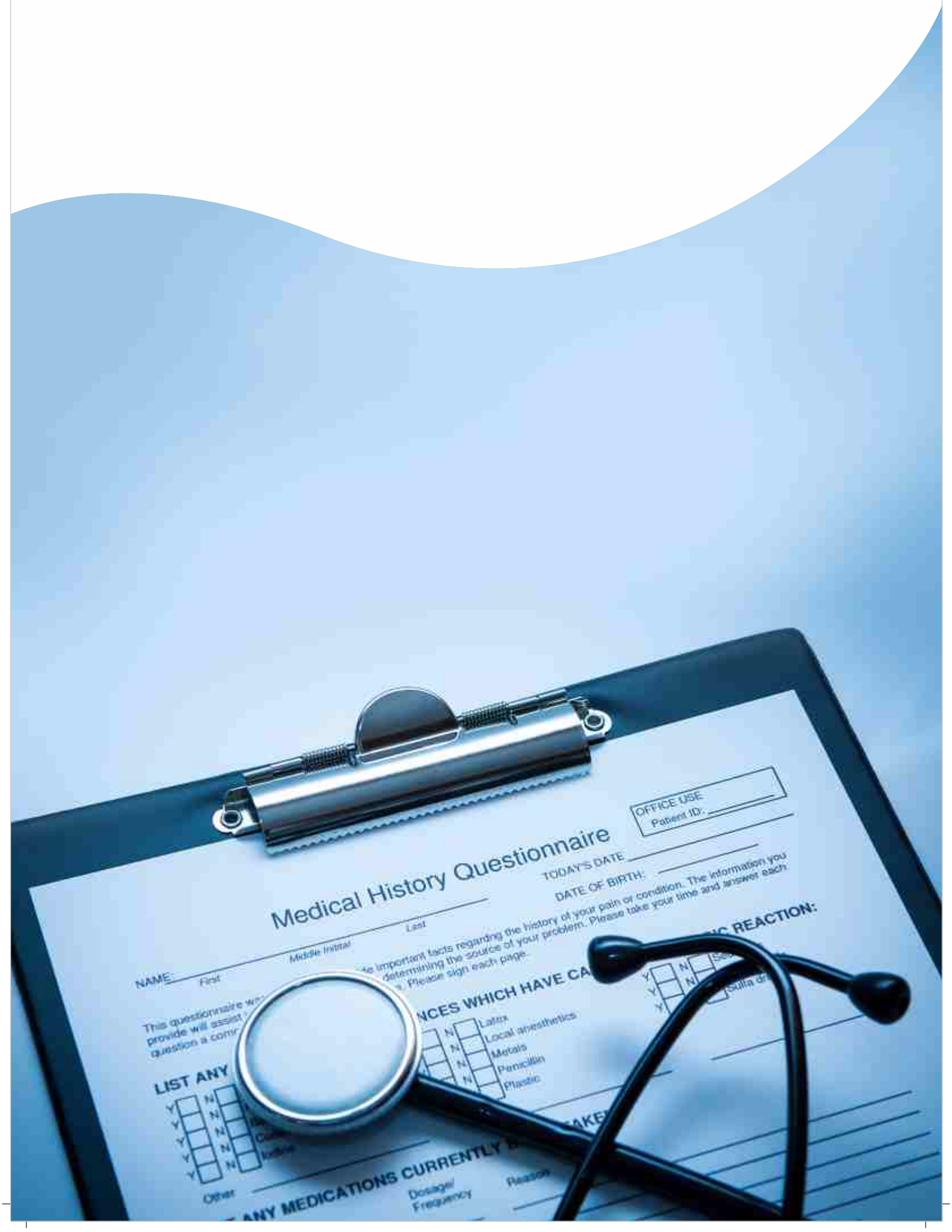
A GUIDING FRAMEWORK FOR OPD & PREVENTIVE HEALTH INSURANCE IN INDIA

SUPPLY AND DEMAND SIDE ANALYSIS

8TH FICCI HEALTH INSURANCE CONFERENCE | DECEMBER 2015

Feedback

powered by
VIDAL HEALTH
THIRD PARTY ADMINISTRATOR


Medical History Questionnaire
OFFICE USE
Patient ID:
TODAY'S DATE
DATE OF BIRTH:
NAME:
First
Middle Initial
Last
LIST ANY
Latex
Local anesthetics
Metals
Penicillin
Plastic
Other
Dosage/
Frequency
Reason

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1 MESSAGE FROM CHAIRMAN - IRDAI



I am happy to know that FICCI is releasing a Knowledge Paper on Primary and Preventive Health Insurance in India. While the need to include primary and preventive elements in health insurance products is undisputable, it has not made much headway given the concerns relating to likely misuse and overuse. This paper has come at an opportune moment giving scope for discussions not only regarding the supply and demand side aspects of primary and preventive care but also the environment within which these aspects operate. The discussions revolving around chronic diseases are also timely, given the financial burden of these ailments both at the individual level and the economy as a whole.

I compliment FICCI for bringing out the paper during the seminar on "Creating Value through Customer Centricity" - product innovation keeping in view the demands of the customer is the need of the hour.

With best wishes,

T.S. Vijayan
Chairman, IRDAI


MEDICAL
MEDICAL
Health Care
Doctor
Hospital
Pharmacist
Nurse
Dentist
First Aid
Surgeon
Emergency

2 FOREWORD BY FICCI

It gives me great pleasure to introduce FICCI's paper on "A Guiding Framework for OPD & Preventive Health Insurance in India".

While health insurance in India has been growing at a 20% CAGR since 2000, most of the products in the market are limited to hospitalization insurance. From a consumer perspective, this is less than 10% of total spend in any given year. In the past, insurers have cited the lack of data and lack of physician networks as key constraints to introducing out-patient insurance structures, even though the potential market for the same is about 20 times the current health insurance market size.

This paper, produced by Feedback Consulting in partnership with FICCI's Task Force on Primary and Preventive Care provides both, the international 'big picture framework' and a detailed local market context with actionable solutions. The task force was led by Mr Girish Rao, CMD – Vidal Healthcare, and Ms Vidya Hariharan, Director – Group Strategy, Vidal Healthcare, ably supported by Mr Deepak H, Head-Emerging Sectors- Feedback Business Consulting

The team has presented crisp findings on markets such as Brazil, China, Turkey, Thailand, Indonesia and South Africa, and highlighted learnings for India. They have also detailed local insights by talking to Pharmaceutical companies and healthcare start-ups such as Practo, Qikwell, IHO and the like.

The paper provides actionable insights – from recommending capitation as a solution to the constraints faced by the health insurer to technology recommendations on Electronic Health Systems.

It includes a minute analysis of regulatory clauses and suggested wording which can help catalyse the market towards OPD insurance in a twelve month timeline.

I hope industry will use this as a basis to engage in a constructive dialogue with the Regulator – in the road towards comprehensive health insurance products.

G Srinivasan
Chair - FICCI Health Insurance Committee &
CMD, The New India Assurance

Shobha Mishra Ghosh
Senior Director
FICCI

3 ACKNOWLEDGEMENTS

FICCI would like to thank the multi-stakeholder group for their inputs in the creation of this paper -

- Mr Girish Rao, Co-Chair, FICCI Health Insurance Committee & CMD – Vidal Healthcare Services
- Mr Antony Jacob – Co-Chair, FICCI Health Insurance Committee & CEO - Apollo Munich Health Insurance
- Mr Sandeep Patel, CEO & Managing Director – Cigna TTK Health Insurance
- Ms Vidya Hariharan, Director - Group Strategy - Vidal Healthcare Services
- Mr Alam Singh, Advisor - LexisNexis
- Dr S Prakash, Executive Director - Star Health and Allied Insurance
- Ms Malti Jaswal, COO - Health Insurance TPA of India
- Mr Shreeraj Deshpande, Head – Health Insurance - Future Generali India Insurance
- Ms Asha Nair, Former General Manager, United India Insurance
- Mr Sanjay Datta, Head- Underwriting & Claims, ICICI Lombard General Insurance
- Dr Vijay Agarwal, Executive Director - Pushpanjali Crosslay Hospital
- Mr Mahesh Kumar, Director- Compliance & Legal - Max Bupa
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- Mr Khalid Ahmed, Head – Products - PNB MetLife
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- Ms Salonie Chawla- Consultant-Emerging Sectors-Feedback Business Consulting

4 EXECUTIVE SUMMARY

Two metrics measure the 'state of the market' for health insurance in India.

- First, population coverage for hospitalization insurance is 50%.
- Second, health insurance accounts for 5.2% of total health care spend – in the context of "provider-as-stakeholder", it is a marginal play.

Health insurance is 5.2% of total healthcare spend

	Rs in Cr	Rs in Cr	Rs in Cr	%	%
Year	Total Healthcare Spend (Public + Private)	Commercial Health Insurance	Social Health Insurance	Commercial Health Ins%	Social Health In%
2008	270,00	5,125	6,474	2.53%	2.40%
2009	312,00	6,625	7,277	2.83%	2.33%
2010	359,400	8,305	9,195	3.08%	2.56%
2011	410,400	11,145	10,336	3.62%	2.52%
2012	478,800	13,263	11,618	3.69%	2.43%
2013	560,196	16,512	13,059	3.93%	2.33%
2014	553,365	18,810	14,679	3.83%	2.65%
2015E	766,852	21,391	19,509	3.72%	2.54%

Source: HealthCare Spend - IBEF 2015; Commercial Health insurance - IRDA Annual Report; Social Health Spend - MOH and GSHIS publication by the World Bank; projections for 2015 adjusted for market reality of healthcare spend at 4% of GDP.

