Working Paper Series

A Study of PPP Models for Social Healthcare Insurance

Venkitasubramanian Akshay

December 2010

Centre for Public Policy Research

©Copyrights Reserved

For more information, please contact Centre for Public Policy Research, Door No 28/3656, Sonoro Church Road, Elamkulam, Kochi, Kerala, 682 020 India. Telephone: +91 484 6469177, Fax +91 0484 2323895, E-mail: project@cppr.in. Or visit the CPPR website at http://www.cppr.in/

Abstract

Widespread lack of insurance has compounded the healthcare challenges that India faces. For the middle class, there is some form of healthcare insurance provided by government and private employers, but in general a majority of the health insurance schemes are inaccessible to below poverty line (BPL) Indian citizens.

With the public insurance model failing, private players have started to gain a foothold in the health insurance market with innovative schemes. Public-private partnership schemes like 'Yeshaswini Insurance Scheme' for BPL families in Karnataka have been a huge success. With a subscriber list of around 1.4 million families, it has generated a surplus of Rs 1.86 crores in its first year of operation in 2002. Following this success, the governments of Andhra Pradesh and Tamil Nadu are also in process of implementing comprehensive health insurance schemes with the help of private insurance companies. Kerala is also in the process of implementing a health insurance scheme using the public insurance model.

The premise of this paper is to compare current healthcare insurance models followed by different social health insurance schemes and evolve a best fit model for the nation.

Abbreviations

TPA- Third Party Administrator

FHPL- Family Health Plan Limited

IRDA- Insurance Regulatory and Development Authority

NGO- Non Governmental Organisation

SHG- Self Help Groups

PPP- Public Private Partnership

OPD- Out Patient Department

GIC- General Insurance Company

RSBY- Rastriya Swayam Bima Yojna

CBHI- Community based health Insurance

SEWA-Self Employed Woman's Association

1. Introduction

When it comes to healthcare, there are two Indias - a country that provides state of the art medical care to middle-class Indians and attracts medical tourists; and another where a majority of its own citizens cannot afford or even get access to basic healthcare. According to the Constitution of India, public health is the responsibility of the State. The Constitution states that, *"……..raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties."* (Article 47, Directive Principles of State Policy).

Table 1: Healthcare Delivery System Per Capita

Per lakh (100K) Population	Beds	Hospitals	Dispensaries
Urban	178.78	3.6	3.6
Rural	9.85	0.36	1.49

Source: Review of Health Care in India, 2005

The Union government took steps to improve the healthcare systems in rural India by launching the National Rural Health Mission in 2005. The focus of this programme is to improve the capabilities of local healthcare systems so that they are can deliver basic healthcare needs. However, this system fails to notice the urban poor. Even though the urban poor have access to private healthcare systems, they cannot afford them. In a socialist state like ours, the onus of healthcare needs of its citizens falls on the Union Government.

A study by the Ministry of Finance has revealed that health Insurance is a financial instrument that can address healthcare needs. However, as most urban as well as rural BPL families cannot afford the premiums of mainstream health insurance policies, they often resort to sale of assets or take on debt to finance healthcare. It is estimated

that more than 20 million Indians fall below the poverty line due to healthcare bills (PriceWaterHouse Coopers 2007).

The Ministry of Health and Family welfare concurred with the Ministry of Finance the absolute need for alternative mechanisms of financing of healthcare, as public health investments cannot be enhanced beyond a point. Public expenditure in the healthcare industry is only 0.9 per cent of the GDP, far less than sub-Saharan countries. The Ministry further stated that healthcare insurance was a viable method to address the concerns of accessibility and affordability in healthcare sector, as the availability of insurance would drive the demand for services and increase revenue, which would improve the quality of care. Moreover, the WHO states that 98.5 per cent of the total expenditure in healthcare in India is met from out-of-pocket expenses. Hence, there is a strong case for the government to step in and fill the huge insurance void by creating public health insurance schemes, as well as address the existing issue.

2. Review of Literature

2.1. Concept of Health Insurance

The concept of health insurance can be aptly termed as, "What is highly unpredictable for a person may be predictable for a group of persons." Health insurance, like all other insurance, is to protect us against risks by pooling in resources. An unfortunate few will be unable to afford healthcare due to the fortunate few who are insured, but remain healthy. In a country like India, where there is no social security system, insurance is a financial mechanism to bridge the gap between affordability and accessibility. Moreover, in a large population like ours, the proportion of people who require hospitalization is relatively lesser. Hence, there is a strong case for establishing health insurance in India.

2.2. Health Insurance Development in India

2.2.1. Beginnings of Health Insurance in India

Health insurance as a concept can be traced by to ancient civilizations. In ancient South East Asian cultures, including India, the tradition was to pay the doctor while in good health and discontinue the payment during periods of illness. The modern system of health insurance in India developed in the industrial era, based on the European system.

The Workman's Compensation Act that was passed in 1923 was the first formal insurance developed in India. The Act provided the workmen and their dependants with some relief in case of accidents arising due to employment leading to death or disablement of workmen. In the post-Independence era, the Employees State Insurance Act passed in 1948 provided a holistic social security scheme for workers and their families. It provided social protection for employees and their dependants in the organized sector for sickness, maternity, death or disablement due to workplace accident. The Central Government Health Scheme (CGHS) that began in 1954 for employees of the Central Government, embers of Parliament, judges, freedom fighters and their families, covering 4.5 million people. To further strengthen the healthcare insurances policies, the Mudaliar Committee in 1959-61 recommended that Primary Health Centres be strengthened.

2.2.2. Pre-Liberalization Health Insurance Market

Nonetheless, medical insurance schemes in India for the general public were developed due to deteriorating industrial relations between the employer and employee. The employer's coverage package was very small and in majority of the cases never covered the families. Hence, a market was created for health insurances. In 1981, General Insurance Company (GIC) designed a limited cover for individuals and families to covering their hospitalisation needs. Subsequently in 1986, this was replaced by the Mediclaim policy under the market agreement that group as well as individuals will get access to insurance benefits under a group Mediclaim policy. In order to accommodate inputs by experts and the medical fraternity, the scheme was further modified in 1991 and 1996. Mediclaim benefits were provided on the basis on reimbursement. The reimbursement required production of bills from the hospitals where the policyholder has undergone treatment. Hence, the policy required the policyholder to have access to funds as he or she was reimbursed only after the treatment.

In the following years, GIC tried to modify this system from a reimbursement to payment model. A certificate of eligibility from an insurance company was issued to the policy holder who had to produce it at the hospital. The hospital would settle all claims directly with the insurance agency. Unfortunately, this model failed as insured persons often took treatment for diseases not enlisted in their policy and hospitals were not compensated.

Apart from Mediclaim, many other modified forms entered the market to suit varying requirements and affordability of different segments such as Jan Arogya Bima Policy, Critical Illness Policy, and Sampoorna Arogya Bima Policy.

2.2.3. Post Liberalization Health Insurance Market

The establishment of the Insurance Regulatory and Development Authority Act in 1999 paved the way for the opening of the health insurance market for private competition by 2000. The introduction of Third Party Administrators (TPA) in an effort to provide better services as well as cashless transactions to the insured has reduced administration hassles. Thus, the administrative costs, which were the secondary objective of the TPA, can be capped. Moreover, the collection of premium increased

www.cppr.in

over 100 per cent in 2004-05. Post liberalisation, the health insurance industry stands at 90:10 in favour of public insurance companies.

Table 2: Growth of the Healthcare Insurance Sector

Year	People Covered (lakh) % Increase	Premiums (Rs. In cr)	Per Capita Premium (Rs/lakh)[1]
1997-98	27.87	216	773
1998-99	35.34	272	768
1999-00	48.94	380	777
2000-01	56.23	519	923
2001-02	77.84	742	953
2002-03	88.02	895	994
2003-04	109.95	1024	931

Source: Health Insurance - A Horizontal Study, Ministry of Finance-2005

There are strong financial indicators that point to a tremendous growth in the insurance sector. India's GDP is poised to grow above the 10 per cent mark, making it one of the fastest growing economies in the world. Furthermore, the Indian population is becoming more health conscious. Today a middle-class family of four spends between Rs 8,000-Rs 12,000 (Committee on Public Undertakings 2005-06), a year on healthcare; compared to just Rs 2,000 in the late 1980s, of which 98.5 per cent are out-of-pocket expenses (PriceWaterHouse Coopers 2007). There is growth in literacy

[1] The amount shown is rupees per one lakh population, as stated in the report '*Health Insurance- A Horizontal Study, Ministry of Finance-2005*'

rate, income, as well as increased awareness on health-related data. Hence, this makes India a viable economy to propagate healthcare insurances.

