

MEDAPP

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Abstract: - We are creating an Android Application MEDAPP with a white glove service. MEDAPP is an upgraded and simplified version of all application which is used in optimizing a data in medical for a doctors and consultants. That includes a concierge service with a personal Business Intelligence Software Advisor. The new version software and service accepted to the individual practices key indicators (KI) and reporting needs. MEDAPP a revolutionary return on investment system that includes optimizing of fee, insurance rate check, profit and loss analysis, marketing capability of every day, weekly and monthly reports that are itself mailed to you. MEDAPP takes data from Users practice management system and uploads to Amazon MYSQL Server. We take data from server and plot KIs (Key Indicator) and generate reports .For this we want to build a mobile app (Android/I phone).It take a help of web services to achieve a data from server.

MEDAPP is the data collecting and processing platform used for all types of mobile. MEDAPP will provide the four crucial Practice Optimizer daily reports:

1. Morning Report (MR)
2. Hygienist Meeting Report (HYG MR)
3. Daily Board
4. End Of Day Report

Keywords– glove service, KI, optimizer, reports, and web services.

I.INTRODUCTION

Medical practice management is a new field in market. Before some year's medical manager were not use this strategy. Doctors store and retrieve a data by their own technique. The entry of health care regulation initiated a change in doctor's work. The government is conclude that doctors are spending there more time into the paperwork than actual practices in patients' health care. Moreover more doctors found themselves confusing and difficult to understand by process and policies. Medical colleges did not give the any training about data management in medical.

Our vision is simple. "If we can help one Doctor maximize profitability by optimizing her practice, we must help thousands". Our Optimize Fees, Patients Now, Insurance Rating, Dashboards, Marketing and other capabilities have changed the lives of thousands.

Our Software Products enable small business healthcare offices to take control of the business and Medical aspects of managing the day to day operations which have over time become more complex and involved. Having control of the Management aspects of a small business healthcare practice translates into having more time and resources devoted to the clinical aspects of a practice. Providing accurate data to the healthcare providers and Team in a well-defined, reliable manner permitted the small business healthcare Team to strive for a higher standard of care and promotes better business practices.

We are provide you with remote access to your data from anywhere in the world through HIPAA compliant technology

and incorporate the latest in Net Microsoft Smart technology to give you the tools and systems to manage your office effortlessly. MEDAPP is the cloud based product concept to combine all products under one roof, using common data model, common business logic and scaling capabilities.

1. RELATED WORK

Related work is depend on Base papers and conference papers which work is already done in past of Medical application. Once you have been using a good management program for a while you will have accumulated a database on your patients, which you can use to create marketing material. Data base marketing combines word processing with data from the management system. To use it well you need to understand the practice data base and the merge functions of Word [7].

The electronic healthcare record (EHCR) is gathered a simple data about patient, it is team based. Information is shared by EHCR which technology is depend on Common Object Request Broker Architecture(CORBA).CORBA base architecture is proposed by European technical Committee for Standardization [1] [7].Accessing a data by MEDAPP is Better performance than CORBA base system. EHCR is stored a fixed record which is not changed the data after modification [1].

The proposed service-oriented medical framework provides direct communication between hospital and physician. This all information is access by internet with some web services. It also improving a process when access delay and absence of medical delays. It is divided into three frameworks mobile medical framework, medical services overlay network and local medical services. So it may loss any framework whole system will damaged. It provide services only for managing data, we are provide also that services and plotted as graph. It helpful for analysis purpose [2].

In healthcare system data will be access by various web services. Some research papers are created algorithm for optimizing data and report to the particular patient. This is a SOA architecture for healthcare information system. It is somewhat same as MEDAPP for optimizing a data. We are additionally provide Key Indicators which is optimize a data graph manner [3] [4].

2. MEDAPP WORKING PROCESS

Medical practice management is needed in a wide variety of different settings. Hospitals have the many numbers of employer in this field. Each department (i.e. radiology, oncology, laboratory services, etc.) has at least one manager to oversee per days operations, also hospital-wide medical managers who coordinate the activities of the individual departments and ensure all are working toward a same goal. Health care hospitals are also in need of well skilled practice management professionals [9]. Clinics generally see patients without prescheduled appointments. This need of special focus to staff schedule, making sure sufficient staff is on hand to control periods of large patient volume but not having too much staff present so they are sitting around without any work. It is a unique and main problem that the medical practice manager must constantly stay on top of to keep the clinic running slowly. An often missing area of practice management is home health agencies. Home health agencies provide a management of broad health care services to ill or infirm patients in their own homes. All things from medical nursing care to medical equipment maintenance is offered [1] [3]. Any medical practice manager is whole responsible for correct professional person is select into the right places. It is a precise organizational skills of job requiring. it is also difficult to choose special person for a particular task in practice management. There are offices specializing in orthodontics, obstetrics, cardiology, otolaryngology and more than this. There is require more practice are needed. Per day increasing of health care policies and insurance laws have also increase the demand for practice management profession. This field also expanding day by day as per requirements. It is a field with lots of opportunities and a bright future [5] [7].