... Health Insurance cover only hospitalization linked expenses in India

About 50% of the population are covered by social insurance, 7% by commercial health insurance

Population coverage (mn) by Scheme	2003-4	2009-10	2015*P
Employee's State Insurance Scheme (ESIS)	31	3	3
Central Vovernment Health Scheme (CGHS)	4	3	3
RSBY (Min. of Labour sponsored scheme)	NA	70	300
State govt schemes	1.6	114	153
Commercial Private insures	15	55	90
Total population covered	51.6	298	618
Uncovered population	898	752	532

528 mio i.e. 52.8 crore or 50% of the poulation

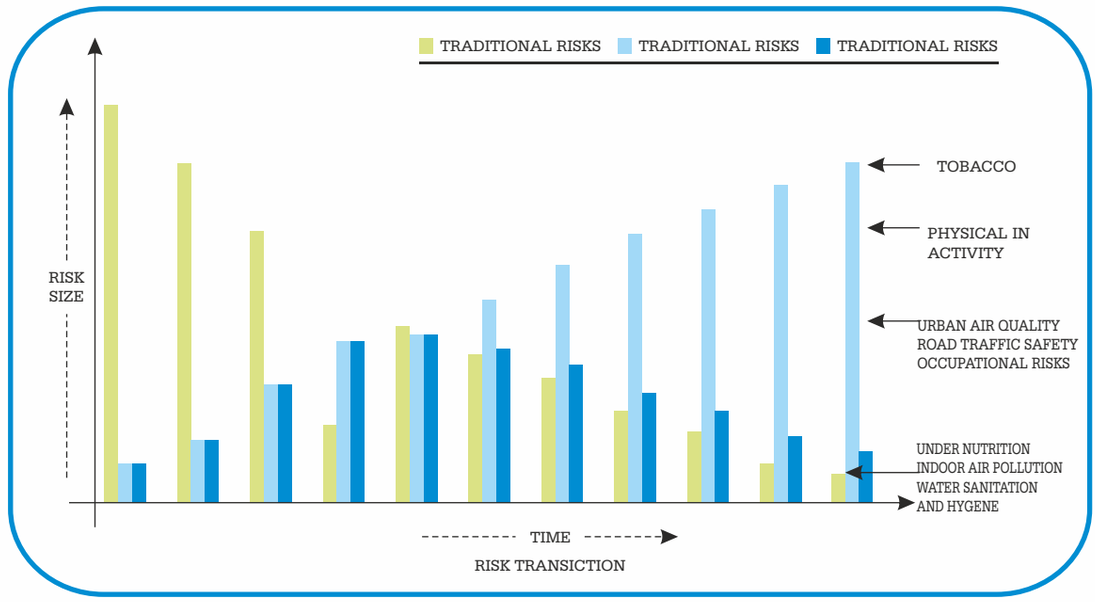
Source: Government Sponsored Health Insurance - Are you covered? Grand La forgia and Somil Nagpal; World Bank 2012. Table 3.1

Social insurance covers 50% of the population - but does not cover primary care.

OPD insurance does not exist currently.

The main reason health insurers are seen as marginal is due to the fact that all current products cover some variation of in-hospitalization care. As disease patterns in the country change – most of expenditure will shift, and is shifting to outpatient care (OPD care).

India's health risk profile has changed.



As countries get prosperous, health risk and health spend transitions from infection / communicable to chronic diseases. India is no exception.

As per WHO, it is critical for every country to have a sound Primary Healthcare (PHC) system; which is the first level of contact individuals, families and communities have with health care. The importance of a primary health care model for health service delivery is greater access to needed services; better quality of care; a greater focus on prevention; early management of health problems; and cumulative improvements in health and lower morbidity as a result of primary health care delivery.

The objective of this white paper is to analyse the demand and supply needs for primary and preventive care health insurance and suggest a framework for the introduction of OPD or primary care health insurance. It includes an analysis of regulations and changes required therein to enable.

4.1 KEY FINDINGS OF THE STUDY

1. About 66% of healthcare spend is on OPD treatment – this is for the working population in the country. Our analysis shows that the burden of OPD costs – i.e. pharmacy bills, lab tests spend, doctor consultations and OPD spend are rising even for the working population. Our opportunity analysis shows that **about 16.2% of the urban population with paying capacity are likely to purchase OPD covers.**

2. Primary healthcare in India is still largely unorganised and private sector healthcare supply is disproportionately skewed to urban over rural segments. **The**

biggest barrier to insurers offering OPD covers is the lack of data for pricing these covers. This is where risk sharing structures – such as capitation – can galvanise the market towards OPD insurance. Interviews with providers and health administrators carried out during this white paper suggest a willingness to participate in risk-sharing structures – it only remains for enabling regulation to catalyse this opportunity.

Insurers say that biggest barrier to offering comprehensive health insurance (covering cost of medicines, tests and consultations) is the lack of data for pricing these covers. This is where risk sharing structures – such as capitation – can galvanise the market forward.

3. Stepping stones for insurers to write OPD covers are Chronic Care and Elderly Care covers. **In both the cases, physician willingness to participate and patient need to purchase is higher than in the case of OPD cover.**

4. The design of a primary health insurance structure needs a network of doctors who can contract with either health insurers or healthcare aggregators – to participate in OPD financing schemes. **Pharmaceutical companies have indicated their willingness to collaborate with health insurers to provide access to physicians (on a non-commercial basis).** This represents an important aggregation opportunity for health insurers and health administrators alike.

5. To conclude – three things will enable OPD insurance in India:

    a. **Risk sharing structures**: Capitation based products which allow for risk sharing with aggregators, health administrators or providers.

    b. **Electronic Health Records**: Mandatory usage of Electronic health records would provide a low cost, relatively frictionless platform to administer OPD claims.

    c. **Closed provider networks**: To align providers and insurer's interests, OPD insurance would work best on a closed [listed] provider network structure, using PINCODE and geo-locational mapping to ensure sufficient depth of network, so that customer choice is not vitiated.

The time is best for creating financing mechanisms for the primary healthcare in India - the market is likely to first target urban consumer who can afford to buy. Aggregation of provider capacity for primary care is possible and payors, including the government programs and commercial insurers can provide the platform to scale primary care financing across the country, by 'layering' these on existing hospitalization based schemes.

5 OUR APPROACH AND FRAMEWORK

5.1 APPROACH

In order to write this white paper, we interviewed health insurers (public sector, private sector and specialist companies), TPAs, Pharmaceutical companies and providers. We also spoke to international market experts and carried out desk research to capture key learnings for markets such as Brazil, China, Turkey, Thailand, Indonesia and South Africa.

5.2 TASK FORCE MEMBERS AND INTERVIEWEES

1. **Mr Girish Rao**, Co-Chair, FICCI Health Insurance Committee & CMD - Vidal Healthcare Services
2. **Mr Antony Jacob** - Co-Chair, FICCI Health Insurance Committee & CEO - Apollo Munich Health Insurance
3. **Mr Sandeep Patel**, CEO & Managing Director - Cigna TTK Health Insurance
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12. **Mr Mahesh Kumar**, Director- Compliance & Legal - Max Bupa
13. **Dr Sanjay Kinra**, Visiting Faculty - Bahai University, Brazil
14. **Dr Vikram Singh**, Vice President - Medical Affairs & Pharmacovigilance - Janssen
15. **Mr Khalid Ahmed**, Head - Products - PNB MetLife

5.3 FRAMEWORK

Many health insurers conveyed to Feedback Consulting that the out-patient healthcare services and their coverage typically involve small ticket and high volume transactions. Hence, the customers as well as the insurers end up availing the hospitalization and in-patient plans. Therefore, out-of-pocket private expenditure on health has risen steadily over the years, with the cost of medicines, followed by that of hospitalisation accounting for the largest share of the household expenditure. Absolute spending, as well as its share in total non-food expenditure, rises with income levels.

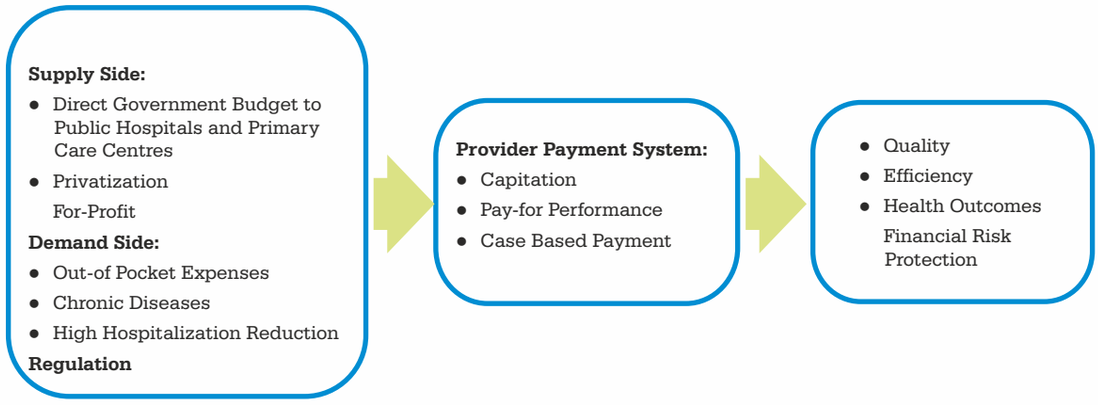
Furthermore, **Most of the public funding is for preventive, promotive and primary care programmes** in areas which are physically inaccessible; while private household expenditure is largely for curative care. **This cost burden has started pinching the urban consumer. OPD covers will soon become critical for customers, because at the very minimum they provide aggregation efficiency in the form of network discounts which will help the household move from a 'pay-as-you-go structure' to a more efficient mechanism of paying for healthcare**.

Our framework for this paper focuses on the rising demand for an OPD cover and supply side challenges which if addressed can result in OPD insurance being adopted - at least for Urban India to start with.

5.3.1 Methodology

A comprehensive assessment of the demand supply gaps in India was conducted in detail through a survey with health insurance providers, doctors and professors studying the Healthcare Insurance segment.

We also reviewed how OPD expenditure is financed in key, relevant markets (relevant to Indian healthcare's phase of development) to understand how some of the constraints on the supply side of the market can be managed.



6 INDIAN PRIMARY AND PREVENTIVE HEALTHCARE SCENARIO

6.1 HEALTHCARE SCENARIO IN INDIA

India comprises around 16% of the world's population and accounts for almost 21% of the global burden of disease. In 2014, national expenditure on healthcare was valued at about 4.2% of national GDP, and it is expected that this value will remain constant till 2016.

Total healthcare spending in currency terms is projected to rise at over 12% annually, from USD 78.8 Billion in 2013 to an estimated USD 140 Billion in 2018. The Indian healthcare sector is steadily gaining more importance in the country. Recent trends reported in the sector include:

- Increase in per capita healthcare expenditure
- Increasing penetration of health insurance
- Shift of focus from communicable diseases to lifestyle diseases
- Emergence of telemedicine
- Newer modes of delivery including mobile-based health delivery
- Expansion of healthcare to Tier II and III cities
- Re-emergence of traditional medicine

The sector is expected to grow at about 15% year-on-year leveraging several changing dynamics in the overall market, including factors like:

- Growth of infrastructure development
- Expanding middle class
- Greater health awareness
- Demand for higher levels of healthcare
- Rising incomes and increasing purchasing power with more women in the workforce
- Higher incidence of lifestyle diseases
- Launch of innovative insurance, reimbursement and financing policies
- Growth in medical tourism

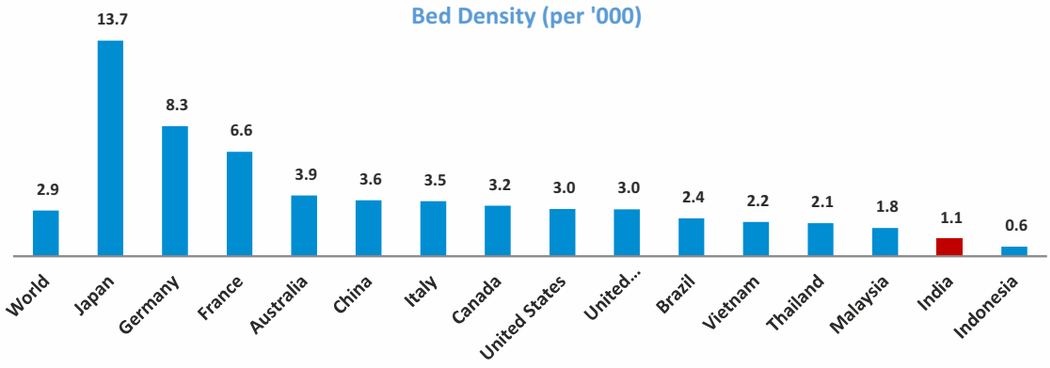
6.2 HEALTHCARE SPENDING IN INDIA Vs GLOBAL