Table 3: A Chronological List of Important Milestones in the Healthcare Insurance Segment

YEAR	IMPORTANT EVENTS
1912	Insurance Act, 1912 passed, setting down rules and regulations specific to insurance industry.
1923	Workman's Compensation Act passed, aims to provide workmen and/or dependants some relief in case of accidents arising out of or in the course of employment, causing death or disablement
1938	Insurance Act, 1938 passed, recognizing two categories, i.e. Life and non-life (general) insurance. Led to an insurance wing being set-up, attached to the Ministry of Finance.
1948	Employee's State Insurance (ESI) Act passed, providing protection to workers & dependants in the organized sector for sickness, maternity, death
1954	The Central Government Health Scheme started in 1954, providing health cover to employees of Central Government, MPs, Judges, Freedom Fighters and their families.
1956	Life Insurance industry nationalized and Life Insurance Corporation of India (LIC) set up subsequently.
1959	Mudaliar Committee constituted, recommended provision of long-range health insurance policy for all and strengthening Primary Health Centres
1972	General Insurance industry nationalized; General Insurance Corporation of India came into being in 1973 with more than a hundred private companies merged into the four subsidiaries of GIC, namely; NICL, NIACL, OICL and UIICL. Before GIC came into existence, a number of private insurers offered group health cover to corporate bodies. GIC offered Limited hospitalization

	cover since 1981
1986	GIC introduced Mediclaim insurance; modified in 1996 to allow differentials in premium for six age groups.
1999	Insurance Regulatory and Development Authority (IRDA) Act passed; opening up the insurance sector to private players allowing 26% Foreign Direct Investment in the sector.
2001	Indian Insurance Amendment Act, 2001 GIC became a re-insurer, its earlier role of co-ordination between the four subsidiaries taken over by a new body, General Insurance (Public Sector Companies) Association (GIPSA). IRDA introduced several insurance regulations including provisions for Third Party Administrators (TPA) system in health insurance.

Source: Health Insurance - A horizontal Study, Ministry of Finance-2005

The health insurance segment continues to be the fastest-growing segment in the insurance industry, with a consistent growth rate of 40 per cent per annum in the last three years; almost double that of general life insurance (Committee on Public Undertakings (2005-06). If the current trend continues for the next few years, health insurance will be second to only motor insurance.

2.3. Forms of Health Insurance Schemes

Health insurance is mainly of four forms: [2]

- Employer Provided
- Mandatory/Social
- Voluntary
- Community-based

2.3.1. Employer Provided

In the employer-provided insurance model, the employee is reimbursed for his health expenses upon producing a claim. Many of these insurance schemes include dependants. The employer usually pays the insurance company directly.

2.3.2. Mandatory/Social

Employee Social Insurance Scheme (ESIS) and Central Government Health Scheme (CGHS) are types of mandatory or social insurance schemes. The ESIS scheme automatically covers labour class employees, while the CGHS covers Central Government employees.

2.3.3. Voluntary

Many voluntary schemes are administered by public or private companies, such as Life Insurance Corporation, Oriental Insurance Company Limited, United Insurance Company Limited, Star and Health Allied Health Limited, among others.

2.3.4. Community-based

These are insurance schemes specifically applicable to certain segment of the population; usually implemented in areas where there is a special need to address concerns like low premiums, reduction in default payments or improve social healthcare. These insurances are sponsored by governments or NGOs.

[2] The classification terminology is followed from the report on *" Committee on Public Undertakings (2005-06), Health Insurance- A Horizontal Study, New Delhi"*

Table 4: Enrolment in Health Insurance Schemes

Form	Scheme	Beneficiaries (in lakh)
Social/Mandatory Schemes	The Employees State Insurance Scheme	253
	Central Government Health Scheme	43
	State Sponsored Schemes	5
Employer Based Schemes	Railways Health Scheme	80
	Defense Employees	66
	Ex-Serviceman	75
	Mining & Plantations	40
	Employer run facilities –Private Sector	60
	Employer run facilities- Public Sector	80
Commercial Schemes	Public Sector Non-Life Companies	100
	Private Sector Non-Life Companies	8
	Health Segment of Life Insurance Schemes	2.3
Community Schemes	Community Sponsored Insurance Schemes	30

Source: Health Insurance- A Horizontal Study, Ministry of Finance-2005

2.4. Stakeholders in Indian Insurance

2.4.1. Ministry of Finance

Insurance companies are accountable to the Banking and Insurance division of the Department of Economic Affairs in the Ministry of Finance. Day-to-day activities are exempted, as well as certain spheres of functional autonomy. The policy framework on which the companies do operate is provided by the Ministry. The Ministry is also

www.cppr.in

responsible for periodical review and monitoring of performance of public sector insurance companies as well as appointment of chief executives. The Insurance Regulatory and Development Authority Act (IRDA), 1999, which formed the IRDA, is also a part of the Finance Ministry.

2.4.2. Insurance Regulatory and Development Authority

IRDA monitors the functioning of public and private sector insurers through regular reporting, inspections, enquiries and investigations, which include the audit of insurers, intermediaries, insurance intermediaries and other organisations involved in the industry. In a nutshell, it regulates the overall functioning of insurance companies in private as well as public sectors.

2.4.3. Insurance Companies

In India, there are mainly two categories of insurances: Life and General. In India, health insurance is covered under the general insurance category. In the public sector, general insurance is administered by four companies: National Insurance Co. Ltd., Oriental Insurance Co. Ltd., United India Insurance Co. Ltd. and New India Assurance Co. Ltd. Health insurance is offered under life insurance with few riders by the Life Insurance Corporation. In the private sector, the players are as listed below (highlighted players are health insurance specialist companies):

- Tata AIG General Insurance Co. Ltd.
- ICICI Lombard General Insurance Co. Ltd.
- Cholamandalam General Insurance Co. Ltd.
- Royal Sundaram Alliance Insurance. Co. Ltd.
- Iffco Tokyo General Insurance Co. Ltd.
- Reliance General Insurance Co. Ltd.
- Bajaj Allianz General Insurance Co. Ltd.
- HDFC Chubb General Insurance Co. Ltd.
- Star Health and Allied Insurance Co. Ltd.
- Star Union Dai-chi Health Insurance Co. Ltd.
- Apollo-DKV Insurance Co. Ltd.
- Religare Health Insurance Co. Ltd.
- Birla Sun Life Insurance Co. Ltd.

2.4.4. NGOs and Self Help Groups

These players are generally involved in the implementation of Community Health Insurance Plans and insurance schemes in remote places. They help in complimenting formal health insurance companies in advocating health insurances. There are, at present, 64 groups involved in these practices. The most successful players are Self Employed Women's Association (SEWA) of Gujarat, DHAN Foundation and ACCORD of Tamil Nadu, and Yeshaswini Trust of Karnataka.

2.4.5. Third Party Administrators (TPA)

The IRDA introduced The Third Party Administrators Regulations in 2001. The main advantage of introducing the Act was to provide cashless facility to insurers and enhance the claims process. They have become an intermediary between the insurer and insured; i.e. extended arms for the insurers and dispense professional advice to the insured. Moreover, in the long run, they are expected to bring in greater professionalism in the healthcare insurance sector, which will fuel growth in the insurance business.

Rules to register as a TPA:

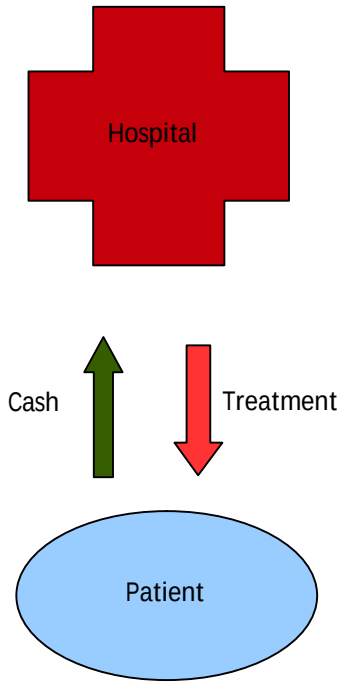
- Only a company with share capital and registered under The Companies Act, 1956, can function as a TPA
- The TPA cannot engage in any other business other than health services
- The minimum paid up capital shall be Rs 1 crore in equity shares
- At least one director in the board should be a doctor
- The aggregate holdings of equity shares by a foreign company shall not, at any time, exceed 26 per cent of the paid up equity capital of a Third Party Administrator
- TPAs have to maintain Rs 1 crore working capital at all times

2.5. Types of Insurance Models

2.5.1. Provider Model

This is one of the most primitive models of health insurance. The patient pays the hospital on a regular basis, and avails treatment for free, when he or she falls sick.

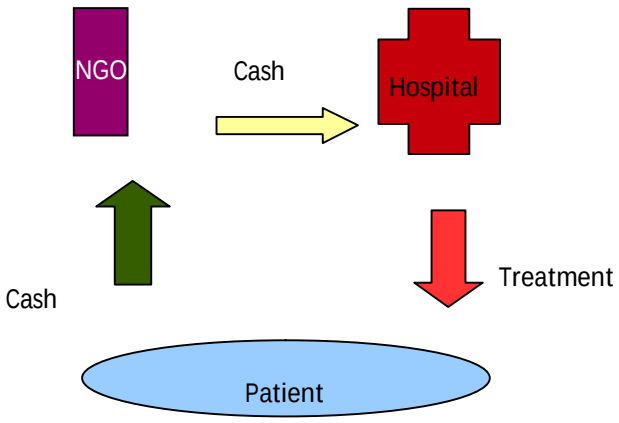
Figure 1: Provider Model



2.5.2. NGO as Insurer Model

In the NGO model, the NGO often plays the role of an insurance provider. It collects money from the people and ties up with a hospital to administer treatment. Many of the insurance schemes that follow this model fail in reality, as quite often NGOs do not possess the skill to execute the functions.