Table no 1: Comparison of Base Papers

No	Paper Name	Disadvantage
1.	A CORBA-Based Integration of Distributed Electronic Healthcare Records.	1. Base on old version. 2. Not remotely access data. 3. Less functioning.
2.	A Service-Oriented Medical Framework for Adaptive Information Delivery in Mobile Environment	1. Base on only textual format. 2. Data may be lost
3.	Optimizing Medical Data Quality Based on Multi agent Web Service Framework	1. Multiple operations are required, so it may time consuming. 2. Desktop base

Once you have been using a good practice management program for a while you will have accumulated a database on

your patients, which you can use to create marketing material. Data base marketing combines word processing with data from the management system. To use it well you need to understand the practice data base and the merge functions of Word [3].

For Example: A simple example of data base marketing would be to sort your recall lists by age. Then send a recall card to each age group designed to appeal to their interests. Older adults would get one kind, children would get another, young adults could get a third and everybody else get yet another.

How it works-

DP (Dental Practice) is available in the entire United States and is a business intelligence tool with easy to use traffic light color-coded dashboard. The program allows the dentist to click and drill down into problem areas.

DP has the following key features and benefits

1. Real time practice vital signs and fee analysis
2. Practice valuation and patient payment system.
3. Insurance to cash analysis revenue and marketing.
4. Emergency management, CE management.
5. Real time analysis of cash flow.

2.1. Database

i. Robustness: MEDAPP is powered by Microsoft SQL server. No local database at client side: DPO's all database related problems are resolved by removing database need at client side. All the data will be on cloud.

ii. Performance: SQL server is much faster, robust and efficient than MS Access. It will show the results quickly.

iii. Database limit: There is no limit to the database size.

2.2 Alert

This module will show you all your alerts, events in calendar format, detailed alert view. When User login to your MEDAPP and if User is new user or existing user with no event /alert created, after Click on Alert, it will show you following screen.

For Creating New Alert, User has 3 options:

1. Click on Create Alert, it will open Create Alert window.
 2. Just go to particular date & double click there, it will open Create an Alert window.
 3. Click on New Event button in My Calendar section, it will open Create an Alert window.
- All above option will open same Create an Alert Window.

2.3. Profit and loss statement

Prepare your profit and loss statement in a categorized format. The categories will identify the first six critical factors which are available for us. They are:

- Personnel costs
1. Variable costs
 2. Facility and equipment costs
 3. Business expenses
 4. Discretionary costs
 5. Owner's compensation

In addition to above categories we added two categories as listed below:

1. Net Income
2. Other Expenses

1. Net Income:

Net Income = Total Income – Total Expenses

Total Income = PMS Collection + Other Income from FS

2. Other Income = we have provided separate mapping category “Other Income Details” on mapping screen, it includes the following categories:

1. Consultation
2. Discounts Earned
3. Gain On Disposal
4. Instructional Fees
5. Interest Income
6. Miscellaneous Income

2. 4. My Dashboard

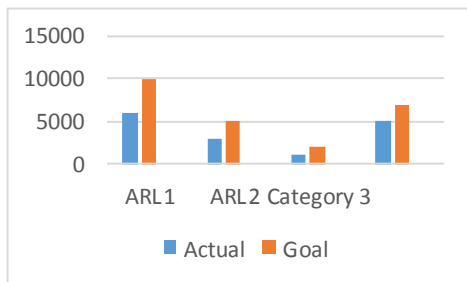
This module will analyse your practice in detail. It will show graphical presentation of Accounts Receivable vital signs, Collection by Practice, Gross Production by Practice, and New Patients vs. Total Patients, Dentist gross Production, Profit and Loss Account, Hygienist Production Analysis and many more KI’s grouped into different KI names. Similarly it will analyse the value of your practice. Also it will determine the utilization rate of your practice [4] [6].

My dashboard is grouped into following KI’s:

- i. Doctors KI
- ii. Essential KIs
- iii. Hygienist KIs
- iv. Practice KIs
- v. Procedure KIs

2.4.1. Doctor KI

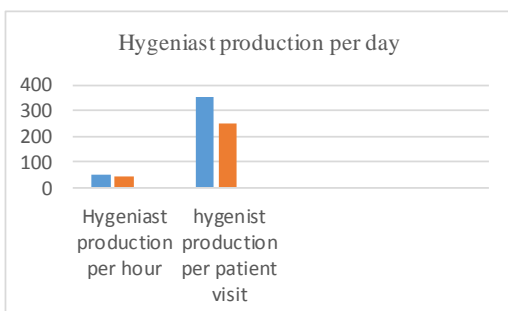
This graph shows Accounts Receivable from patients having AR< 30 days, AR >30, AR> 60 days and AR> 90 days and Total Accounts Receivables along with goal set. User can view the graph by clicking on Account Receivable Vital Signs according to selected month and year.