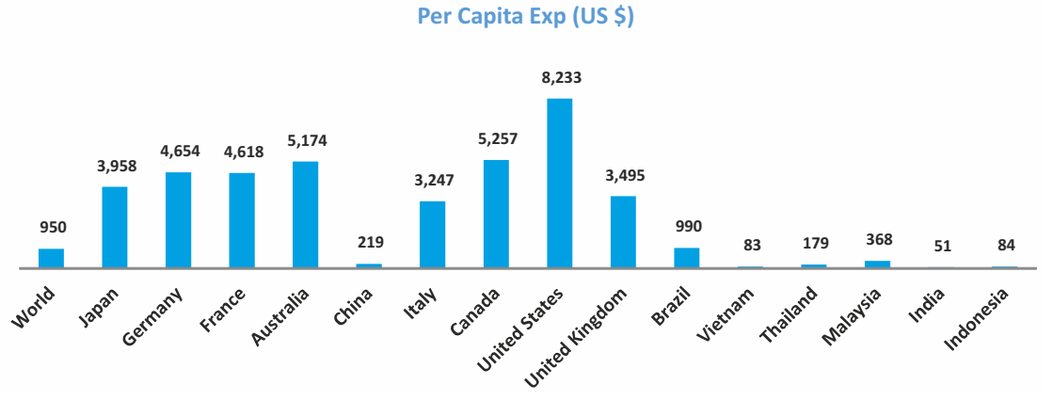
As signs in the global economy point to recovery in the near future from a prolonged recessionary phase, it is expected that global spending on healthcare will accelerate to reach USD 9.3 trillion by 2018.

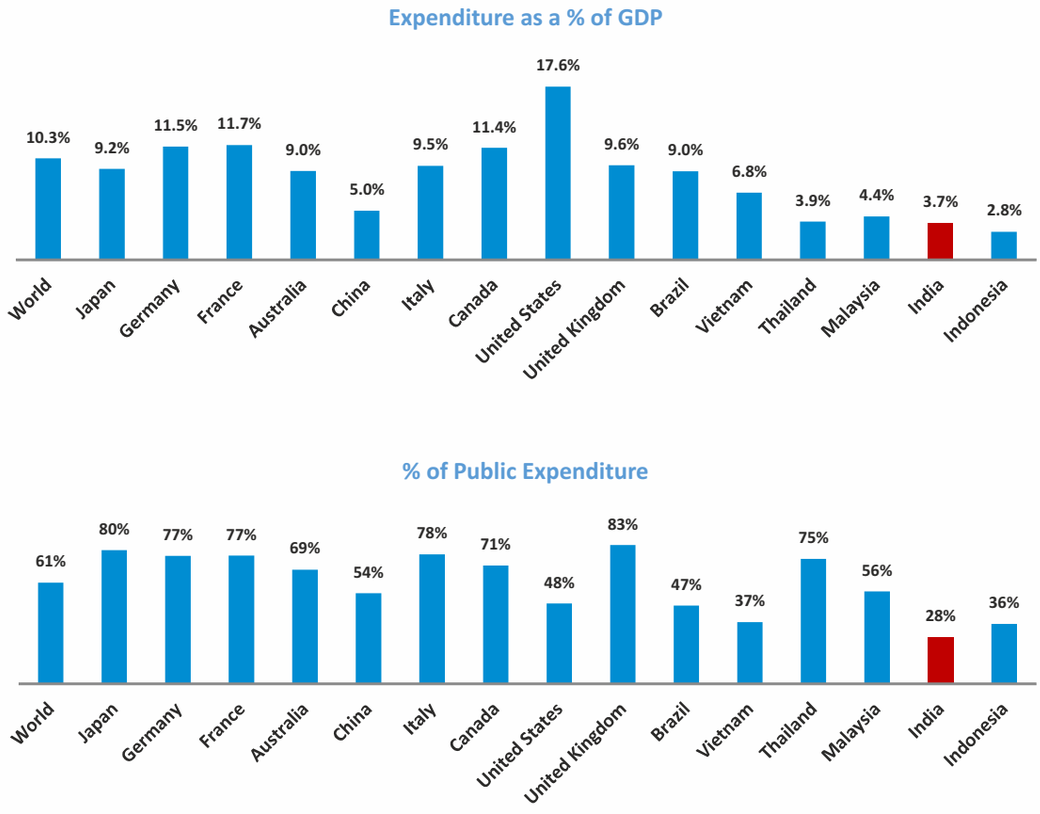
The growth drivers include rising health needs of both aging and growing populations, increasing cases of chronic diseases, expansion into emerging markets, rapid infrastructure development and advances in technology and treatment services.

Though the Indian economy has one of the highest growth rates in the world, national expenditure on healthcare as a percentage of GDP is among the lowest. It is ranked lower than economies such as Indonesia, (among select emerging and developed nations), on its focus on public healthcare. In comparison with the other BRICS nations that share similar social, political and economic influences, studies by the World Bank and WHO indicate that India's spend on healthcare is the lowest of these nations.

Most public hospitals in India have been unable to adequately cater to the large density of population they serve, thereby operating over-capacity to fulfil public healthcare needs. Private hospitals are spread unevenly across the country and also face high capacity utilization levels. This has brought the concern of 'bed density' to the forefront. To meet the WHO recommendations on bed density, it is estimated that the Indian Hospital system will need to invest anywhere between US$ 400 – 600 bn in the next 8 years. (Source: Feedback Consulting Internal estimates)







Source: Feedback Analysis of WHO Stats, Year: World Bed density (2005), Japan Bed Density (2009), All Other data is for 2010

6.3 STRUCTURE OF THE INDIAN PRIMARY HEALTHCARE SYSTEM

Primary healthcare in India caters to basic level preventive and curative medical care. It accounts for over 70% of the healthcare delivery market and is reported to be growing at almost 15% annually. The major components of this segment include:

- Doctor consultations (Mainly comprising of care delivered by a general physician in an out-patient setting)
- Diagnostics
- Retail healthcare such as pharmacies, over-the-counter drugs, personal medical equipment, health food and physiotherapy.

The Primary Healthcare System constitutes both Government and Private infrastructure. Private infrastructure is primarily focused on urban regions, while rural areas are largely catered to by Government facilities, supported by NGOs.

Most of the Government health funding in India is on preventive, and primary care programmes in remote rural areas. By contrast, private households in the APL income segments spend mostly on curative care, and consume care from private sector healthcare practitioners. This places a disproportionate cost burden on lower income segments, which can pay (or borrow) but cannot then recover from the (debt) burden.

Government Infrastructure

A three-tier system forms government infrastructure in primary healthcare, comprising of the Sub Centre, Primary Health Centre (PHC) and Community Health Centre (CHC). PHCs are established and maintained by the State governments under the Minimum Needs Programme (MNP) or Basic Minimum Services (BMS) Programme.

As on 31stMarch 2014, there were 152,326 Sub Centres, 25,020 Primary Health Centres (PHCs) and 5,363 Community Health Centres (CHCs) operational in the country.

Private Infrastructure

The primary source of healthcare for almost 70% of the urban population is the private infrastructure. This constitutes mainly of:

- Out Patient Services of Existing Hospitals
- Clinics & Polyclinics (GPs, Specialists): 6.5 – 7 Lakh Clinics
- Diagnostics Centres & Path Labs: 70,000+ centres including those operating within hospitals
- Pharmacies

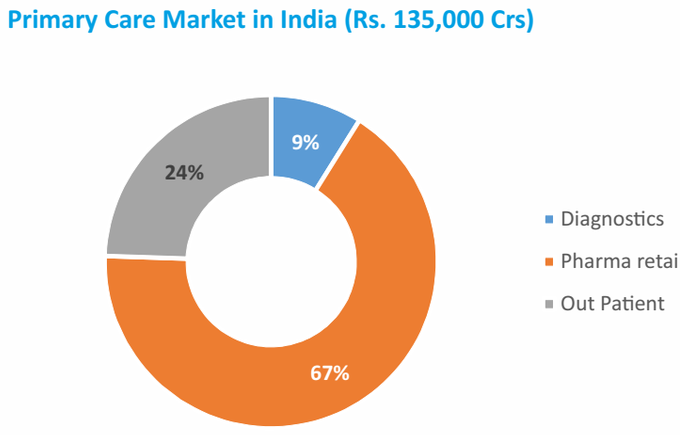
Clinics largely comprise practices of independent doctors, set up either near the doctor's residence or in small commercial spaces. Recently, however, popular brands have set up chains of clinics. This format has started to gain significant momentum with changing needs of Indian consumers.

Name of the clinic chain	Start Year	Number of clinics in 2013
Apollo Clinics	2002	90 clinics (50 are owned by franchises)
Razi Healthcare	2009	50 Clinics (30+ clinics in AP)
LifeSpring Hospitals	2005	12 clinics in Hyderabad
Nation Wide Primary Healthcare Services	2010	7 clinics in Bangalore
Bharat Family Clinic	2012	1 in Delhi
Modern Family Doctor / The Family Doctor	2011	20 in Bangalore & Pune
Healthspring	2009	4 clinics in Mumbai
India Home Healthcare (Home care)		2 (1 in Bangalore)
Express clinics		28 (6 in Bangalore)
Manipal Clinics		9 (Bangalore)
Brit Health Care		Noida / UK Based
Manappuram's MaCare Healthcare		Thrissur

Source: Feedback Research. Data as of 2013

6.4 SIZE OF THE PRIMARY HEALTHCARE MARKET IN INDIA

Based on the average number of patients provided consultation per day and the average fee charged per patient, it is estimated that the Indian Primary Healthcare Market is valued at around Rs. 135,000 Crs, with almost 2.5 - 3 bn patient visits annually.



Source: Feedback Consulting Internal Data, Secondary Research

Overall, it is estimated that doctors see an average of 12 patients a day, which translates to an average of only 2.2 visits per patient per annum. This is less than 1/4th the number of visits recorded in developed economies and well below the global average as well.