Figure 2: NGO as an Insurer Model



2.5.3. NGO as an Intermediary

This model is a slight modification of the older one. Here, the NGO acts as an intermediary between the insurance company and the people by collecting the premiums as well as an intermediary with the hospital to assist in the claims process. This model is highly successful and is widely followed in the implementation of Community Health Insurance Schemes. The CHI schemes are for the BPL population, which is usually illiterate, and hence, the NGO interface makes it easier for insurance companies to collect premiums. For the people, they get to bargain with the insurance company for better premiums.

Figure 3: NGO as an Intermediary

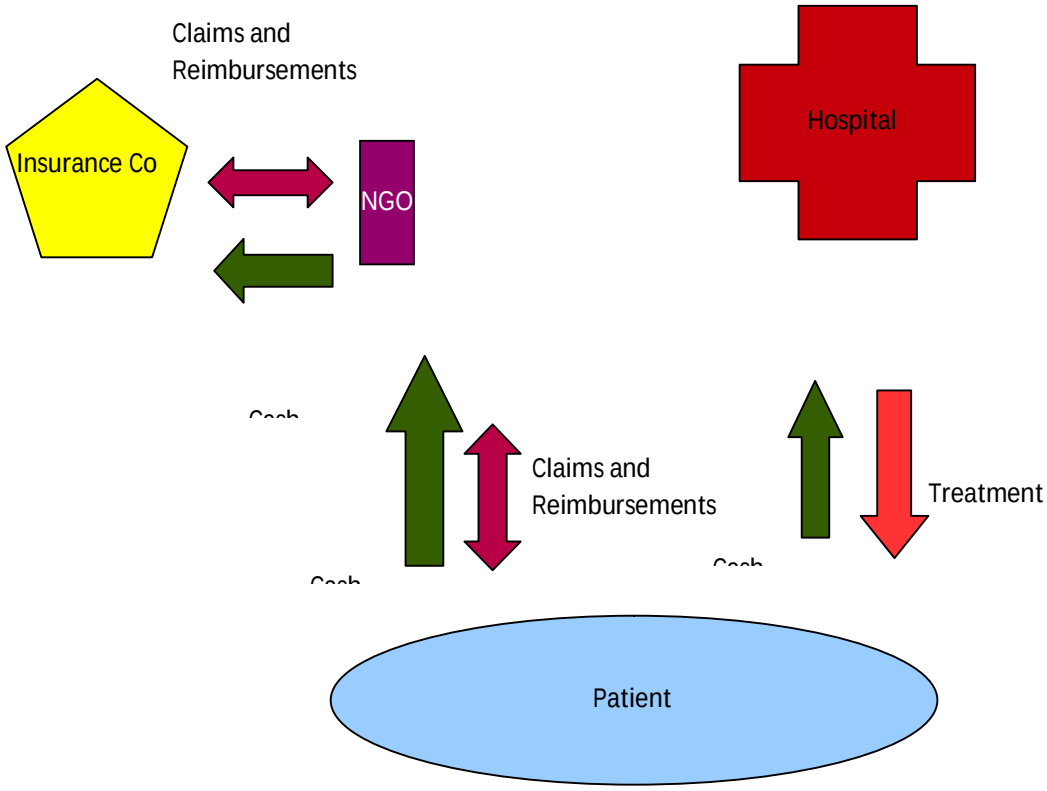


Table 5: Comparison of Insurance Models

Features	Provider	Insurer	Intermediary
Needs a community based organisation	Not necessary	Necessary	Is beneficial if one wants to negotiate an effective package with the insurance company
Community awareness	Necessary		
Premium	Depends on the benefit package, usually lower than the other models	Depends on the benefit package	Depends on the products available. Can be negotiated
Benefit package	A very comprehensive package. Usually includes outreach activities, OP and IP	Limited and depends on the cost of treatment and the numbers insured	A standard package covering IP only. Certain aspects, e.g. the maximum limit and exclusions can be negotiated

Fund management	Usually institutionalised and easy	Members have to be trained and supervised initially	Collection of premium needs to be supervised. Financial risk is with the company
Providers	The NGO hospital. A single provider usually.	Multiple private providers. Usually no control over them. Tendency for moral hazard is high, especially in the intermediary model.	
Administration	Simple and shared between the institution and the community.	Complicated and the sole responsibility of the community	Simple and shared between the NGO and the company
Enrollment into the scheme	Tends to be higher than compared to the other two models		
Utilisation of services[3]	Higher as the package is more comprehensive		Lowest among the three models

[3] This represents the coverage of medical services, i.e, surgeries, outpatient facilities, hospitalization, abortion.

Risk management	Is the lowest among the three models	Being flexible, they can introduce measures to control risk	Is already built into the model. But more can be done
Cost recovery	The least among the three models	Usually meets moderate costs. However, the scheme is vulnerable as the risk pooling is small	Is financially sustainable as the risk sharing is large. Administrative costs are subsidised by the NGO and the community.
Protection against catastrophic health expenditure	The most efficient, especially in those schemes where there is no upper limit	Depends on the upper limit. The higher the upper limit, the greater the protection.	

Source: A feasibility study of Community Based Health Insurance at Waynad

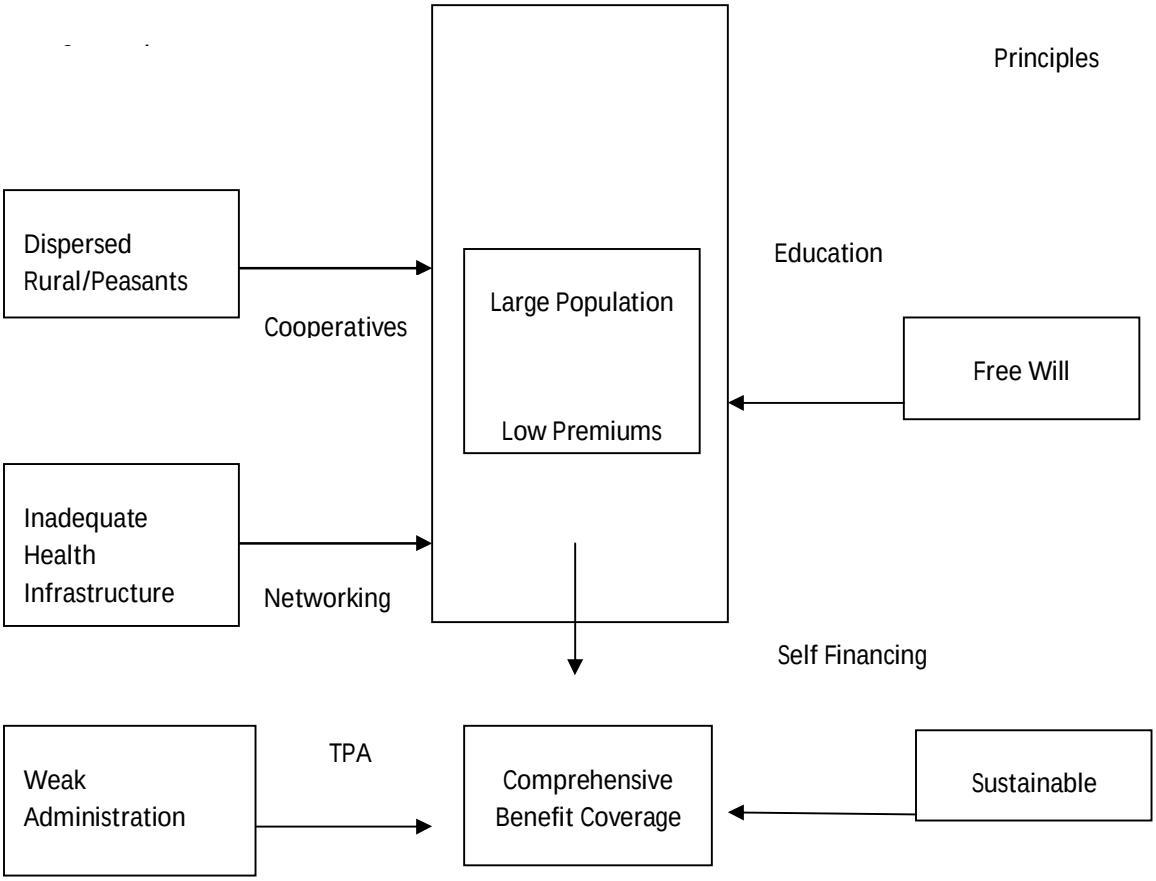
2.6. Insurance Models in India

2.6.1. Yeshaswini Model (YM)

The Yeshaswini Model of Health Insurance was introduced in rural Karnataka in 2003. The scheme covered about 1.6 million rural farmers in its first year of operation for a monthly premium of Rs 55 to Rs 60 per annum. It covered the person for all types of treatments as well as outpatient department (OPD) services through a network of private hospitals. At the end of its first year of operation, it was deemed as a success with 2.2 million people enrolled under the scheme. Around 9,039 surgeries were performed and 35,814 patients utilised the OPD services. A majority of the cases were major (the patient would not have survived if they did not undergo treatment).

