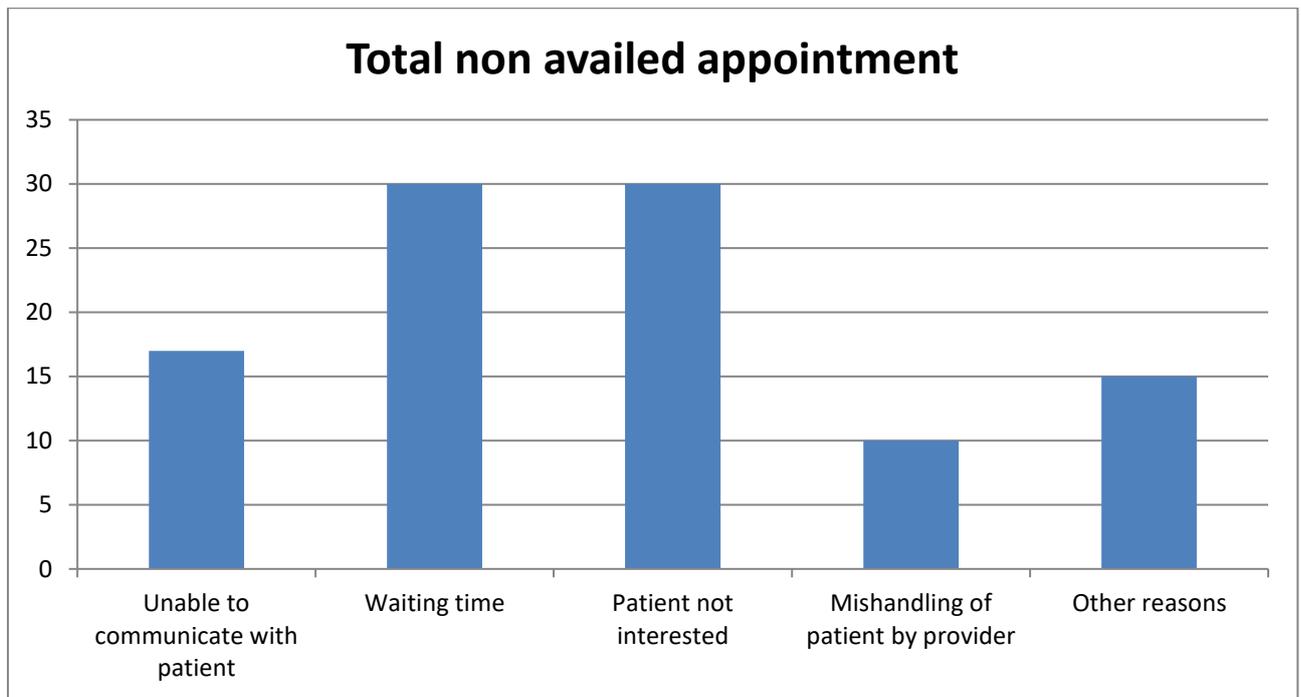


INTERPRETATION

Main reason for cancellation of appointment is that patient wants its appointment at different hospital or not different date. Some appointment cancelled due to the fact that they booked appointment too early and during this time window they changed their mind.

Reason of Non Avail of service

Unable to communicate with patient	17
Waiting time	30
Patient not interested	30
Mishandling of patient by provider	10
Other reasons	15



INTERPRETATION

Main reason behind non-avail of appointment is no show, waiting time & communication gap. 75% of non avail appointments are due to the patient side, while other factors include negligence from provider, non-availability of particular service at that hospital etc.