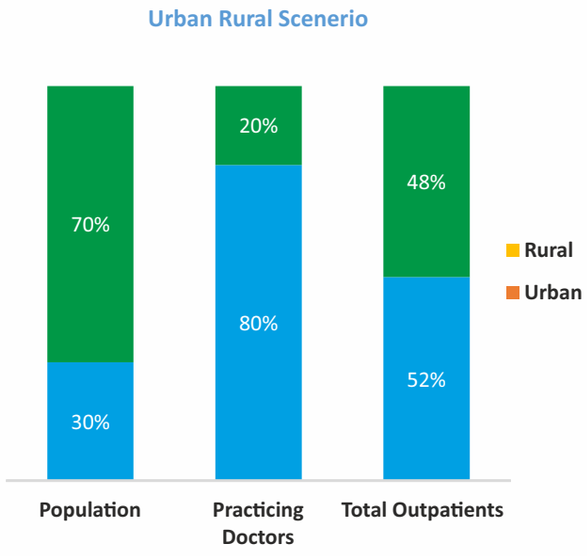
Countries	Patient visits to the doctor
Japan	14.4 per person per year
United States	8.9 per person per year
Belgium	7.9 per person per year
France	6.9 per person per year
Austria	6.7 per person per year
Germany	6.5 per person per year
Canada	6.3 per person per year
Australia	6.3 per person per year
Italy	6.1 per person per year
Denmark	6.1 per person per year
Netherlands	5.9 per person per year
United Kingdom	4.9 per person per year
New Zealand	4.4 per person per year
Finland	4.3 per person per year

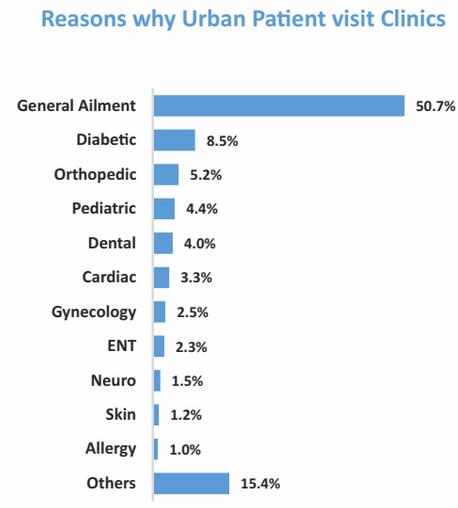
Source: http://www.nationmaster.com/red/graph/hea_con_wit_doc-health-consultation-with-doctors&b_map=1

6.5 URBAN PRIMARY & PREVENTIVE SCENARIO: HOW MUCH CAN BE PREVENTED?

With easy access to doctors and higher spending capacities, visits to the doctor in urban areas are 2.5 times higher than in rural regions. Consultations with doctors, however, primarily deal with general ailments.

There is also a general view in the industry (Feedback's Primary Research) that, **low levels of primary care consultation has led to an increase in inpatient services; some could have been prevented at an early stage.**





Source: Feedback Internal Estimates, Feedback Research, Secondary Research
Note: The Data on Urban Patient Visits is based on Sample survey of 2000 patients

It is possible that the lower number of visits to primary care (as compared to global benchmarks) has resulted in higher conversion of OP to inpatient episodes. Based on the data from NSSO (2014), one could infer that **44.3% of hospitalization cases could have been prevented by early detection and simple preventive action including exercise, dietary changes and regular health check-ups.**

Cases of Hospitalization which could have been prevented (reported per 100,000)

Ailment	Cases Per 100,000
Fever	760
Diarrhea's	149
Diabetes	119
Heart Disease: Chest Pain, Breathlessness	336
Hypertension	150
Cough with Sputum (Non TB)	30
Gastric & peptic ulcers	308
Stroke / hemiplegia	87
Sub total	**1,939**
Total Cases	**4,381**
% Ailment where there was a potential to have avoided through primary care	44.3%

Source: NSSO, Key Indicators of Social Consumption in India, 2014

In addition to the above, diseases such as malaria and TB can also be prevented through health care education and increasing hygiene awareness.

Reasons for Low Preventive Care in India:

Historically, the Indian healthcare system has been structured around a curative care model. Health insurance policies have largely followed this trend, providing cover only at the curative stage. The main reasons for low preventive care in India include:

- Non-Availability of programs that promote preventive health check-ups and diagnosis
- Low awareness
- Mind-set of people to ignore symptoms
- Current financing model which primarily requires out-of-pocket expenditure by the patient
- Changing disease profile

Recently, however, several insurance providers have started including clauses that cater to prevention and primary care. Such policies have been enormously successful among corporate customers, however these have been limited to annual health check-up packages only and not packages that are ongoing and comprehensive.

In our view, Primary and Preventive Care Insurance can play a vital role to bridge this gap in India. Every stakeholder in the value chain will be benefitted by virtue of subscribing to it:

Stakeholder	What is in it for the stakeholder?
Patient	• Increased frequency of Consultation & Tests • Increased probability of ailment detection at an early stage to reduce the need for hospitalization • Low financial burden • Improved health
Doctors (Clinics)	• Increased footfall; assured number of patients • Patient Information availability
Hospitals	• Better management of available beds • Resources can be deployed to specific patients requiring higher attention • Possibility to set up several smaller facilities across regions
Insurance Providers	• A fresh model for growth • Increased benefits to customers • Lower rate of in-patients could lead to fewer claims • Access to patient information or data
Regulators	• Higher Customer Satisfaction • Focus of the insurers will shift to overall health and wellness, beyond financing considerations

In addition to the positives for all stakeholders; there are challenges before the model can take off. Based on our conversation with various stakeholders, the following framework has been set out to understand the challenges from a demand side and supply side perspective. The same framework has been used for further analysis and to provide recommendations in the white paper.

Demand Side

- Who is the target customer segment?
- Current spending on insurance & penetration
- Average number of visits
- GP vs. Clinic Visits
- In Hospital vs. Clinic Visits
- Average Spending per visit etc.
- Ideal number of doctors required to be empanelled to cater to the target population

Supply Side

Product Design

1. Not an issue if there is an enabling infrastructure

Delivery Model

1. General Physicians Network Creation (select cities or all urban)
2. Doctor Impanelment for Primary Care Insurance (how may required)
3. Transaction Platform / Bill Access Mechanism
4. Patient Records & Genuine Claims through EHR
5. Gatekeeper model: Can we leverage Telemedicine based or Mobile based Consultation to rout customers; doctors or nurses at home

Financing Model

1. Capitation Model Vs. Case based model
2. Payment Authentication
3. Transaction Platform for claims and registration

Enablers

Level of Technology Involvement & Possible Areas

Physical Support Infrastructure Creation=Need for stakeholders who can aggregate doctors

Patient Education & Awareness

Supportive Regulatory Environment

As per this framework, we have analysed the demand side potential for primary and preventive care. Subsequently, the supply side constraints have been indicated which are critical for structuring the primary and preventive insurance structures. For supply side analysis, select practices of some global markets have been detailed and case studies from India have been highlighted which can be replicated in structuring insurance models.

7 LEARNING'S FOR INDIA FROM INTERNATIONAL MARKET EXPERIENCES

7.1 INTRODUCTION

Practices of Select Countries have also been analysed to draw learning's from an India perspective. The countries outlined are; Brazil, China, Turkey, Thailand, Indonesia and South Africa.

1. Brazil: Family Health Programme acts as a strong gatekeeper model and saves patient's costs

Key Learning for India:

- **The Family Health Strategy** - *designed to meet the government's constitutional obligation to provide health care to all citizens. It is funded primarily through taxes.*
- **The Family Health Team** *for each patient acts like a gate keeper model to reduce the number of hospitalizations and cost.*
- Public health care is provided to all Brazilian permanent residents and foreigners through the government of Brazil's **National Health Care System**, known as **Unified Health System - SUS**. The SUS is universal and free for everyone.

Country:	**BRAZIL**
Population	205 million
Current Healthcare Spend (%)	9.7 % of GDP (preventive and curative spend)
Background of the Scheme	• Public health care is provided to all Brazilian permanent residents and foreigners through the **National Health Care System, known as Unified Health System - SUS. The SUS is universal and free for everyone.** • The main strategy for a strong primary healthcare system has been its family health program. At present, the country has 50% physicians and 50% specialists. Through this strategy, routine check-ups to heart transplant, all are available to everyone free of charge at the point of service.

Model Implementation Plan	• To implement the Family Health Program/ Strategy, Brazil converted the structure of its PHC workforce to a team-based model in which Family Health Teams composed of one physician, one nurse, and four to six Community Health Agents (CHAs) care for patient populations. It also adopted coding standards for data and care records are maintained electronically. • The program has proven successful and cost-effective, improving accessibility and health outcomes for patients, while also reducing health disparities.
Challenges Faced	• The Primary care system is fully funded by the government, this has led to negligible public private partnerships and less private insurers are able to cover the primary care services, thus affecting the quality of care. • Needs to strengthen the capacity of care in order to respond to the health demands of senior citizens. • Brazil is going through an epidemiological transition towards a double rise in Non-Communicable Diseases, for which the country needs to rebuild its primary healthcare model and better management of chronic diseases.

2 Thailand: Capitated payment system for non-communicable diseases and P-P-P to provide higher standard of primary care.

Key Learning's for India:

- **Through Capitated system of payment**, *increase in the sales of medicines of diabetes, blood pressure and high cholesterol and expanding health coverage by focusing on bringing down the cost of essential medicines, the out of pocket costs was reduced and access was equated in both rural and urban segments.*
- **As a Public Private partnership example**, *supplementing Thailand's network of government run health facilities are a number of private medical hospitals and clinics which can provide a higher standard of treatment and care.*

Country	THAILAND
Population	68 Million
Current Healthcare Spend (%)	4.6% of the GDP (Preventive and Curative)
Background of the Scheme	• In 2002, Thailand implemented the **Universal Coverage Scheme** (UCS), a public insurance system to achieve universal access to healthcare, including essential medicines (National List of Essential Medicines), and to influence primary care centers and hospitals to use resources efficiently, via capitated payment for outpatient services and other payment policies for inpatient care. • Individuals enrol in the scheme at a local Contracting Unit for Primary Care (CUP), primarily housed in government-owned hospitals. By 2004, 95.5% of the population was insured, with three-quarters (75.2%) of the population covered by the UCS.
Model Implementation Plan	• The UCS focused on utilization of essential medicines and long-term increase in sales of medicines for conditions that are typically treated in outpatient primary care settings, such as diabetes, high cholesterol and high blood pressure. • The scheme did not increase the use of medicines for diseases that are treated in secondary or tertiary care settings. • People joining the scheme receive a gold card which allows them to access services in their health district, and, if necessary, be referred for specialist treatment elsewhere. • Increased utilization of services among UCS members was observed; the total outpatient (OP) visits to district and provincial hospitals increased from 111.9 million visits in 2003 to 140.7 million in 2010; especially in the rural areas.
Challenges Faced	• To strengthen high quality primary care, address some inefficiency in allocation due to incomplete system reform, and extend health care to migrants. • Most of the doctors in Thailand are specialists; that is why it is hard to find a reliable all-round general practitioner to treat you for minor medical problems.

3. Turkey: Family Medicine and Technology reforms for primary healthcare leverage higher patient satisfaction and reduction in cost burden through organized home care consultation.

Key Learning for India:

Greater availability of primary health care services through Family Medicine Programme acts as a referral system for patients. **All family health centers use electronic patient records and so this diminishes the time burden of formal procedures for insurance. Most family health centres are supported by central medical laboratory units during daily clinical routine and results can be retrieved from an automated system by internet.**

The empanelment of physicians in the programme – allows provider-patient relationships and homecare, when necessary – capitation payments, provider redistribution to rural areas, training in family medicine, and the use of field coordinators for monitoring, evaluation, and communication between frontline providers and policymakers.