Origins of Idea: The YM was a brain child of Dr Devi Shetty who pioneered the concept of affordable cardiac surgeries. Dr Shetty explored the area of telemedicine as a method to reach out to rural areas for treatments. His study revealed that affordability was the concern of the rural populous, as the bed occupancy rate was only 35 per cent. Hence, he came up with an idea to make healthcare affordable to the poor in the form of social healthcare insurance scheme christened as the Yeshaswini Health Insurance Scheme.

Figure 4: Yeshaswini Model of Health Insurance



Source: The Karnataka Yeshaswini health insurance scheme for rural farmers and peasants

The scheme had to have low premiums and also cover major treatments such as cardiac surgeries, kidney dialysis, uterus removal, maternity issues, among many others. Thus, the self financial model had to self sustainable. Hence, Dr. Shetty came out with a unique model of health insurance as mentioned below.

The model addresses three main problems that impaired health insurance from reaching the rural poor.

- **Mobilising a large base**

  Insurance is gambling on risk. The larger the population, the lesser the risk. Hence, it was vital for the insurance scheme to be a success to mobilise a huge population in taking it up. As most of the targeted population was highly dispersed and inaccessible, the Yeshaswini scheme had to come up with a method to solve three problems:

  - Educate the people about the scheme
  - Create a system to collect premiums
  - Issue identity cards

  Fortunately, the population under observation was united in cooperative communities. Cooperatives were highly structured since their inception in 1905. Each had a registrar and a deputy registrar who managed the cooperative. Thus, the role of educating the masses meant educating the deputy registrar on the benefits of insurance. The person would then educate all the members of the cooperative regarding the scheme. He or she would also be responsible for administration related to the scheme; with regards to premium collections and card distributions

- **Affordability**

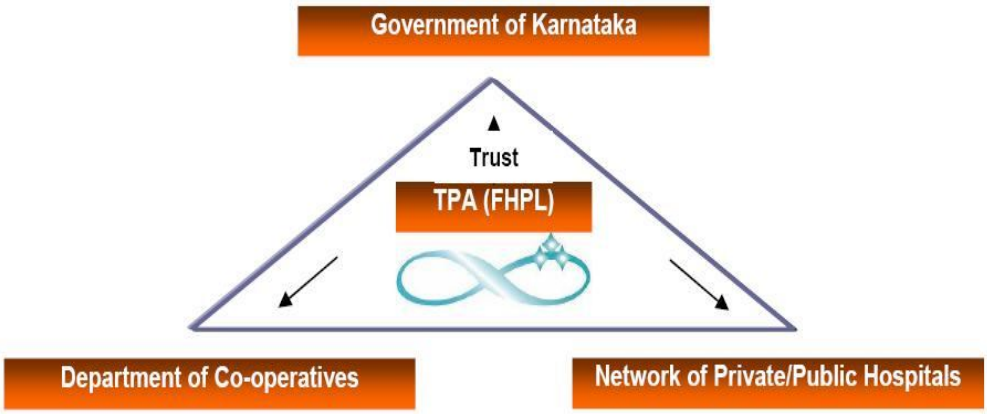
  Dr Shetty's central tenet to addressing these healthcare needs was affordability. He wanted his patients to be able to afford the treatment. In this case also, he wanted to design the premiums such that they covered major surgeries. With the rough assumption that a major surgery will cost around Rs 10,000 and minimum of 1 million subscribers will enroll in the plan, the

premium was set to be around Rs 75-85. Seeing the potential in the plan, the government decided to pitch in Rs 30 subsidy per person. Hence, every subscriber had to pay about Rs 60. The person was entitled to coverage of Rs 200,000. This would allow the insurer to afford two cardiac surgeries, as well as few other smaller operations.

- **Delivering Healthcare**

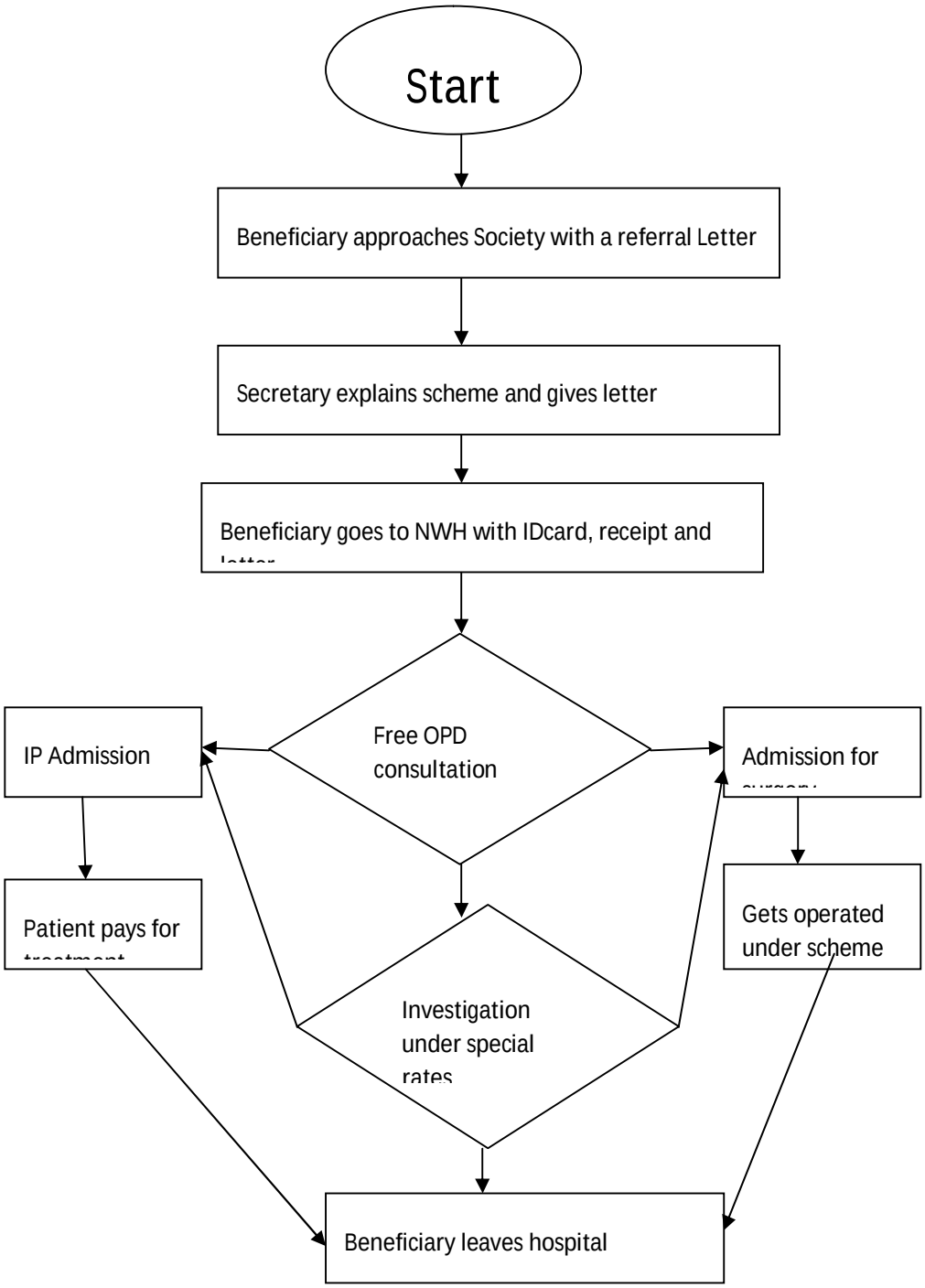
  A lot of the previous plans in the social healthcare insurance sector failed because of the delay in the delivery process, as most were reimbursement. In certain cases, the whole process used to take a long time. On the other hand, the TPA claims process sometimes used to cause huge losses to the healthcare provider, as the TPA is prone to errors. Hence, for the social insurance scheme to work, Dr Shetty needed professional administration of the insurance scheme so that the insured got treatment without any reason to worry. Hence, the TPA in charge of administering had to do it with utmost professionalism.

Figure 5: Yeshaswini Model



Source: State Government Sponsored Health Insurance (Karnataka), International Labour Association Study

Figure 6: Process to Avail Treatment



Source: The Karnataka Yeshaswini health insurance scheme for rural farmers and peasants.

2.6.2. Aarogyasri Model

Aarogyasri Model was the brain child of the Dr Y S Reddy, former chief minister of Andhra Pradesh, who used his CM relief fund to enable people to afford medical treatment. The Aarogyasri Health insurance scheme was designed to cover 48.23 lakh BPL families (or about 1.68 crore). The scheme protects the insurer from major surgical interventions as well as out patient costs. The scheme was implemented in three phases, as shown in the table.

Table 6: Aarogyasri Execution Phases

Districts	No. of BPL Families	Total BPL Population
Phase 1 (March 2007)	2,316,426	8,339,854
Phase 2 (December 2007)	4,813,000	16,700,000
Phase 3 (April 2008)	3,487,000	12,300,00

Source: State Government Sponsored Health Insurance (Andhra Pradesh), International Labour Association Study

The scheme was implemented with the help of Star Health and Allied Insurance Company.

- **Identification of BPL Families**

  Based on BPL cards issued by the Civil Supplies Department, the government issues Health Cards for beneficiaries to avail treatments under the Rajiv Gandhi Aarogyasri Scheme. In order to cover families, each member of the family has to also posses an individual identification card.

