



**Application Engineering and Development
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Automated Healthcare Finance Ecosystem**

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Revision History

Version Number	Change Description	Effective Date
1.0	1. Initial Document: Problem Overview and Key functionalities 2. Eco-system architecture diagram	26 th March, 2020

Problem Overview:

This application model will facilitate paperless insurance processing which will not only streamline insurance claims but also improves the interaction between the three big players in health insurance claims which are:

- Insurance Corporation
- Insurance Claim
- Health institution

This EcoSystem tries to bridge the gap between insurance policies, customers and health care centres which benefit people from all demographics equally. This application also targets to connect organizations within an enterprise which will streamline a patient's treatment improving the interaction and transparency between doctors, laboratories and billing department.

In developing countries across the world, health care centres lack proper workflow which makes relatively simple task like requesting for funds from government for hospitals or checking if a person has insurance relatively complex. Health insurance provided by employers in most countries must be reimbursed through the company portal which takes a financial toll on an individual who does not have the financial strength to pay for treatment upfront.

This application will be crucial during an epidemic or pandemic where time is of essence, treating and maintaining patient becomes critical.

This application targets to:

1. Streamline urban health care service
2. Structure rural health care system
3. Improve transparency within enterprises and organization
4. Provide affordable health care services
5. Abridge the gap between government and health care institutions for fund disbursement during pandemics.

Application Key Functionalities:

1. Healthcare Admin will add the enterprises (Hospitals, Health centers, Insurance Companies, Government health care department)
2. Enterprise Admin can add organizations (Doctor organization, Lab organization)
3. Doctors will examine and treat patients
4. If patient is not cured in health center, then he/she will be transferred to specialty Hospitals.
5. Government Department will provide funding to Enterprises.
6. Insurance Agent will approve patient bills.
7. Reimbursement of approved bills from insurance company.

Proposed Entities:

1. Admin
2. Doctors
3. Patients
4. Lab assistants
5. Insurance Agents
6. Government department

Ecosystem Model:

- Automated Healthcare Finance Ecosystem Model is based on basically three enterprises: Healthcare Enterprise, Insurance Enterprise and Government Enterprise.
- This model can have 'N' no. of networks as shown in the figure. For example: Boston can be one network where these enterprises might work.
- Each enterprise has different organizations.
Health Enterprise has four organizations –
 - ◆ Doctor Organization
 - ◆ Patient Organization
 - ◆ Lab Organization
 - ◆ Billing Organization
- Insurance Enterprise has three organizations:
 - ◆ Insurance Policy Organization
 - ◆ Insurance Sales Organization
 - ◆ Insurance Funds Organization
- Government Enterprise has three organizations –
 - ◆ Audit Organization
 - ◆ Financial Organization
 - ◆ Government Ministry Organization
- All of these organizations have their work requests and work area which are interconnected.