Country:	**TURKEY**
Population	78 Million
Current Healthcare Spend (%)	5.6% of the GDP (Preventive and Curative)
Background of the Scheme	• Between 2003 and 2010, Turkey implemented the Family Medicine reform, which mandated all state-funded primary care be provided in a state-contracted Family Medicine Centre and established high quality PHC for every patient in the country.
Model Implementation Plan	• The Family Medicine reform The empanelment of physicians in the programme - allows provider-patient relationships and homecare, when necessary - capitation payments, provider redistribution to rural areas, training in family medicine, and the use of field coordinators for monitoring, evaluation, and communication between frontline providers and policymakers. • The implementation of e-Health in the medical system in Turkey has increased the accountability and transparency in health system. **All family health centres are using electronic patient records (over 60% use the software provided free by the ministry**

	of health) and so provide health authorities and insurances with the necessary service information.
Challenges Faced	• The healthcare system faces on-going challenges with regard to access and uptake of services by the rural population, a lack of qualified medical personnel and the low quality of some public health facilities.

4. Indonesia: Prioritize preventive care to reduce prevalence of diseases

Key Learning for India:

A scaled-up community-based healthcare approach *through community health workers and higher number of Community health centres guarantees effectiveness in achieving better health outcomes and is considered low cost. This can be replicated by India in metro cities, townships and rural area as well.*

Country	**INDONESIA**
Population	249.9 million
Current Healthcare Spend (%)	3.1% of the GDP (Preventive and Curative)
Background of the Scheme	• On January 2014, Indonesia's government launched Universal Health Coverage: to establish a compulsory national health insurance system for making basic care available to all by 2019. • Indonesia's health infrastructure is primarily based for primary health facilities and outpatient care; especially for middle class and lower middle class population.
Model Implementation Plan	• In Indonesia Community Healthcare Centre (CHC) is a major tool to maintain and protect citizen's health status by providing accessible healthcare for all. They provide primary healthcare which includes preventive and curative care. **CHC's use electronic health records.** • The formally employed pay a premium worth five percent of their salary, with one percent being paid by the employee and four percent being paid by their employer. Informal workers and the self-employed pay a fixed monthly premium

Challenges Faced	• The shortage of basic health infrastructure in rural and remote areas leads the disproportionate concentration of health workforce. • The gate keeping system is weak as a result of low human resources and the ineffective referral and counter-referral mechanism.

5. China: National Healthcare Reform Plan for Three Tier Primary Care System

Key Learning for India:

- *Addressing the needs of the huge population through a* **three tier system for rural, townships and urban areas** *which could be followed at state or district level in India.*
- *In the urban areas, most cities cover outpatient services for chronic diseases (i.e., diabetes) or fatal conditions.* **Outpatient expenses are covered by Medical savings Account, a pooling system for each citizen** *under the government until it is exhausted.*
- *It is mandatory for the urban employees of state-owned and private enterprises and urban resident without jobs to be covered under* **basic insurance programme***; which can also be followed by India considering the rise in chronic diseases in urban areas*

Country	CHINA
Population	1.4 Billion
Current Healthcare Spend (%)	5.6% of GDP (preventive and curative spend)
Background of the Scheme	• First and second tier system is meant for the rural areas and the townships with low incomes. These tiers have general physicians, township health centres and OPD clinics working locally with primary health centres to provide basic care to people. • The third tier system includes the urban areas, where care is provided by urban community health centres, paramedical personnel, senior doctors and municipal hospitals. • China spent US$ 125 billion in 3 years by expanding health insurance coverage in rural as well as urban areas.

Model Implementation Plan	• The reform plan has two main levers. The first lever improves the insurance benefit package for those seeking care at "the demand side". The second lever changes the way doctors at the township, urban and rural levels are paid, to a system based on both patient enrolment (capitation) and performance in terms of patient satisfaction and antibiotic prescription rates (pay-for-performance) - together "the supply side". • Outpatient expenses are covered by Medical savings Account, a pooling system for each citizen under the government until it is exhausted, and after which outpatient expenses are paid out of pocket.
Challenges Faced	• The medical education in China focuses on specialists rather than general practitioners (GPs). The Chinese medical students opt for specialty courses very early, in second year of education. As a result, many health centres have shortages of GPs in the country. • Disparities exist between and across urban and rural programs in terms of their financing and benefits, related to local government economic capacity

6. South Africa: Comprehensive Care Packages to make Healthcare Affordable

Key Learning for India:

- *The re-engineered National Health Insurance policy places a greater emphasis on population-based health outcomes, and seeks to decentralize health services through regulation of costs of medicines and care.*

Country	South Afria
Population	53 Million
Current Healthcare Spend (%)	8.9% of GDP (Preventive and Curative)
Background of the Scheme	• The National Health Insurance policy of 2014 intends to provide improved access to quality health services for all South Africans. It bases its approach on the Brazilian

	experience largely and focuses on a 'Reengineered Primary Health Care System' that will focus mainly on community outreach services using a defined (tariffed) comprehensive primary care package of services.
Model Implementation Plan	• The 52 Districts are divided into wards, which will also roll out ward-based primary healthcare outreach teams of community healthcare workers (CHWs). As per the primary care system, the cycle followed is: • Knowing the demography of the catchment population • Knowing the epidemiology • Health promotion and prevention (household and community) • Screening and referral • Preventive care • Linking resources to community needs to improve health The outreach programs are linked electronically with a mandated data coding standard and an electronic data interchange for OPD transactions. Electronic health records are maintained in a mandated data structure. This can also be replicated in India at district level.
Challenges Faced	• HIV/AIDS and other poverty-related diseases such as tuberculosis and cholera place a tremendous disease burden on South Africa's health care system. • Lack of health workers, understaffed hospital and low doctor population ratio in the community health centres and clinics.

Some other global practices which can be monitored while developing insurance products are:

7. Dubai: Easy Transaction Platforms and Bill Access Mechanism

The Dubai Health Authority (DHA) has created an insurance network where the health card has been replaced by insurance card. This insurance card helps the DHA monitor all transactions in the health sector to ensure optimum utilisation of the health services in the emirate via electronic monitoring system or E-claim. This insurance card covers transactions and monitoring of GP visits, surgical procedures, tests and investigations and emergencies. The market uses electronic health records and a Pharmacy Benefit Management system (sourced from an approved list of software vendors) – OPD cashless is provided using both these technology modules.

8. South Korea: Supportive Regulatory Environment for Primary and Preventive Care

In South Korea, government is the single payer, while it encourages investments and regulates the provision of primary healthcare. The government has integrated its bargaining power by consolidating all the payers into a single entity and incentivised the private sector to invest in the provision of healthcare. This way the government enables low cost primary healthcare access and acts as a single payer for healthcare. Monitoring is via a technology standard, (coding standards) and electronic health records which reduces the cost of administration.

7.2 SOME INDIAN CASE STUDIES

The following case studies have learnings for OPD insurance product design:

1. Doctor Integration Network and Empanelment for Primary and Preventive Care

Case Study: Practo Technologies

Practo.com, the health app has 1, 00,000+ doctors listed on the system; over 10 million electronic patient records (doubling every year) have been created, over 6 million unique patients and over 10 million appointments are made every year. Over the 7 years of its existence the number of active practitioners on the base has stabilised at about 30%.

The start-up aims to be the one stop destination for patients to find their doctors, research about them and book online appointments, with comprehensive coverage from the metros of Bangalore, Mumbai, Delhi, Hyderabad, Chennai, Pune and Singapore.

Practo has demonstrated the power of aggregation within the physician community in a short span of 7 yars.
Valuation concerns persist, as with all e-commerce players, however, the company has ensured that the physician community has a working example of digital aggregation – paving the road for primary care insurance.

Practo uses a proprietary software product retailed on a subscription based Software as a Service (SaaS) model. The health portal lists medical and allied healthcare professionals and healthcare practices in an unbiased listing format. It does not charge either party for any service.

However, as with any start-up in the e-commerce space, there are valuation concerns. That being said, the start-up has demonstrated the power of aggregation in the healthcare access space.

Case Study: RSBY

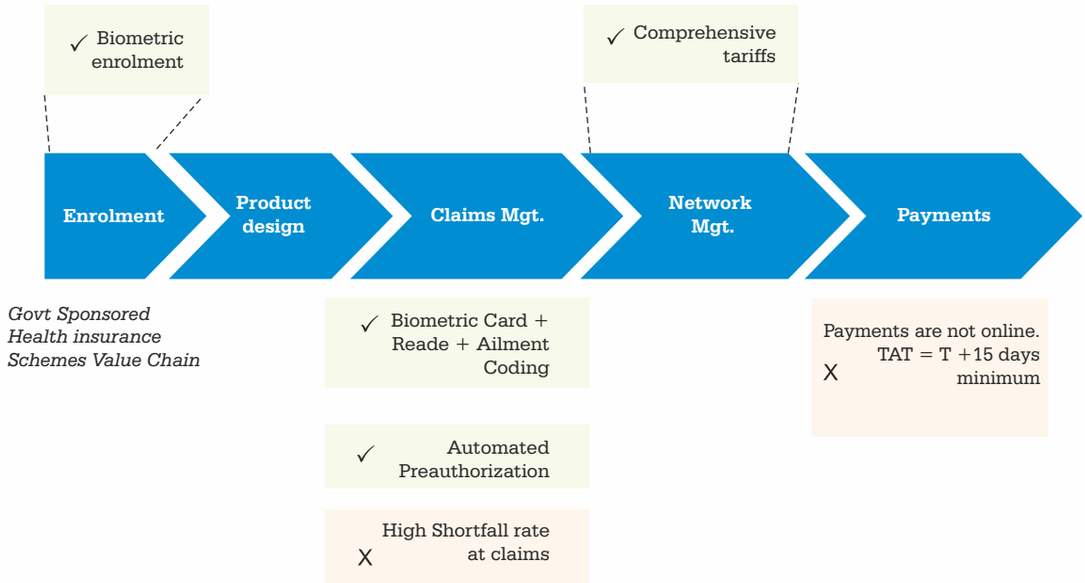
The first example of 'game changing' aggregation – among hospitals was RSBY (Rashtriya Swasthiya Bima Yojana).

The RSBY created a network of 60,000 hospitals and empaneled them through a system where the doctors have smart card readers, web camera, fingerprint scanner and a telephone line to be connected with districts which are physically inaccessible and also with the insurers assigned. A common data standard, developed in collaboration with GTZ (German Technical Cooperation Agency) which served as the technical advisor to Ministry of Labour, GOI, the nodal ministry for the RBSY.

These smart cards have been provided by the Ministry of Labour and Employment, GoI.

The graphic below shows the impact of aggregation across the health insurance value chain. The green "√" marks represent the aggregation points through technology and the use of common data standards.