SATISFACTION LEVEL OF PATIENT AVAILED THE SERVICE

SATISFIED	175
UNSATISFIED	14

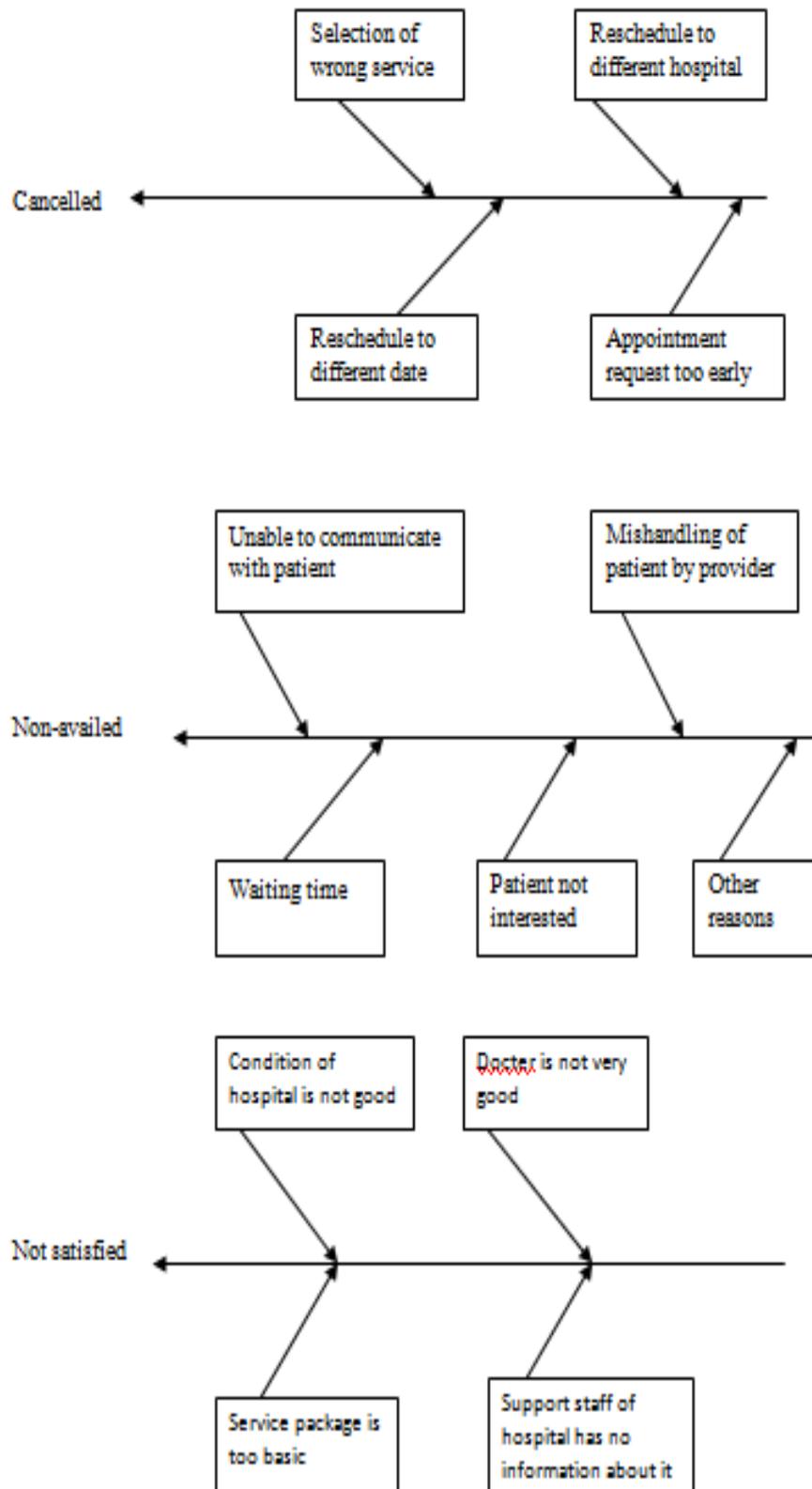


INTERPRETATION

Out of 189 appointments, 175 patients are happy to use this service, while 14 patients are not very satisfied because of following reasons

- Hospital is not very good
- Staff don't have prior knowledge of this program

ROOT CAUSE ANALYSIS (FISH BONE DIAGRAM)



RECOMMENDATION

- Proper mapping of hospitals along with their services and rates, and this information to be passed among staff members of hospitals.
- Web mailers as well as hard copy of mailers to be send to patients at regular intervals.
- Everyone is not connected to internet all the time, so we need to build a helpdesk 24*7 to communicate patient via telephone.
- Portal should provide all information regarding , various kind of services associated with us ,what is the procedure e.t.c. to the users .

LIMITATIONS

- Source for the data cannot be given due to the prior norm for confidentiality by the organization.
- Detailed root cause analysis could not be carried out due to confidentiality of the data

CONCLUSION

With the development of web based medical appointment booking system, patients are able to book and manage their own appointment with ease. They will be reminded of their appointments via SMS/email that will be promptly sent to them before their appointment date. The system itself also provides a quick view of their appointment at the Home page. These functions could indirectly help to reduce the number of missed medical appointments and patients no-show up for their appointment. Patients would be notified via SMS/email if their appointment were affected, when there is urgent needs of the service provider at other place or in case of any situation that can result to the absence of the service provider.

Patients could also track and monitor their own appointment record with this system. However, the display of bio-data such as X-rays and laboratory results are not included in the system due to technical constrain. The system will not be able to diagnose or prescribe drug for usage. The system is mainly designed to facilitate appointment booking between the patient and the health personnel

The system delegates some administrative work to the patients by allowing them to manage their own appointment and personal profiles. They could now maximize their competence and allocate more time to maximize service quality.

REFERENCES

- 1. ONLINE APPOINTMENT RESERVATION AND SCHEDULING FOR HEALTHCARE- A DETAILED STUDY -**
- 2. DEPENDABLE ONLINE APPOINTMENT BOOKING SYSTEM FOR NHIS OUTPATIENT**