

M-Health Care

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Abstract— Our proposed project, M-Healthcare includes, Immunization Schedule with Child Care (ISCC) aims at scheduling child immunization and preparing clinical notes for patients. With this project we are going to provide information about diet chart, information about nearest hospital in emergency situation. Notification about new government policies is also provided through android application. Report generation, Billing and maintaining clinical notes are also our project goals. All this goals are implemented by using one web portal at hospital side and android application at parent side.

Key words: M-Health Care, ISCC, GPS tracking

I. INTRODUCTION

A. Problem Definition

Developing a web portal and android application for parents and hospitals is our project aim. The web portal is for hospital side and android app is for both doctors and parents. Before two-three days of child vaccine we are going send reminder to parents to remind them about their child vaccine or about immunization schedule of their child.

In addition to this we are supposed to track nearest hospital according to location of parents in emergency situation. Also we are going to prepare diet chart and clinical notes for patients

In this we are try to move from hospital centric system to person centric system.

B. Literature review

1) Healthcare Executive Alliance

This provides Operational efficiency and Clinical efficiency on their websites. This website gives overview of their hospital only. This website does not give any information about immunization of patients.

2) <http://www.softclinicsoftware.com/>

Soft Clinic software designed keeping in mind all the physicians is currently being used by over 1700 doctors every day in India and other countries.

Awarded one of the Best Hospital Management Software by various Physicians & Surgeons Association, Soft Clinic can be used by all physicians, small hospitals & nursing homes for computerizing their entire facility

a) Disadvantages

- 1) Immunization Schedule is not provided
- 2) Facility of maintaining clinical notes is not present
- 3) *IJRISE International Journal of Research In Science & Engineering*

This journal aims to cover the scientific research in a broader sense and not publishing a niche area of research facilitating researchers from various verticals to publish their papers. It is also aimed to provide a platform for the researchers to publish in a shorter of time, enabling them to continue further.

a) Disadvantages:

- 1) Provide only documentation for health science
- 4) *Hospital Management software in java*

This desktop application provide following modules:-

- 1) Patient management
- 2) Services Management
- 3) Appointment Scheduling
- 4) Store Management

a) Disadvantages

- 1) High Cost of software development, deployment and improvement.
- 2) Difficulties in migrating from manual process, because both staff and patients are used to the manual process and so are unable to speedily cope with the new system.

5) *PokeDr.*

This application runs iphone, Ipad or android smart phones. This application can be used anywhere, but this application provide only diet information to its user.

a) Disadvantages

- 1) Clinical notes are not managed in well manner.
- 2) Real time information is not handled in this project.

C. Proposed Experiment work

To accomplish the above work we first take information from our users. Our users are doctor, patients and hospitals. After registration of users we are supposed to prepare immunization schedule for child vaccine and send reminder to their parents before few days of vaccine.

By using standard diet chart we are going to prepare diet chart for children. We also aims to provide GPS tracking and by analyzing traced information sending information about nearest hospital in emergency situation.

Maintaining clinical notes and report generation for patients are also included in our project we are maintain this in SQL databases.

D. System Architecture

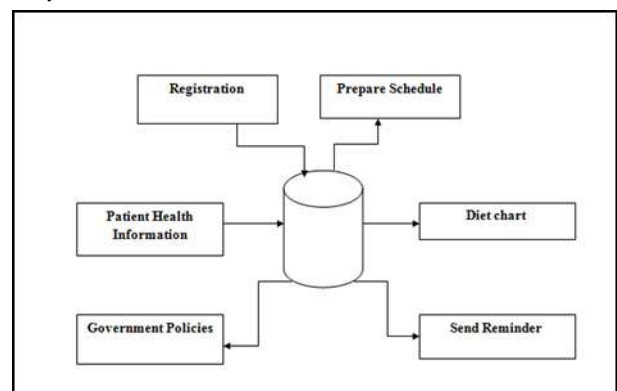


Fig. 2.1: System Architecture

- In this system we are provided child registration facility for collecting child information, Such as child name ,

- date of birth , weight, height of child as well as name, mobile number, address of parents.
- Next facility we are provided is prepare schedule for vaccine. In that module we mention all the vaccines and period of vaccine in which child have to take it.
- We are also provided facility of Patient health information in that module all the information about the child which is fill up by receptionist and doctor.
- Diet chart is provided on the android application, we mention the diet of child and the care which need to take by parents after and before the vaccine.