RSBY ACROSS THE Health Insurance Value chain



2. Transaction Platform / Bill Access Mechanism

Case Study: Indian Health Organization (IHO)

Indian Health Organization has come out with **Discount Cards or Health Cards** which are special schemes that give the consumer discounted rates on medical, health and drug expenses for a monthly or annual membership fee. Unlike a health plan, there are no caps or sub-limits in a health card. Health cards cover overall healthcare expenses, including cosmetic treatments.

The product is targeted at high-risk people, e.g. chronic disease sufferers and senior citizens, who would be excluded from current health insurance offerings. It provides 'aggregation' efficiency.

The membership fee of these cards varies from Rs 1,000 to Rs. 8,000 depending on the plan chosen and the number of members registered. Most variants of the plans offer preventive health check-ups as part of the product. Therefore, the members are eligible for tax benefit of up to 5,000 under Section 80D.

Case Study: Qikwell Technologies

Qikwell Technologies is a Bangalore based start-up which offers a proprietary technology to manage patient transactions. Qikwell plans consultations and pay the consultation fee through stored credit cards. The start-up has presence across 250 hospitals in 19 cities. Its customers include some of the country's biggest hospital chains, including Manipal Hospitals and Fortis Healthcare, with some 6,000 doctors and specialists on its network.

3. Gatekeeper Model for Preventive Consultation

Case Study: Narayana Hrudayalaya (NH)

NH established the Family Physician's Network to set up a network of private practitioners trained in using free software for the transmission of ECG scans via broadband or satellite networks for NH for assessment. Trans-telephonic Electrocardiogram (ECG) machines and software was provided free of cost by NH to the practitioner network. These machines help local practitioners send ECG scans directly to NH in Bengaluru where professionals would interpret scans and recommend next steps to the local medical staff. This system also helped increase footfall to NH through referrals for surgeries from the rural centres.

Various healthcare start-ups demonstrate how digitization can create frictionless aggregation of physicia and convenience to consumer.
However each of them uses a proprietary data standard.
There is a need to mandate a market level standard – for OPD insurance to take off.

Case Study: Portea Medical

The Bangalore based start-up, **provides in-home healthcare** in the 24 urban cities of India. The backgrounds and medical knowledge have been verified by senior doctors. Portea Medical facilitates routine check-ups, oncology, maternity care, and palliative care, but its core consumers are the elderly; since the personal-payment mode for senior citizens can be costly in hospitals.

Portea has built its own technology platform to help its health providers adhere to standard operating procedures, access diagnostic tools, share information and keep records for each patient.

4. Health IT and Technology for Primary and Preventive Care

Caste Study: E-mamta

E-Mamta is a citizen-centric service delivery initiative by the Ministry of Health and Family Welfare, Government of Gujarat in January 2010. It leverages information and communication technology to track pregnant mothers and children, and integrates non-recipients of services into the health care system. The programme adopts an innovative working design that harnesses ICT as a tool to strengthen primary health care facilities and service delivery in Gujarat. Based on a case-based tracking software, 'e-Mamta' aims at integrating all pregnant mothers and children as recipients of maternal and child health care services.

5. Health Insurance Programs

Case Study: Apollo Munich

Apollo Munich's Maxima Complete health plan covers both hospitalisation and OPD treatment costs on a cashless basis in network hospitals and clinics. This plan also offers coverage for pharmacy bills, diagnostic tests, outpatient dental treatment, contact lenses, spectacles and health check-ups.

7.3 CONCLUSION: ENABLERS AND CHALLENGES

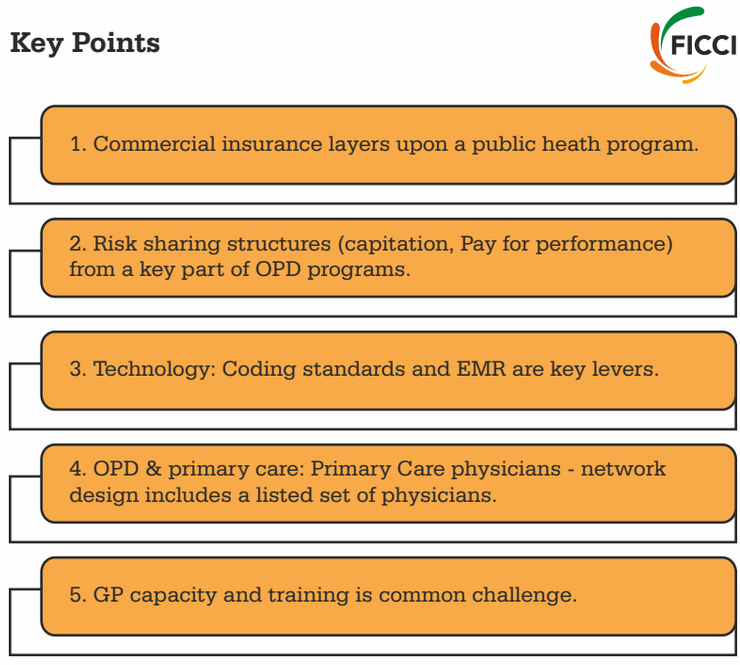
The graphic below summarizes key enablers and challengers from the international market scan.

Country	Brazil	Thailand	Turkey	Indonesia	China	South Africa	Dubai
Enabler - Coding standard?	●	●	●	●	●	●	●
Enabler - EHRs?	●	●	●	●	●	●	●
Enabler - Data interchange?	●	●	●	●	●	●	●
Enabler - Capitation?	●	●	●	●	●	●	●
Enabler - Network design	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Challenge - GP capacity?	●	●	●	●	●	●	●
Challenge - Rural Infrastructure?	●	●	●	●	●	●	●
Challenge - Training / Skills?	●	●	●	●	●	●	●

Enablers ● Not adopted ● In process ● Working enabler

Challenges ● Serious constraint ● Medium constraint ● Not a constraint

7.3.1 Key takeaways from the market scan:



- Commercial OPD insurance usually layers on a public health program - even in markets where population coverage is not comprehensive.
- Insurers use risk sharing structures - such as capitation, fee per case or a mix of both plus a 'pay for performance' to manage their utilization case.
- From a technology perspective - Coding standards and Electronic Health Records are relevant - and it is REGULATION which can drive adoption in this case. As both Turkey and Dubai show, where there is a regulation which limits the number of options that industry can adopt with respect to coding standards and EHR - market adoption is highest. This kind of framework allows regulations to evolve - for example, Dubai will shift to the ICD 10 – CM standard in a phased manner during 2016.
- OPD Insurance / Primary care insurance - needs a closed provider network construct. This is the only way to align the interests of the physician and the Insurer. The network construct also needs to have strong empanelment criteria - so that there is a time bound mechanism for new empanelments. This ensures that physicians who are willing to collaborate with insurers get a reasonable 'first mover' advantage – a period of time where they can enjoy higher traffic flows. At the same time, this first mover advantage is not open ended - so customer choice is not vitiated.

8 DEMAND SIDE ANALYSIS

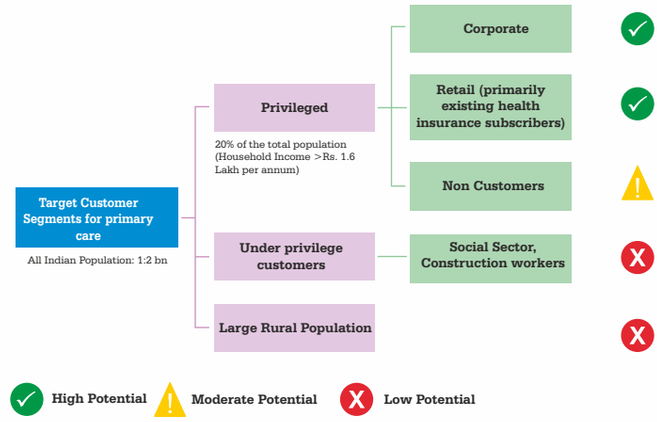
8.1 TARGET MARKET AND ADDRESSABLE MARKET POTENTIAL

As mentioned previously, government healthcare spend tends to focus on preventive and primary care - in remote rural areas. And, as the review of other markets practices on OPD funding structures shows (see chapter 6), commercial OPD insurance schemes usually layer over a public healthcare program. In the Indian market, we do not have a working model for primary or OPD care. Therefore, commercial insurers are likely to focus on the income pyramid which has ability to pay. Secondly, private sector healthcare network capacity in terms of physician presence is heavily tilted in the same market - which means that it would also be easier to create physician network presence in this market. This would represent the best chance for the market as a whole to move towards OPD insurance.

In most other markets, commercial OPD insurance sches usually layer over a public healthcare program. In the Indian market, we do not have a working model for primary or OPD care. Therefore, commercial insurers are likely to focus on the income pyramid which has ability to pay.

This section therefore focusses on the addressable market rather than the entire market - and quantifies demand for the same.

Considering this, the following are the segments that we see as "Target Customer Segments" & "Addressable Segments":



The target group in the white paper is restricted to the urban cities and the potential assessment is restricted to these segments. We have used the current health insurance subscriber's data from IRDA to estimate the potential.

Policy For	No. of Persons Covered (mn)			Gross Premium (Rs. Lakh)		
	FY 12	FY 13	FY 14	FY 12	FY 13	FY 14
Government Sponsored Schemes including RSBY	161	149	155	222,531	234,797	208,193
Group Insurance Schemes excluding Government Sponsored Schemes	30	34	34	594,816	718,586	805,745
Family / Floater Insurance excluding Individual Policies	6	8	11	138,876	194,464	273,887
Individual Insurance excluding Family / Floater Policies	14	15	16	350,750	397,449	461,629
Total	212	207	216	1,306,973	1,545,296	1,749,454

Source: IRDA Handbook 2014

Addressable Market Segments = 61 mn people (Assuming that the target segment is the APL (largely) urban and semi urban segment.

As per our data analysis it is estimated that the addressable market segment of 61 mn people will account for an expenditure of about Rs. 10,200 crs on out-patient consultation, diagnostic lab tests and medicines from pharmacies. That gives a per capita spend of approximately Rs 1650.

Addressable Market Potential Estiates

Our Patient Consultation	• 3.7 average tests per person per annum • Rs. 150 spent per visit	• Rs. 3,400 Crs Market Potential • 228 mn OPD a year
Diagnostic Labs	• 2.9 average test per person per annum • Rs. 150 spent per visit	• Rs. 2,300 Crs Market Potential • 178 mn test a year
Pharmacy	• Rs. 745 spend per person per annum	ı Rs. 4,500 Crs Market Potential

Source: Feedback Consulting Analysis

- This is an extremely conservative market estimate – because spend per episode for consultation and diagnostic labs is based on per capita estimates at the POPULATION level – which depresses them significantly. Typically urban healthcare spend is about 2.5x rural spend.
- **This also does not include 'peak spends' – outpatient spend linked to hospitalization, or spend linked to chronic care episodes. Again – its estimated that this will push up spend on diagnostics especially by about 4 to 5 times since chronic care patients typically spend Rs 5000 at least on diagnostics annually, and between Rs 500 and Rs 3000 on medicines per month**.