- **Scheme Governance**

  Upon getting the health card, enrolment of the family under the scheme falls under the purview of the Government of Andhra Pradesh, which has set up a trust headed by the chief minister The Government has to provide details to the insurance provider, so that the beneficiaries can claim the insurance.

- **Scheme Interface**

  At the ground level, the scheme will be implemented with the help of Aarogyamitras. Aarogyamitras are local interface between administrators and the people.[4] They are usually assigned to the local hospital, where they take care of the welfare of the local beneficiaries.

- **Scheme Information Management**

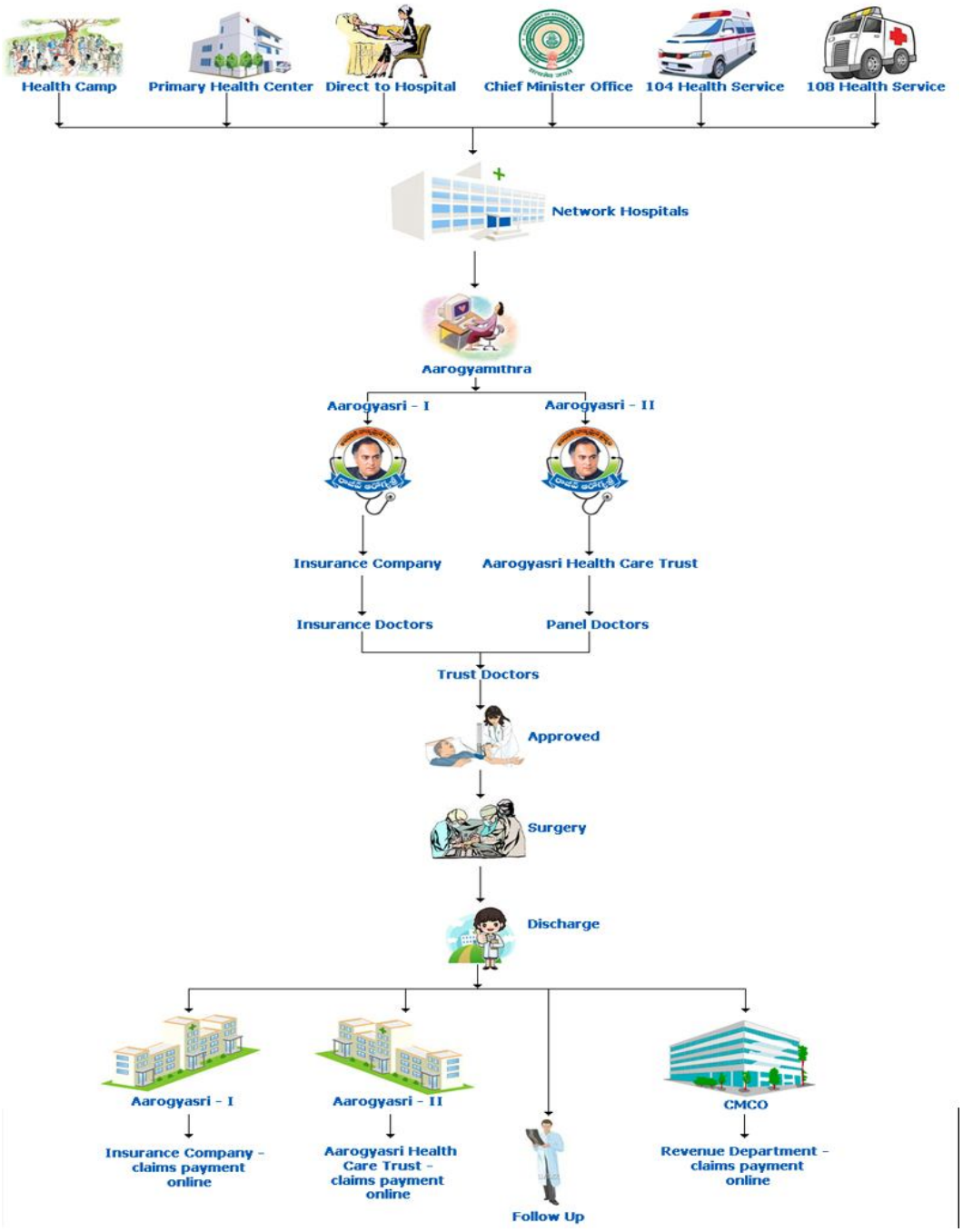
  In order for the scheme to deliver its goals and also for the people to track them, a website was hosted. The main objective of the website was to relay updated information on the scheme to the citizens. More importantly, it is also designed to provide real time information on hospitals to help beneficiaries get access to proper healthcare.

- **Scheme Delivery**

  The overall management of the scheme was handed over to Star Health and Allied Health Insurance, who were responsible for premium collection as well as service delivery. The scheme covers about Rs 1,50,000 per family per year. A floating amount of Rs 50,000 is available to cover additional expenses. The scheme covers pre-existing diseases as well. It also has packages to provide end-to-end treatments. Moreover, to assist insurers, it has a 24-hour toll-free helpline. It is mandatory for patients to be provided with free food by the hospitals till discharge, as well as provisions for free transportation if the patient is refereed from a health camp.

[4] They are onsite insurance agents for a zone. They are located at hospitals.

Figure 7: Aarogyasri Model



Source: www.aarogyasri.org

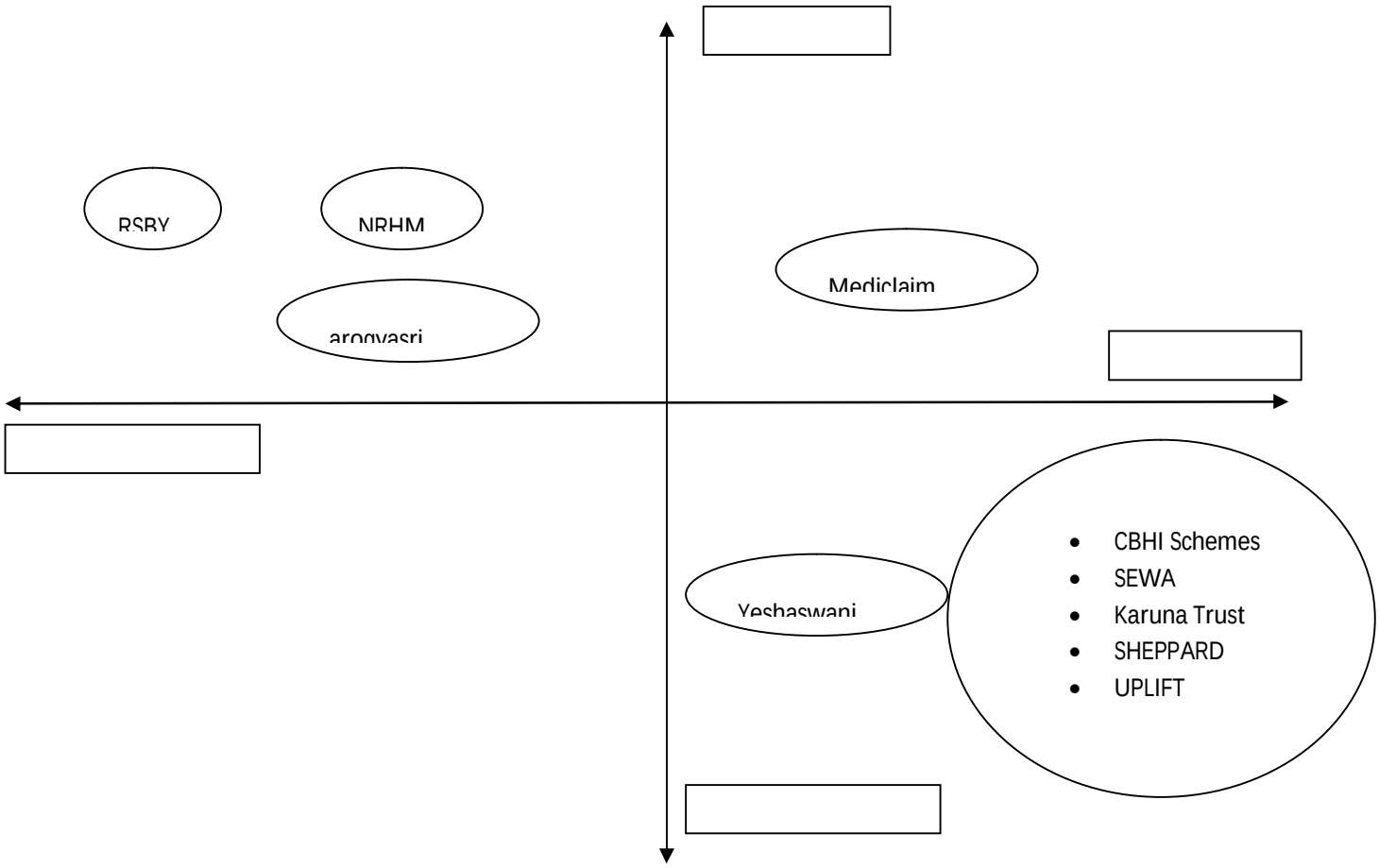
3. Research Objectives

The main objective of this paper is to assess the model best suited for the government to implement public health insurance schemes for BPL families. Widespread lack of insurance has compounded the healthcare challenges that India faces. For the middle class, there is some form of healthcare insurance provided by government and private employers, but in general, majority of the health insurance schemes are inaccessible to the BPL Indian citizens. Majority of the insurance policies are provided by government-run insurance companies, and most insurances are group insurances.