- Government policies are provided on android application of parent's mobile to get to know about the facilities which are government provide. And that facilities are registered and updated by the hospital web portal.
- The main aim of this project is to reminder will be send to parents before 2-3 days of vaccination date of child.

E. Preparing Immunization Schedule

Age Vaccine	Birth	6 wk	10 wk	14 wk	18 wk	6 mo	9 mo	12 mo	15 mo	18 mo	19-23 mo	2-3 yr	4-6 yr	7-10 yr	11-12 yr	13-18 yr		
BCG	BCG																	
Hep B	Hep B1	Hep B2					Hep B3											
Polio	OPV 0	IPV 1	IPV 2		IPV 3		OPV 1	OPV 2		IPV B1			OPV 3					
DTP		DTP 1	DTP 2	DTP 3						DTP B1			DTP B2					
Tdap															Tdap			
Hib		Hib 1	Hib 2	Hib 3				Hib Booster										
Pneumococcal		PCV 1	PCV 2	PCV 3				PCV Booster					PCV					
PPSV23													PPSV					
Rotavirus		RV 1	RV 2	RV 3														
Measles								Measles										
MMR								MMR 1					MMR 2					
Varicella								VAR 1					VAR 2					
Hep A								Hep A1 & Hep A2										
Typhoid													Typhoid					
Influenza								Influenza (yearly)										
HPV																HPV 1-3		
Meningococcal														Meningococcal				
Cholera								Cholera 1 & 2										
JE								Japanese Encephalitis										

* This schedule includes recommendations in effect as of November 2013.
 * These recommendations must be read with the footnotes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars.

Legend:
 Yellow: Range of recommended ages for all children
 Green: Range of recommended ages for catch-up immunization
 Blue: Range of recommended ages for certain high-risk groups
 White: Not routinely recommended

Fig. 2: Preparing Immunization Schedule

This schedule of recommended immunizations may vary depending upon where you live, your child's health, the type of vaccine, and the vaccines available.

Some of the vaccines may be given as part of a combination vaccine so that a child gets fewer shots. Talk with your doctor about which vaccines your kids should receive.

1) Birth

HepB: Hepatitis B vaccine; ideally, the first dose is given at birth, but kids not previously immunized can get it at any age.

2) 1-2 months

HepB: Second dose should be administered 1 to 2 months after the first dose.

3) 2 months

DTaP, Hib, IPV, PCV, RV

4) 4 months

DTaP, Hib, IPV, PCV, RV

5) 6 months

DTaP, Hib, PCV, RV

6) 6 months and annually

Influenza (Flu): The flu vaccine is recommended every year for children 6 months and older:

Kids younger than 9 who get the flu vaccine for the first time (or who have only had one dose before July 2016) will get it in two separate doses at least a month apart. Those younger than 9 who have had at least two doses of flu vaccine previously (in the same or different seasons) will only need one dose.

Kids older than 9 only need one dose.

The vaccine is given by injection with a needle (the flu shot). The nasal spray form that was available in the past is not currently recommended because it was not found to be effective enough in recent years.

7) 6-18 months

HepB, IPV

II. FUTURE WORK

Our future work is to develop body sensor network for human beings through which we can send information about emergency situation in body to doctor and relatives. This body sensor network will give information about human health and accordingly we will try to send messages to other numbers registered by users.

Implementation of SPOC model is our next goal after completion current project.

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III. CONCLUSION

By implementing this project we are going to provide immunization schedule for sending reminder to parent before vaccine date, diet chart, and maintaining child and parent information.

We are also provide facility to trace the nearest hospital and information about government policies.

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