- **Finally, introducing primary care insurance does increase the utilization – something that insurers will price in, even if they use capitation type contracts. As an example – consider what happened with Thailand when OPD programs were introduced:** Increased utilization of services among UCS members was observed; the total outpatient (OP) visits to district and provincial hospitals increased from 111.9 million visits in 2003 to 140.7 million in 2010; especially in the rural areas. While this was in a rural context – the underlying pattern is about latent demand. When any healthcare financing program is introduced for the first time, it releases latent demand.
- **While it's difficult to quantify these factors, conservatively, we believe that a demand side estimate of Rs 30,000 cr would not be far off the mark. Considering the target segment of 61 mio – this gives an OPD transaction size per annum in the top 53 urban markets of approximately Rs 5,000.**

8.2 NUMBER OF DOCTORS REQUIRED TO CATER TO THE ADDRESSABLE POTENTIAL

If we assume, a doctor spending an average of 6 hours a day, spending approximately 10 minutes per patient. Going with the math, conservative estimates put the number of patients at 35 - 48 that can easily be given consultation to in a day. Keeping in mind, that there will be regular (non-insured) patients walking in, we have look at 2 Scenarios to compute the number of doctors required to address the primary and preventive care market.

In order to meet the addressable market potential, as per Feedback study, it would require about 400 - 575 doctors/city, along with 1/3rd the number of diagnostic or pathology labs.

Number of doctors required to Cater to the OPD needs of the Urban Health Insured Population

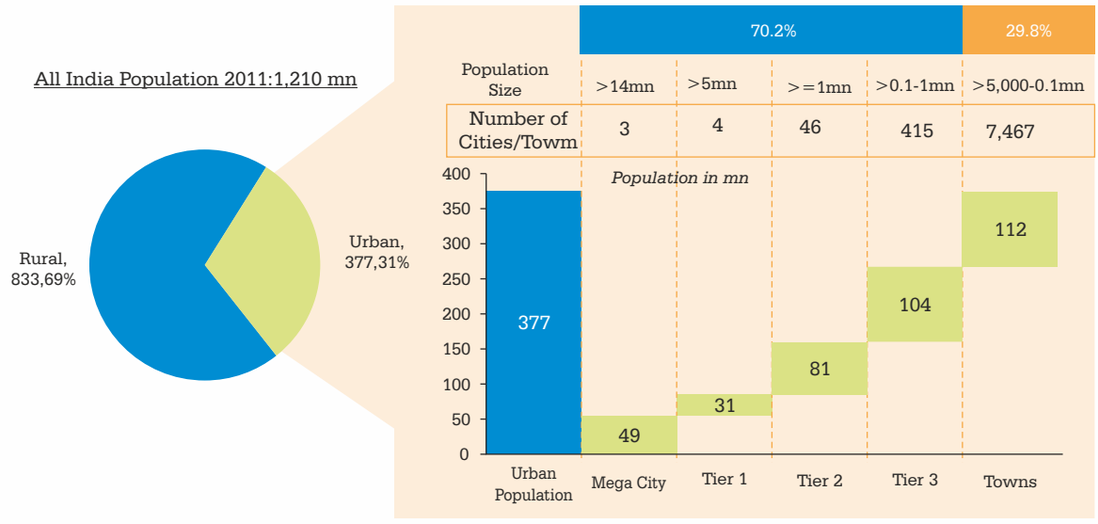
	Scenario 1	Scenario 2
Total Number of Visits in a year (mn)	228	228
Average number of patients seen by a doctor per day	25	35
Average number of patients seen by a doctor per annum assuming 300 working days a year	7,500	10,500
Estimated number of doctors to be empaneled to address the Market Potential	**30,450**	**21,750**
Number of Cities	53	53
Estimated number of doctors to be empaneled per city to address the Market Potential	**575**	**410**

Source: Feedback Consulting Analysis

Among the Urban cities, about 43% of the cities have population greater than 1 mn (53 cities) & can be the starting for Primary and Preventive Insurance

Among the Urban cities, about 43% of the cities have population greater than 1 mn (53 cities) & can be the starting for Primary and Preventive Insurance

India urban Cities Categorization



Source: Feedback Consulting Analysis of Census 2011 data

9 SUPPLY SIDE ANALYSIS

9.1 ADDRESSABLE SEGMENTS FOR INDIA

The following sections summarize challenges and solutions for developing primary care or OPD insurance in India. These represent key findings from the expert interviews carried out with all stakeholders (Insurers, Pharmaceutical companies, TPAs, Hospitals) during the process of creating this white paper.

1. Need for a General Physicians Network:

Many Indian insurers don't know where to start or how to optimize their system to achieve the best results for empanelling (i.e., assigning each provider a set number of patients) doctors for primary and preventive care without the support of policy makers. Empanelment and an independent primary care network ensure continuity for both patients and providers.

Pharmaceutical companies are willing to collaborte with Health Insurers to provide access to Physicians - to be empanelled for insurance.
The collaboration structure is non-commercial in nature.

As part of the white paper, interviews with Pharmaceutical companies showed that they are willing to collaborate with health insurers to provide access to physicians to empanel them on a Physician's network. This collaboration is non-commercial, i.e. the pharmaceutical company views it purely as a physician engagement program without any commercial intent.

2. Use of Electronic Health Record (EHR) Technology for delivering Preventive Care

At present, Indian insurance system is dealing with lack of a disease repository, limited avenues for patient engagement with hospitals and OPD and limited care coordination. A critical component of administering primary healthcare is the need for establishing outcome metrics through Electronic Health Records to measure disease progression and enable the patient's condition to be managed.

Electronic Health Records (EHR) provide the technology platform to administer OPD or primary care insurance.
MOH has released EHR standards in 2013. The Insurance industry would do well to adopt these.

The Ministry of Health has released EHR standards. These 2013 Recommendations on Electronic Medical Records Standards in India issued by EMR Standards

Committee constituted by Ministry of Health and Family Welfare are available at www.clinicalestablishments.nic.in/WriteReadData/107.pdf.

The Health insurance industry would do well to adopt these – since Primary care insurance will involve greater interplay and interfacing with the clinical aspects of care.

3. Need for a Gatekeeper Model to Anchor Primary Care

Current inpatient insurance plans in India do not include the primary care physician in his role as gatekeeper. There are negligible home-care or primary care consultation products which offer preventive management before routing to a specialist.

Creating a primary care or OPD insurance product would provide a structural lever in terms of patient volume to General Physicians – and would have a positive impact on the number of accredited GP's.

One of the supply side constraints faced by the Health Insurance markets is the lack of General Physicians (in terms of numbers). This trend is driven by Health Seeking behaviour in urban India where consumers chose to consult specialists directly. Creating a primary care or OPD insurance product would provide a structural lever in terms of patient volume to General Physicians – and would have a positive impact on the number of accredited GP's.

It's also possible to leverage tele-triage models on the phone – where consumers first consult a doctor on phone – who uses a protocol based clinical triage system to assess whether the patient should see a GP or a specialist. This provides a bridge with current consumer behaviour.

4. Alternative risk sharing models

The most dominant provider payment system in India is fee-for-service. About 70% of the doctors charge on fee-for-service basis. There is not much of a risk trading with respect to providers in primary and preventive insurance, so insurers struggle to make money in outpatient services.

Alternatives for "fee for service" billing need to be explored and mechanisms to enable that need be developed. Some specific structures may suit India more:

I. **Case based model**: In this model, charges depend on specific procedures or services, and the time spent by the doctor with the patient. There is no specific basis used by providers and a large number of them use several factors in arriving at the payment amount required, e.g.: all treatment for 1 instance of malaria (could be 2 or 3 physician visits).

II. **Capitation approach**: In this model a physician or a group of physicians is paid a set amount for each enrolled person assigned to them, per period of time, whether or not that person seeks care or how much care he consumes.

5. Transaction platforms for claims and registration for OPD

Since OPD is unorganized at present, the local medical store does not provide a receipt which cannot be claimed for reimbursement, thus customers don't have an organized transaction platform where they can get claims on transactions.

However, this obstacle is easy to overcome – mobility based solutions (e.g. apps with a secure channel) can provide a platform for customers to 'photograph' the bill and send to the insurer for reimbursement. The economics of centrally capturing data and validating (similar to that done by banks and telecom companies) lead to economies of scale which will eventually make it viable to process individual chemist's bills.

6. Need for OPD Monitoring

The lack of a controlled aggregation model of general physicians by government stakeholders results in blatant misuse of OPD in India. An aggregation model would enable the availability of trained talent across geography tiers and among doctors, nurses and allied health professionals.

9.2 NEED FOR SUPPORTIVE REGULATORY ENVIRONMENT AS AN ENABLER-PRESENT GAPS

- **From the stakeholders' end**, there is an inability to develop and integrate plural systems of medicine and the failure to assign practical roles to the private sector and to assign public duties for private professionals. This has in turn led to current market gaps which are around empanelling existing physicians / doctors /specialists into the delivery network for primary healthcare.
- Further, the **present health insurance scenario does not hold health providers accountable**, due to which there is negligible response from physicians and hospitals with respect to verification of patient's health stage and status of transactions. There is still manual handling of the authorization and eligibility checks – for inpatient hospitalization. Claims incidence for inpatient hospitalization is about 6% but likely to be at least 80% in the case of OPD insurance which means very high transactional intensity. This requires the use of EHR type technology as the basic interface between Insurer and Provider from the word go.
- **There is a lack of substantial data pool on OPD treatments**. Even the protocols and treatments under OPD are yet to be standardized. This means the insurers find it difficult to underwrite and price these products, the primary reason why OPD is a costly insurance product. Initiatives like Electronic Health Records are steps towards making the sector more transparent and organized.
- **The low-cost treatment segment is dominated by stand-alone clinics run by individual doctors, which is highly unorganized** and does not fit under the purview of government's policies. These standalone clinics are thus not accountable for the quality of treatment delivered.

- **The middle class population is not included in the premium pay model of the government** schemes like RSBY that take care of basic healthcare as well. This has kept the insurance coverage also to just 18% where many non-insurance buyers belong to middle class.
- The **Medical Council of India has no authentication system** which can certify genuine doctors from the non-qualified ones. As of now, only 8, 58, 797 are registered in India.
- Additionally, **there is also lack of standardization of hospitals and**, which has led to an urgent need to control cost of treatment, and enforcement to protect consumer's right to affordable healthcare.

There is a need for ease of business and regulations in selling medicines online, e-health insurance covers, and internet based transactions and platforms for connecting health insurance payers and providers.

10 RECOMMENDATIONS

10.1 PRODUCT DEVELOPMENT – OPD INSURANCE

- **Integrated**: For outpatient financing, there would be a need to move to structures which integrate expected clinical quality with cost. Keeping the urban class segment in mind, India needs a balanced structure between capitation and case based payment that can bring accountability to the providers and help illnesses be tested at earlier stages by physicians.