Graph 1. For DOC KI

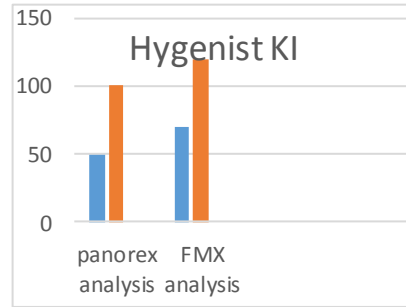
2.4.2. Essential KI’s-

List of Essential KI’s are given below. This set of KI’s helps in bringing information about dentist gross production, Profit & Loss accountant, and Scheduled production tec.



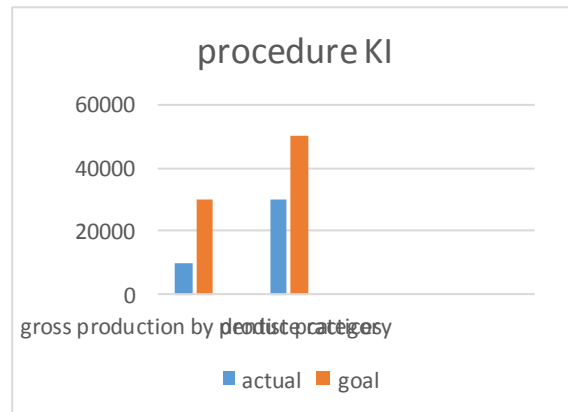
Graph 2. Essential KI

2.4.3. Hygienist KI’s-



Graph 3. Hygienist KI

2.4.4 Procedure KI’s-



Graph 4. Procedure KI

2.5. My Profile

Supporting Firms Analysis:

This KI shows comparison of expenses made on supporting Firms against Collections for a particular time period.

Asset Expense Vital Signs:

This KI gives details of money spent on assets during the time period. The amount of expenses is determined during mapping. If an expense is missing or too many are present, edit the mapped items to show the correct information.

For example: Expenditure on Assets includes Taxes, Rent, Maintenance expenses, Insurance expense, Depreciation expense, Equipment expense, etc.

Profit & Loss Statement:

We have developed a categorized profit and loss statement, which we are recommending to all of our member dentists. This KI you more information about your Profit & expenses.

2.6. Accessibility

1. Ease of use: User can access application with single login. Graphs and Reports are more users friendly and meaningful.
2. Central Access: Whatever changes/updates user will do that will be saved to a central location, so all users will get the changes/ updates immediately.
3. Multi-user: Multiple users can login and see same practice’s data from different locations. They can see the same screen or different KIs simultaneously. Administrator can create different users and assign them access level.
4. Live updates: All users will see same version all the time.

5. Security: MEDAPP is more secure and encrypted. It uses 128 bit encryption and uses HTTPS protocol.

2.7. Applications:

1. Optimizing data generate report within a short time
2. Practices by doctors and consultants
3. Use in medical side.
4. Immediately report sends to patient.

II. OPEN DESIGN OF AN IA PROTOTYPE

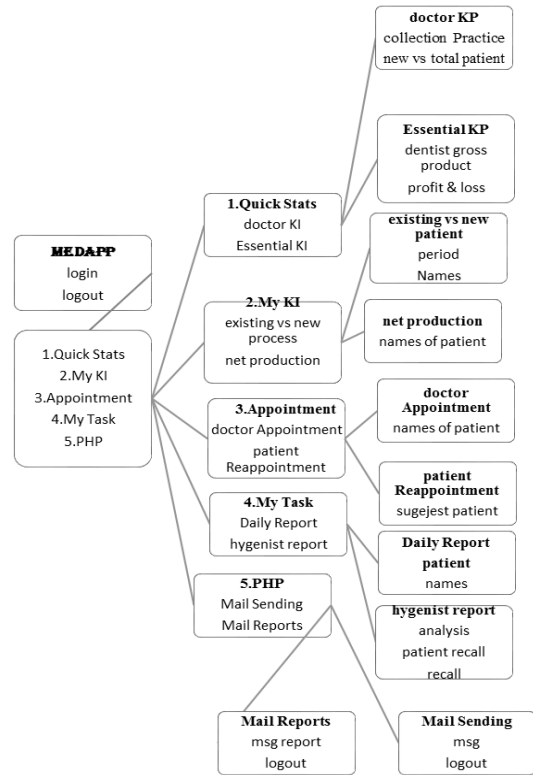


Fig.1. MEDAPP Architecture.