The union government attempted to implement the first healthcare insurance scheme for the poor in 1996-97, known as the 'Janarogya Yojna'. The onus of implementing the scheme fell on General Insurance Company (GIC) and its four subsidiaries - The New India Assurance Company, Oriental Fire and Insurance Co., National Insurance Co., and The United India Insurance Co. The insurance scheme covered people between the ages of 5 to 70 for pre as well as post-hospitalisation expenses for up to 30 and 60 days, respectively. The cost of the premium was $122 per annum, which was borne by the government. The insurance scheme was a huge failure, as it followed the reimbursement model and a claim could take up to six months to be processed.

With the public insurance model failing, private players began to gain foothold in the health insurance market with innovative schemes. Public-private partnership schemes like 'Yeshaswini Insurance Scheme' for BPL families in Karnataka have been a huge success. With a subscriber list of around 1.4 million families, it generated a surplus of 1.86 crores in its first year of operation in 2002. Following this success, Andhra Pradesh and Tamil Nadu are also in process of implementing comprehensive health insurance schemes with the help of private insurance companies. On the other hand, Kerala is also in the process of implementing a health insurance scheme by using the public insurance model. Hence, the premise of this paper is to compare the current healthcare insurance models followed by different social health insurance schemes and evolve a best fit model for the nation.

Figure 8: Mapping of Health Insurances in India



Source: Dr N Devadasan, Community Health Insurance in India- An overview, Institute of Public Health, Bangalore.

3.1. Objectives

- To analyse the healthcare insurance models implemented in PPP schemes
- To compare the PPP schemes and evolve a model best suited

3.2. Methodology

- Secondary Research
- Qualitative Research
- Comparative Study
- Systematic Review
- Meta-Analysis

3.3. Data Sources

- Sarosh Kuruvilla, Mingwei Liu,Priti Jacob, 2005, The Karnataka Yeshaswini Health Insurance Scheme For Rural Farmers & Peasants: Towards Comprehensive health coverage for Karnataka, Ithaca
- ILO Subregional Office for South Asia, (2005-06), *India: State Government Sponsored Community Health Insurance Scheme (Andhra Pradesh),* Social Security Extension Initiatives in South Asia
- ILO Subregional Office for South Asia, (2005-06), *India: State Government Sponsored Community Health Insurance Scheme (Karnataka),* Social Security Extension Initiatives in South Asia

1. Findings and Inferences

4.1. Overall Comparison

Table 7: Comparison between Aarogyasri & Yeshaswini

	Yeshaswini	Aarogyasri
Starting Date	May 1, 2003	April, 1 2007
Ownership of the Trust	Public-Private Partnership	Govt Of Andhra Pradesh
Target Population	All co-operative farmers	All BPL ration card holders
Intervention Area	Rural	Rural-Semi Urban
Risk	Health	Health
Coverage[5]	2,318,778 people	36,700,000 people
Model	In-house (Managed by FHPL)	Partner-Agent
Insurance Company	None	Star Health & Allied Insurances

[5] Number of people covered

Insured Unit	Individual	Whole Family
Enrolment	Voluntary	Voluntary
Premium	Rs 130	None
Co-contribution	Rs 110	Rs 300
Total	Rs 240	Rs 300
Payment	Annual-Upfront through Co-op	Government pays annually
Surgical Coverage	Rs 100,000	Rs 150,000
OPD & Misc Charges	Free	Rs 50,000
TPA	Yes	No
Pre-authorization	Yes	Yes
Cashless	Yes	Yes
Additional benefits	None	Health camps, dedicated service

4.2. Gender-wise Enrollment

Figure 9: Gender-wise Enrollment Graph

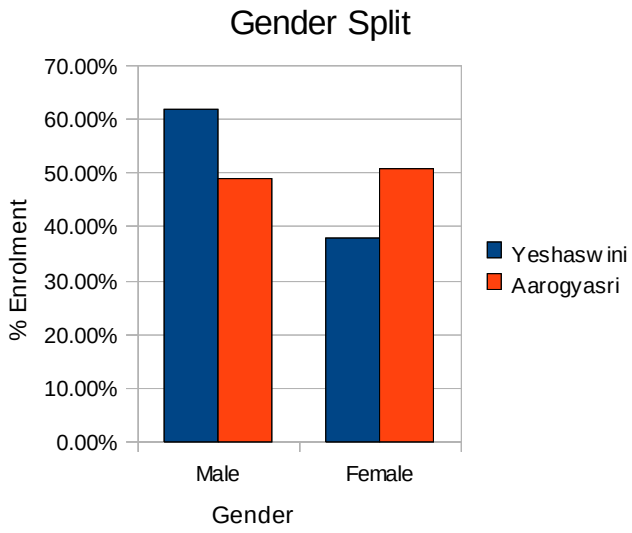


Table 8: Gender-wise Enrolment Split

Gender	Yeshaswini	Aarogyasri
Male	62.00%	49.00%
Female	38.00%	51.00%

4.3. Yeshaswini Year-wise Enrollment

Figure 10: Yeshaswini Year wise Enrolment Graph

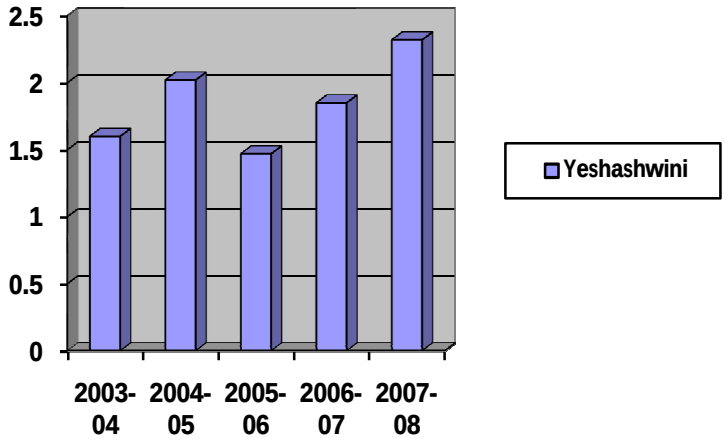


Table 9: Yeshaswini Year Wise Enrolment Table

Year	Enrolled(in millions)
2003-04	1.6
2004-05	2.02
2005-06	1.47
2006-07	1.85
2007-08	2.32

4.4. Aarogyasri Year-wise Enrollment

Figure 11: Aarogyasri Year wise Enrolment

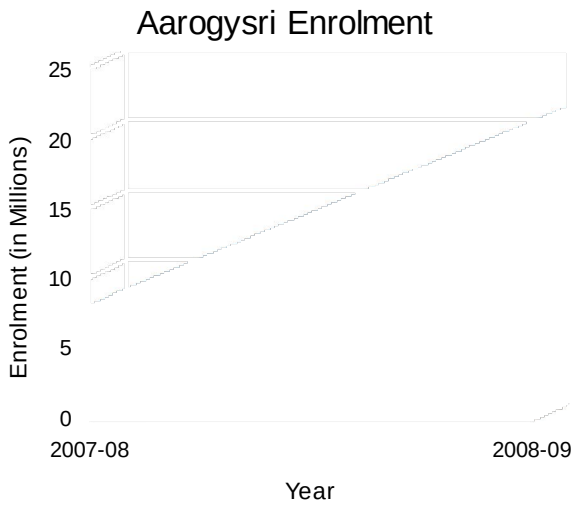


Table 10: Aarogyasri Year wise Enrolment Table

Year	Enrolled(in millions)
2007-08	8
2008-09	21

4.5. Surgeries Performed under the Yeshaswini Scheme

Figure 12: Surgeries performed under Yeshaswini Scheme

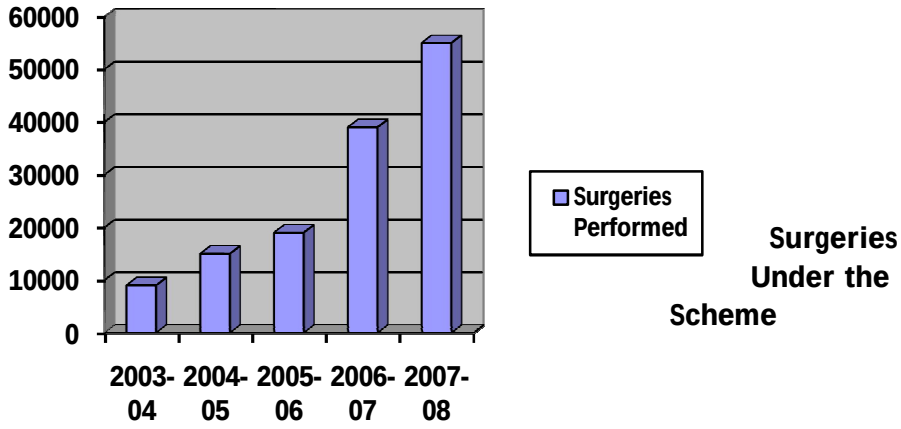


Table 11: Surgeries Performed Under the Yeshaswini Scheme

4.6. OPD Consultations under the Yeshaswini Scheme

Figure 13: OPD Consultations Under the Yeshaswini Scheme

Year	Surgeries Performed
2003-04	9000
2004-05	15000
2005-06	19000
2006-07	39000
2007-08	55000