- **Risk Sharing**: Globally, most outpatient insurance programs include an element of risk sharing with the Provider. Physicians paid using capitation and case based models have incentives help to contain costs as the incidence risk is shared with the provider. A fee for service model does not align the interest of the Provider and the Insurer in this regard.

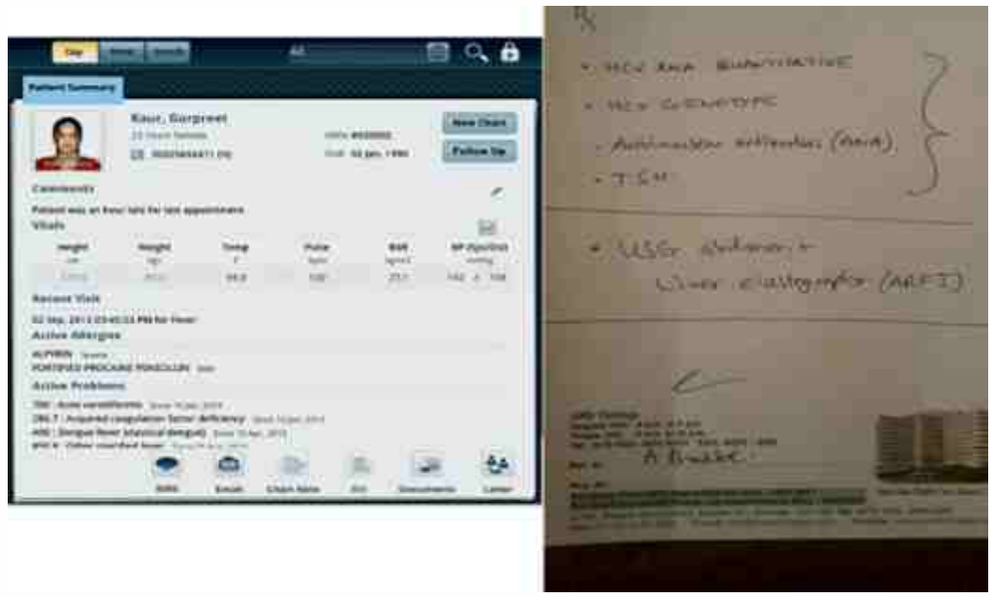
Without exception all CEO's and Business Heads for Health insurance in India cited the lack of in-depth data for pricing as the single biggest obstacle to product innovation; and risk sharing structures as the solution.

- As part of the stakeholder consultation process carried out during the creation of this white paper – our team spoke to a cross section of health insurers in India – across public sector, private sector and standalone health insurers in India. Without exception, the CEO's and business heads interviewed, cited the lack of in-depth data for pricing OPD insurance as the main obstacle to introducing product innovation. There was also consensus on the need to introduce risk-sharing models with providers as a lever to stimulate the market towards introducing comprehensive or OPD insurance structures.

- **Closed provider network**: A basic requirement for OPD insurance is the presence of a closed provider network. This is a network which has a listed set of providers who provide OPD care. Insured customers are 'tagged' to a doctor – who fulfils the role of a primary care physician and gatekeeper in the insured context. This network design is not restrictive to the consumer; since it has the provision to empanel new doctors based on consumer need. In practice, consumers would be provided with sufficient choice in their locality (using pin-code and geo-locational mapping). An example of using geo-locational mapping to create sufficient network depth is shown below:

Segment	Network depth
5 Metros	Hospitals: 5 hospitals for every 10 sq kilometers Diagnostic Centers: 8 diagnostic centers for every 10 sq kilometers Physicians: 5 Physicians in every pin-code, OR for every 10 sq km of residential catchment.
Mini metros (population above 1 mn)	Hospitals: 5 hospitals for every 20 sq kilometers Diagnostic Centers: 8 diagnostic centers for every 20 sq kilometers Physicians: 5 Physicians in every Pincode, or for every 20 sq km of residential catchment
Other cities (population < 1 mn)	Hospitals: 5 hospitals for every 25 sq kilometers Diagnostic Centers: 8 diagnostic centers for every 25 sq kilometers Physicians: 3 Physicians in every pincode, OR for every 10 sq km of residential catchment

- Electronic Health Record Technology: Another basic requirement for OPD insurance would be using EHR or Electronic Medical Record technology to process claims. At its very basic level, the EHR system provides a common basis for both patients and physicians to store and manage data related to medication, diagnostic tests and consultations. For insurers, the combination of a capitation based structure together with the EHR system provides a basis



10.2 HEALTH FINANCING STRUCTURES FOR CHRONIC DISEASES

- It is necessary to manage the chronic ailments as they impact the GDP of the country. By 2015, India could lose 1.27% of GDP because of chronic ailments. If not managed, chronic diseases exponentially increase healthcare costs, especially the out of pocket costs of an urban area living individual.
- Chronic care insurance programs represents a good intermediate step in the Indian Health Insurance market's journey to full OPD insurance – as it involves aggregating specialists rather than physicians. Secondly, the target customers for these programs are already diseased – so need is high.
- For any chronic disease, health insurance has to include a "Condition Management Program" which funds the following costs:
  - o Cost of medicines and consumables (e.g. strips for glucose monitoring in case of diabetes)
  - o Disease management costs (regular tests, consultations with specialists)
  - o Support / Life style management costs. These could range from nutrition counselling to emotional counselling to adjust to the changes in lifestyle usually needed to manage any chronic disease.
  - o The above components are in addition to inpatient hospitalization insurance.
- CMP's lend themselves well to risk sharing i.e. capitation type structures – since the likelihood of utilization is high – the provider's willingness to share in utilization will be high. Globally, in markets such as the US, Australia and the Middle East health administrators work as aggregators and participate in risk sharing through capitation.
- For those already under the insurance plan, a managed chronic care OPD scheme could be introduced that covers the cost of diagnosis, prevention, future chronic ailments and care management if detected with chronic disease.

Chronic care insurance programs represents a good intermediate step in the Indian Health Insurance market's journey to full OPD insurance – as it involves aggregating specialists rather than physicians.

10.3 FOCUSING ON RETAIL SEGMENT

There is no retail product in the OPD segment yet which would offer specifically cover expenses related to diagnostic test and treatment costs. The retail segment is unexplored is high potential. The primary reason of lack of retail OPD insurance product is the negligible availability of substantial data pool on OPD treatments. The protocols and treatments under OPD are not standardized which makes it difficult for underwriters to price & underwrite these products. From a risk appetite perspective, therefore, health insurers would want capitation type structures in order to write OPD insurance programs.

10.4 EXPLORING PUBLIC PRIVATE PARTNERSHIPS

An intensive review for public private partnership in health needs to be done with respect to presence of primary care resources in the townships and urban areas; as it has been done for the Below Poverty Line population. These P=P=P schemes were Aarogyasri and Yeshaswini where ownership of the trust and overall management has been with both the private and public sectors for outpatient services in rural areas.

	Yeshaswini (State of Karnataka)	**Aarogyasri (State of Andhra Pradesh)**
Target Population	Rural It covered the person for all types of treatments as well as outpatient department (OPD) services through a network of private hospitals.	Rural-semi Urban The scheme protects the insurer from major surgical interventions as well as outpatient costs
Private Partner	Family Health Plan Limited	Star health and Allied Insurances
Payment	Annual-Upfront through Co-op	Government pays annually
Insured Unit	Individual	Whole Family
Cashless	Yes	Yes

11 CHANGES TO HEALTH INSURANCE REGULATIONS

This chapter provides specific details on changes required to the new health insurance regulations in order to facilitate the introduction of OPD insurance.

All section numbers below refer to the Expert Committee on Health Insurance report released as an exposure draft to industry in April 2015.

The main areas where regulations need to facilitate are:

1. Introducing OPD and chronic care insurance structures as a specific product line
2. Risk sharing structures
3. Mandatory adoption of EHR standards

11.1 CHANGES TO REGULATIONS

Health Insurance Regulations – 2013; as amended by the Expert Committee's report 2015 March.

Sl No	Clause No. and Title	Current wording	Suggested wording	Justification	Any other remarks
	2.**Definitions** g."Health Insurance Business"	"Health Insurance business" or "health cover" means the effecting of insurance contracts which provide for sickness benefits or medical, surgical or hospital expense benefits, including assured benefits and long-term care, travel insurance and personal accident cover.	"Health Insurance business" means the effecting of contracts which provide for sickness benefits **whether inpatient or outpatient**, medical, surgical or hospital expense benefits, or travel cover and personal accident covers. **Outpatient benefits may be written on an indemnity or risk sharing basis.**	Clarification that scope of OPD is for sickness benefits. (the first suggested wording is a marginal edit, the second sentence is an addition)	Modification
	5. General Provisions relating to Health Policies **a.**	Health Insurance product may be designed to offer various covers i).To specified age or gender groups; ii)To different age groups; iii). To treatment in all hospitals throughout the country, provided the definition of hospital is met iv). To treatment in specified hospitals only, provided the morbidity rates used are representative v). To treatment in specified geographies only, provided	Add sub clause c) Health insurance products may also be designed to offer outpatient covers including covers targeted at chronic care conditions and at specific customer segments (e.g. elderly care) products. These may be offered on a risk sharing (e.g. capitation) or indemnity basis.	Clarification that scope of OPD is for sickness benefits. (the first suggested wording is a marginal edit, the second sentence is an addition)	Addition

Sl No	Clause No. and Title	Current wording	Suggested wording	Justification	Any other remarks
		the morbidity rates used are representative etc provided such specifications are disclosed upfront and clearly in the product prospectus, documents and sales process. b). In order to facilitate offering of innovative covers by insurers, 'pilot products' may be designed and on being cleared by IRDA under the File and Use guidelines be launched for a period not exceeding 5 years. Such products can be only those under the 'Short Term' category which has a term of upto 5 years. After 5 years, the product either needs to get converted into a regular product which shall not give the insurer an option to deny. In the alternative, the product, if not found successful may be withdrawn subject to the insured being given an option to migrate to another product subject to portability conditions.			
	7.Principles of Pricing of Health Insurance Products **a**	The premium for a health insurance policy shall be based on, I. for all policies, the completed age of the prospect on the date of inception of the policy or on the date of its renewal	Add sub clause ii. The premium for a health insurance policy shall be based on: ii. For OPD insurance covers, pricing may be on indemnity or risk-share basis (e.g. capitation based pricing).	Since most insurers have indicated that they do not sufficient data to price – a risk sharing structure is called for.	Addition
	10. Standards, Benchmarks and Protocols for Providers		The Authority may prescribe certain standards, benchmarks and protocols for Network Providers from time to time and Insurers and TPAs shall ensure that only those Providers who meet with such laid own standards, benchmarks and protocols are enrolled in the network.	This addition was proposed in the Expert Committee Report. It will cover the use of EHR as a standard for OPD insurance – there is no change to the Expert Com4mittee Wording proposed, but is included here for completeness.	
	15. Data and related issues		Insurers and TPAs shall follow guidelines relating to technology requirements from time to time to facilitate better policyholder servicing	This will cover using EHR standards in line with the MOH guideline.	

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