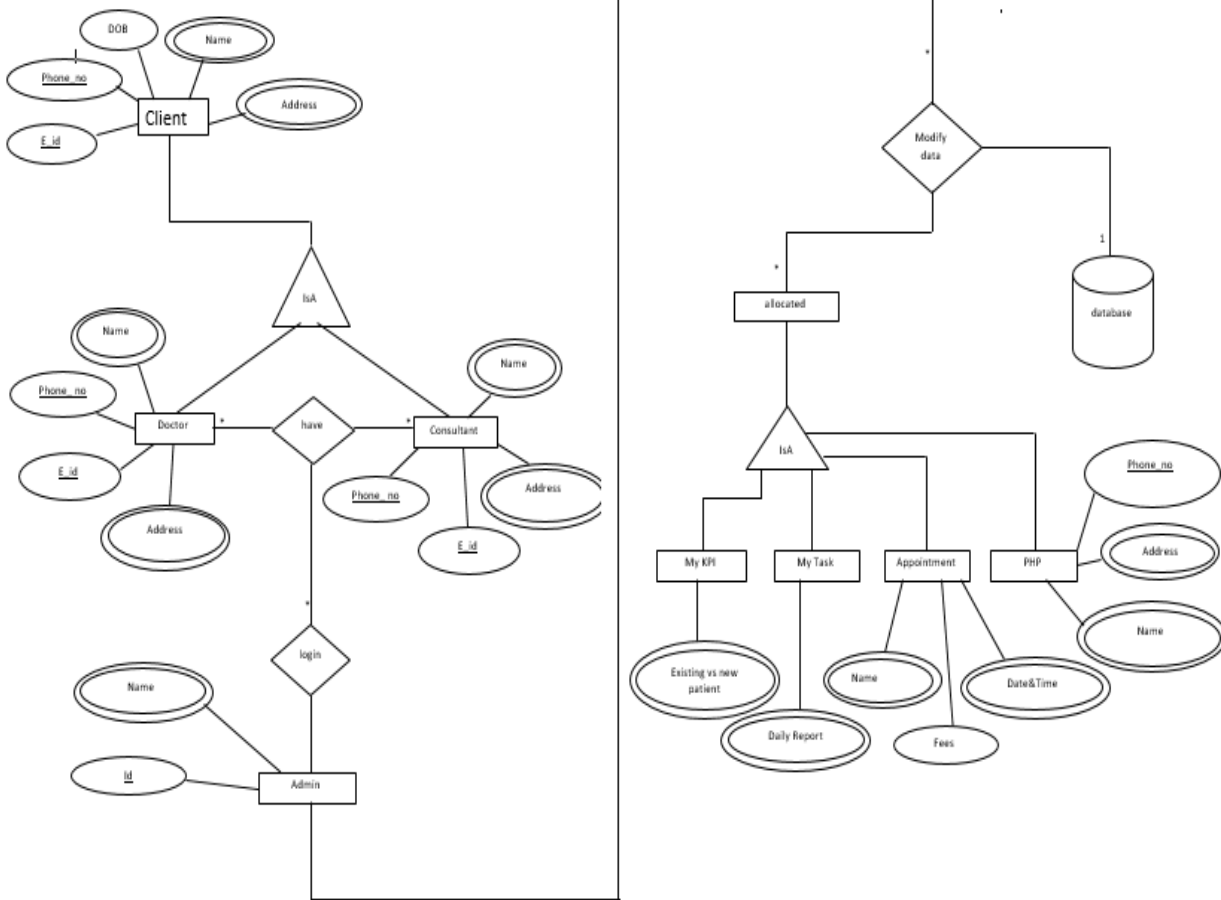


Fig.2. MEDAPP E-R Diagram

CONCLUSION

Now a day at least on employee of medical, clinic centre, hospital, nursing centre, home care agencies are working on practice management. Function of every manager who is regard with practice management to create an efficient and simple atmosphere for billing and cost. Easy to understand for every person who are part of practice management in medical.it is a challengeable and full rewarding career. People who are working in the field have the satisfaction of doing a daily job and take care of health to someone else.

Additionally, it is a job with a competitive salary and great benefits. Once you have been using a good practice management program for a while you will have accumulated a database on your patients, which you can use to create marketing material. Data base marketing combines word processing with data from the management system. To use it well you need to understand the practice data base and the merge functions of Word.

MEDAPP includes a concierge service with a personal Business Intelligence Software Advisor. The upgrade software and service adapts to the individual practices key performance indicators (KI) and reporting needs. We are taking a help web services for getting correct information from large amount of data.

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