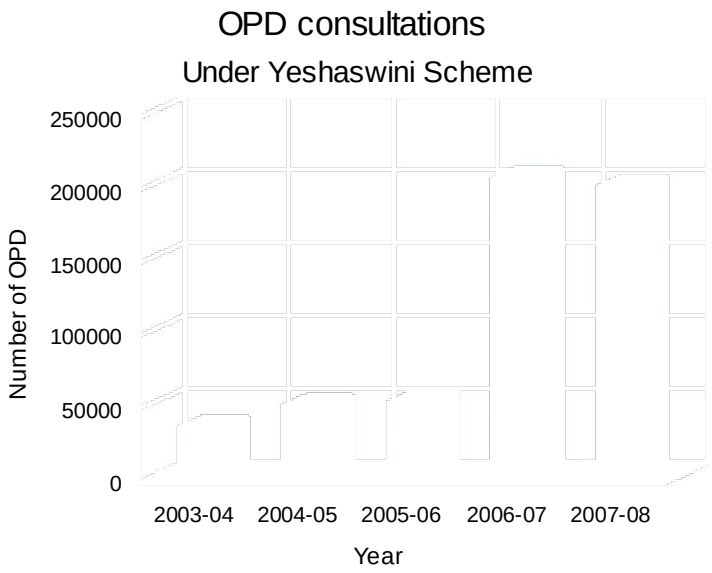


Table 12: OPD Consultations Under the Yeshaswini Scheme

Year	OPD consultations
2003-04	35000
2004-05	50000
2005-06	52000
2006-07	206000
2007-08	200000

4.7. Aarogyasri Breakdown

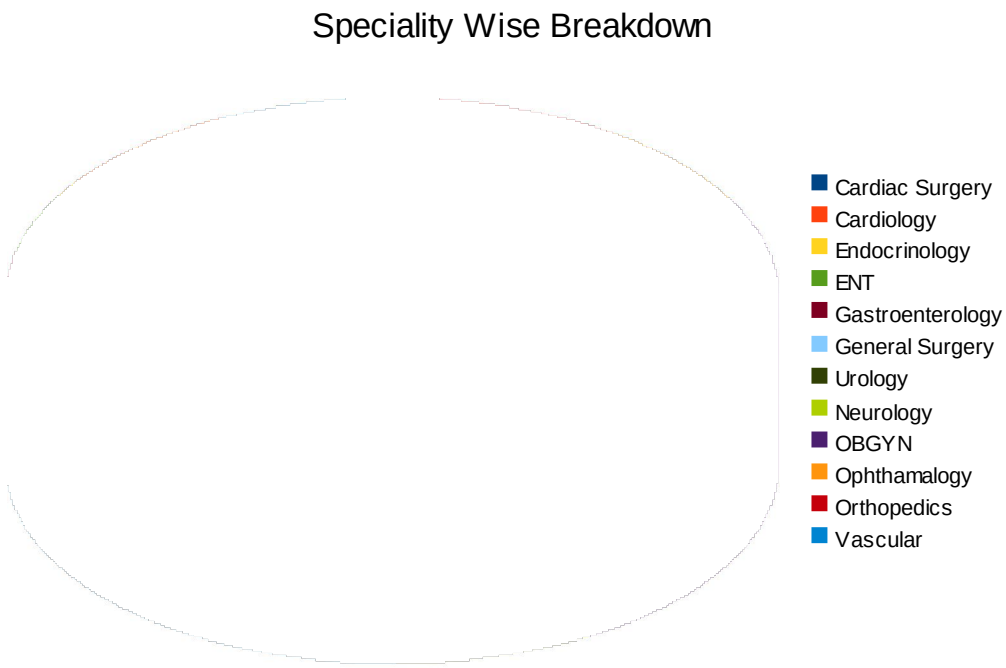


Figure 14: Aarogyasri Specialty Wise Breakdown

Table 13: Aarogyasri Specialty Wise Breakdown

Speciality	Surgeries Performed
Cardiac Surgery	541
Cardiology	587
Endocrinology	101
ENT	354
Gastroenterology	360
General Surgery	1741
Urology	595
Neurology	23
OBGYN	1805
Ophthamalogy	530
Orthopedics	699
Vascular	16
Total	7352

Figure 15: Aarogyasri Surgery Wise Breakdown

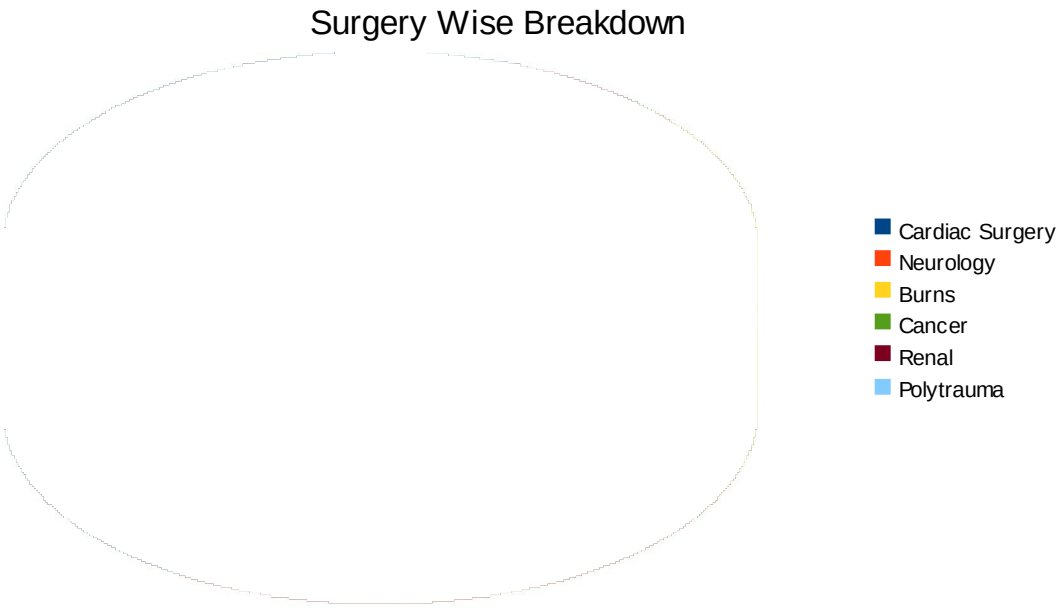


Table 14: Aarogyasri Surgery Wise Breakdown

Speciality	Surgeries Performed
Cardiac Surgery	4712
Neurology	2850
Burns	2434
Cancer	143
Renal	674
Polytrauma	671
Total	11484

4.8. Costs of Insurance Administration

Figure 16: Cost of Insurance Administration

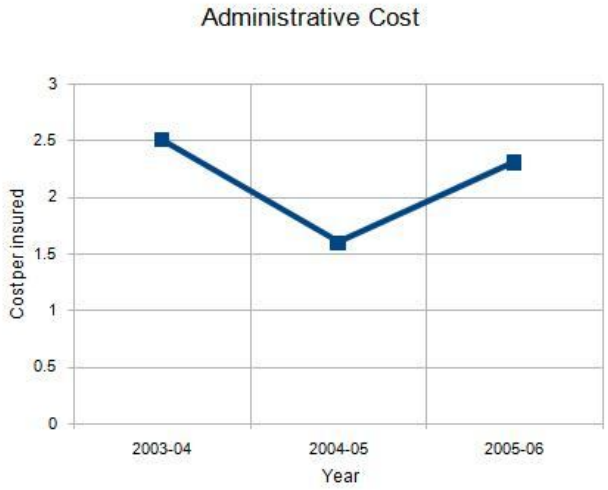


Table 15: Cost of Insurance Administration

Year	Administration Cost	Insured(in millions	Cost per Insured
2003-04	4002	1.6	2.5
2004-05	1278	2.02	1.6
2005-06	4361	1.47	2.3

Figure 17: Co-contribution by the Government of Karnataka, under the Yeshaswini Scheme

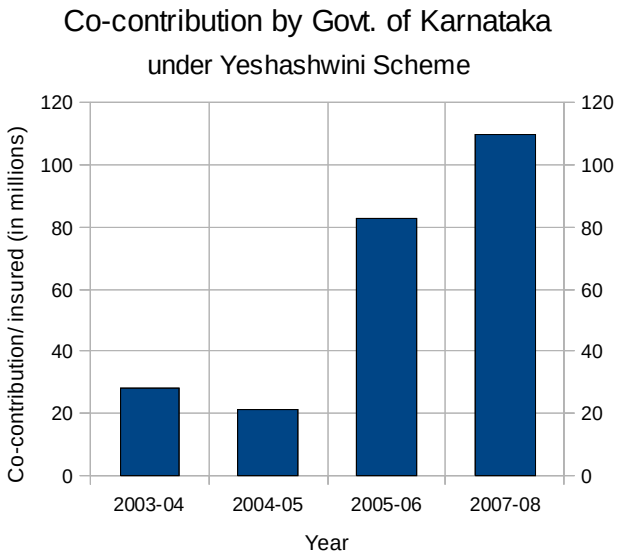


Table 16: Co-contribution by the Government of Karnataka

Year	Co-Contribution (in millions)	Insured(in millions)	Cost per Insured
2003-04	45	1.6	28.13
2004-05	42	2	21
2005-06	121	1.46	82.88
2007-08	198	1.8	110

4.9. Yeshaswini Scheme

- The insurance co-contribution of the government has increased every year from ` 28 to `110. This data indicates that the project may not be sustainable over a long period.
- The increase has also attributed to fluctuation in enrollment of the scheme.
- The increase of co-contribution also highlights the deficiency in the healthcare delivery systems. A strong focused strengthening program is necessary to improve the same. This indicates a lack of policy framework on the part of the government
- The increase on insurance premiums every year also indicates the dependency on private players. Hence, a standardisation of rates is necessary to curb costs. This also indicates a lack of policy framework on the part of the government
- The stabilisation of administrative costs indicates good governance by the TPA - Family Health Plan Limited (FHPL)
- Increase in OPD as well as surgery data indicate the successive utilisation of the scheme
- The increase in enrollment over the years also indicates the popularity and acceptance of the scheme by the general public
- The growth in enrollment was far less when compared to the Aarogyasri scheme, indicating that the agent model works faster than the community model

4.10. Aarogyasri Scheme

- The scheme had a tremendous growth from its first to second year- 163 per cent. Shows approval for the Partner-Agent model

- The scheme premium over the two years in operations has been maintained at Rs 300. This also shows that the use of a professional insurance agency helps in curbing costs. This also indicates that use of TPA cannot curb administration costs.[6]
- The strong information management system has helped in increased enrolment as well as in outreach of the scheme
- The gender split ratio is lower in Aarogyasri when compared to Yeshaswini.
- The scheme may not be financially viable over the years, since enrollment is bound to increase along with cost
- The operations of scheme do not involve a framework to enhance local healthcare capabilities. This indicates a lack of policy framework
- The overall sustainability of the initiative is questionable

4.11. Overall Inferences

- Inference from the fact that cost of healthcare has gone up as the demand for it has also gone up (due to insurance). Thus, the systems in place are not really improving their efficacy.
- Social health insurance schemes are a populist platform for governments and support them. This affects the viability of the scheme.

[6] The way the TPA operates makes the difference. In Karnataka, the functioning of TPA as a co-operative allowed the government to curb administration costs, where as in Andhra they are yet to find a good model for the TPA.

5. Conclusion

One size cannot fit all. Nonetheless, PPP's are highly complex, as they have to address issues raised by the government, private company, NGOs, SHGs and most importantly, the people. In order for the private players to get involved, there needs to be broad policy framework that can be customised to suit the needs of each scheme. The onus of creation of such policy framework lies on the government.

At present, both the schemes have their own advantages and disadvantages. A model which combines the Yeshaswini and Aarogyasri would be best fit for a social health insurance scheme. The viability of the model is questionable, as both models have not been able to curb costs related to healthcare. This suggests that an insurance model alone won't be sufficient for an extended period. The government must have a policy to up scale the infrastructure as well as the care provided by local healthcare centres. There is also a strong indication that healthcare awareness must be increased in the rural areas, which is a must for any insurance scheme to be successful. Hence, we need an integral approach that links affordability and accessibility.

An alternative approach would be:

- The creation of a Central Agency to strengthen the healthcare system
- The Central Agency allocates funds to the State Agency.
- The State Agency is responsible for creating a framework of healthcare system as well as an insurance system that suits its needs.
- The insurance system process can be outsourced to private players. From Aarogyasri, we have learnt that the agent scheme is much more effective, but expensive. Thus, the agent's role in the insurance scheme is to help set up small co-operatives that can help in collection as well awareness. [7]

[7] The rate of enrolment in the two schemes varied by a huge margin. Hence, the agent- insurer model is a good way to insure the person. However, after that, the admin cost goes up. Thus, we need an

- The healthcare system strengthening can be another public-private partnership, in an effort to bring affordable healthcare to the doorstep. It can be partially financed by the government, the insurance company and the local government in place.

- The local healthcare system must have a plan in order to increase its capabilities as well as capacities over time. This plan administration must be taken up by the local authorities.

- The insurance premium collection must be left to co-operatives who will hand it over to the insurance company.

- Initially, the government may subsidise the plan, but it highly not recommended as in the long term it may not be self sustainable.[8]

- A third party must be involved in administration of the insurance scheme. As observed in the Yeshaswini scheme, the TPA can provide smooth cashless transactions and be effective administrators in resolving conflicts and grievances.

- A third party must be involved in monitoring the whole process in each local government, as they can give insights to process improvements that can further enhance the quality of healthcare delivery.

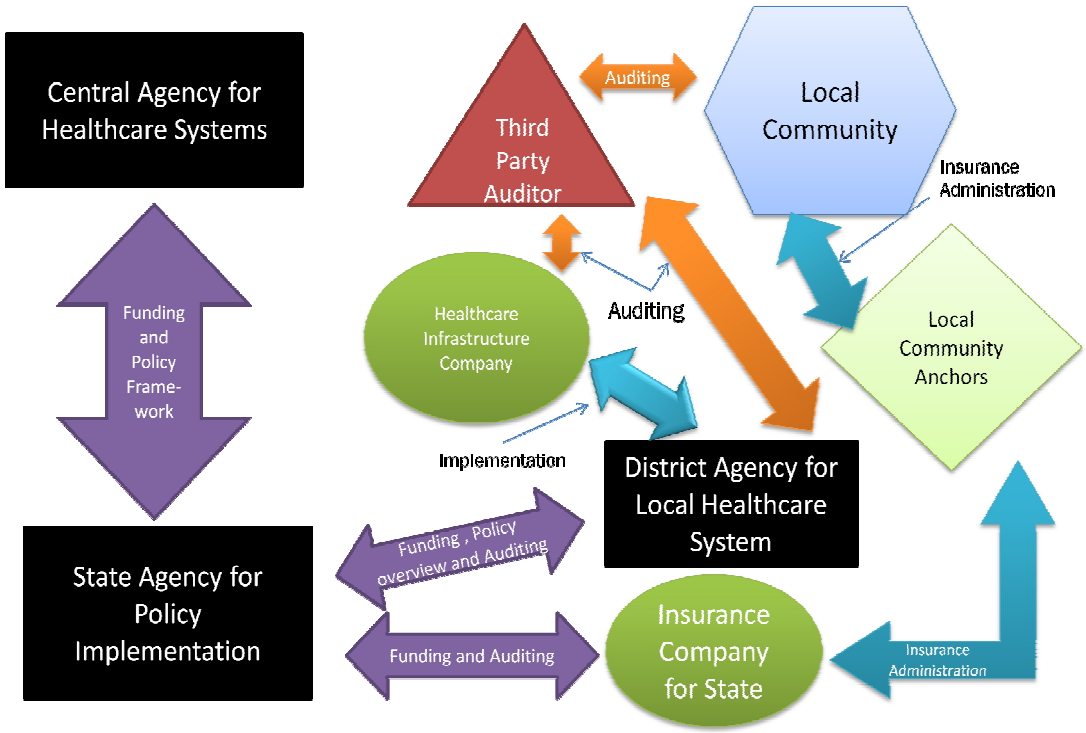
- From Aarogyasri, we have learnt the importance of a strong information management system. A real time monitoring system can help in management of facilities, monitoring (transparency in process) as well as in increasing the efficacy of the overall system. This system can be a public-private partnership.

intermediary. From Karnataka, the co-op helped in curbing these cost elements. Thus, the plan should be administered by a co-op that is relieved of public relation duties.

[8] It should just cover basic health issues, and as years go by, and the facilities improve, so will the insurance coverage.

- The central committee must have a sub committee to provide regular audits and must play the role of a central monitoring agency.

Figure 18: Alternative Healthcare Model Based on a Socially Viable Health Insurance Scheme



References

Devadasan, N. 2007. *Community Health Insurance in India-An Overview*. Bangalore: Institute of Public Health.

Government of India. Committee on Public Undertakings (2005-06), Health Insurance- A Horizontal Study. Ministry of Finance.

ILO Subregional Office for South Asia. 2005. *India: State Government Sponsored Community Health Insurance Scheme (Andhra Pradesh).* Available at http://www.ilo.org/public/english/region/asro/bangkok/events/sis/download/paper16.pdf

ILO Subregional Office for South Asia. 2005. *India: State Government Sponsored Community Health Insurance Scheme (Karnataka).* Available at http://www.ilo.org/public/english/region/asro/bangkok/events/sis/download/paper16.pdf

Kuruvilla, S., Mingwei Liu and Priti Jacob. 31 March 2005. *The Karnataka Yeshaswini Health Insurance Scheme for Rural Farmers and Peasants: Towards Comprehensive Health Coverage for Karnataka?* Available at http://www.isec.ac.in/Karnataka_Kuruvilla16.5.05_aligned.pdf

Vij, Sonal. February 2009. PPP: Hit or Miss. *Express Healthcare*. Available at http://www.expresshealthcare.in/200902/market01.shtml