

## **Chapter 3- Research Framework and Methodology**

### 3.1 Research Framework

After identifying the research objectives the next step is to finalize the exact steps followed to achieve these objectives and the methodology used for each one of them. Therefore, the research framework and the methodology that was followed in the study are being laid out. It includes the research framework that stem from the existing literature in the area of strategic management, especially the design school and that was developed keeping in mind multiple factors like the health insurance discipline, the degree of clarity of the identified research problems, the degree of control that can be achieved over the different variables, the unit of study, timescale and the available limited resources.

Before discussing the research design and methodology in details, let's look into the research framework that was developed to help identify the process to be followed towards achieving the set research objectives. The research framework for the current study was crafted not only from literature surveyed and general understanding of the cashless process and players involved in the Indian health insurance industry but also based on the principles of strategic management. Strategic management has become an academic discipline in its own right, like marketing and finance. Literature on strategic management is vast and dates back to the writing on military strategy for example- Sun Tzu wrote his Art of War in about the fourth century B.C. (Sun Tzu, 1971).

Having researched the literature thoroughly, Mintzberg, Ahlstrand and lampel (1998) identified ten key schools of thought, which they then classified into three groupings. The first they called *Prescriptive School*, one that are more concerned with how strategies should be formulated than with how they necessarily do form'. This grouping comprises the *Design, Planning and Positioning Schools*. They then describe a second main group, which they termed *Descriptive Schools*, comprising *Entrepreneurial, Cognitive, Learning, Power, Cultural and Environmental Schools*. These set out not to prescribe how strategy should be made but rather to describe how it is made in practice. The final group comprises just one school, the *Configurational*.

The research framework developed for the current study is highly influenced by the *Design School*. As per Mintzberg, Ahlstrand and lampel (1998) the design school represent, without question, the most influential view of the strategy formation process. As its simplest, the

design school proposes a model of strategy making that seeks to attain a match, or fit, between internal capabilities and external possibilities. In the words of this school's best known proponents, "Economic strategy will be seen as the match between qualifications and opportunities that positions a firm in its environment." (Christensen et al., 1982). The origin of the design school can be traced back to two influential books written at the University of California (Berkeley) and at M.I.T.: Philip Selznick's *Leadership in Administration* of 1957, and Alfred D. Chandler's *Strategy and Structure* of 1962. Selznick (1957), introduced the notion of "distinctive competence", discussed the need to bring together the organization's "internal state" with its "external expectations", and argued for building "policy into organization's social structure". Chandler (1962), in turn, established this school's notion of business strategy and its relationship to structure. The real impetus for the design school came from the "General Management Group" at the Harvard Business School, beginning especially with the publication of its basic textbook, *Business Policy: Test and Cases*, which first appeared in 1965 (by Learned, Christensen, Andrews and Guth).

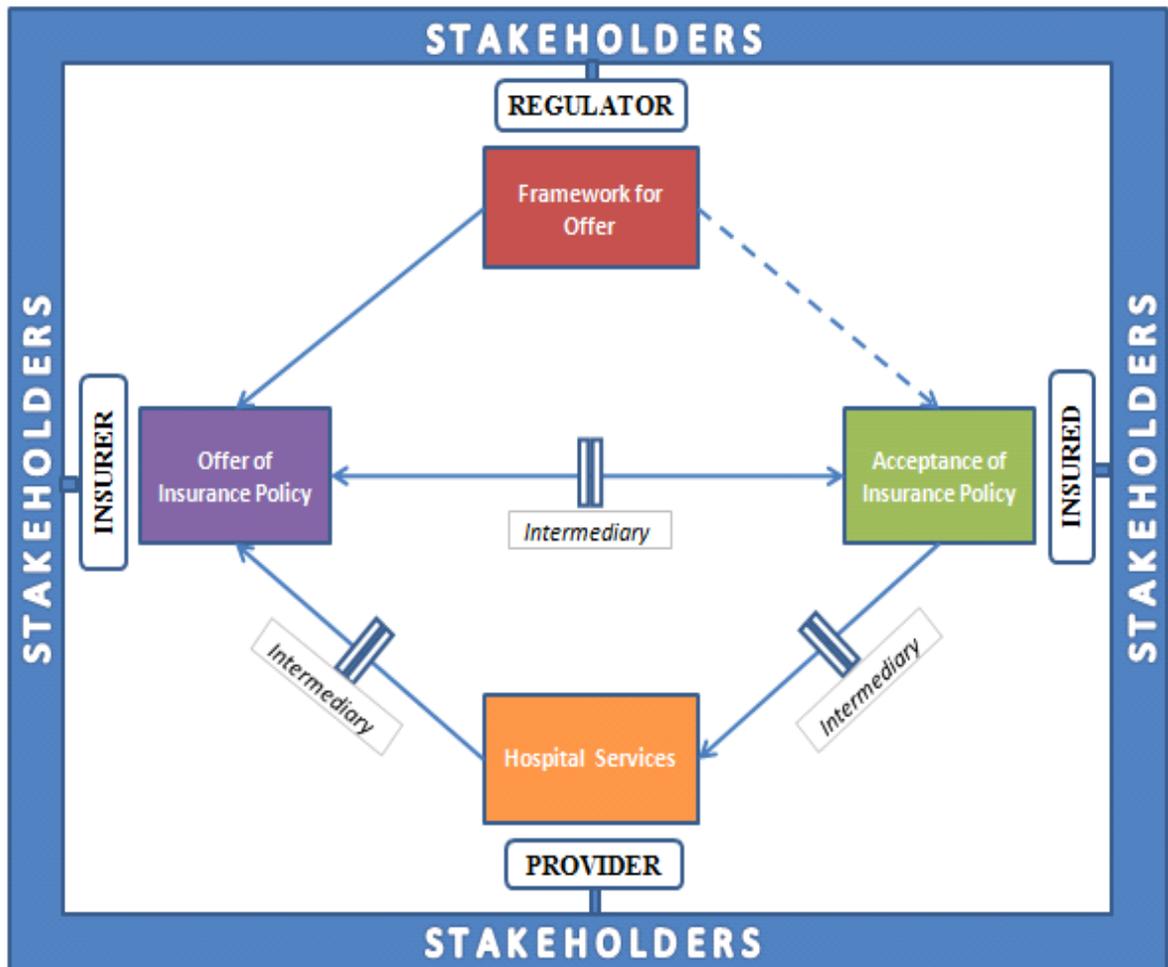
The basic design school model (Please refer to Annexure I) places primary emphasis on the appraisal of the external and internal situations, the former uncovering threats and opportunities in the environment, the latter revealing strengths and weaknesses of the organization (Christensen et al., 1982). The analysis of internal and external situations helps in developing the key success factors and distinctive competencies, which then help in the creation of strategy. Once alternative strategies have been determined, the next step in the model is to evaluate them and choose the best one. The assumption, in other words, is that several alternative strategies have been designed and are to be evaluated so that one can be selected (Andrew, 1987). Rumelt (1997), a DBA from Harvard General Management group, has perhaps provided the best framework for making this evaluation, in terms of series of tests i.e.,

- *Consistency*: The strategy must not present mutually inconsistent goals and policies
- *Consonance*: The strategy must represent an adaptive response to the external environment and to the critical changes occurring within it.
- *Advantage*: The strategy must provide for the creation and or maintenance of a competitive advantage in the selected area of activity.

- *Feasibility*: The strategy must neither overtax available resources nor create unsolvable sub-problems.

Finally, once a strategy has been agreed upon, it should then be implemented.

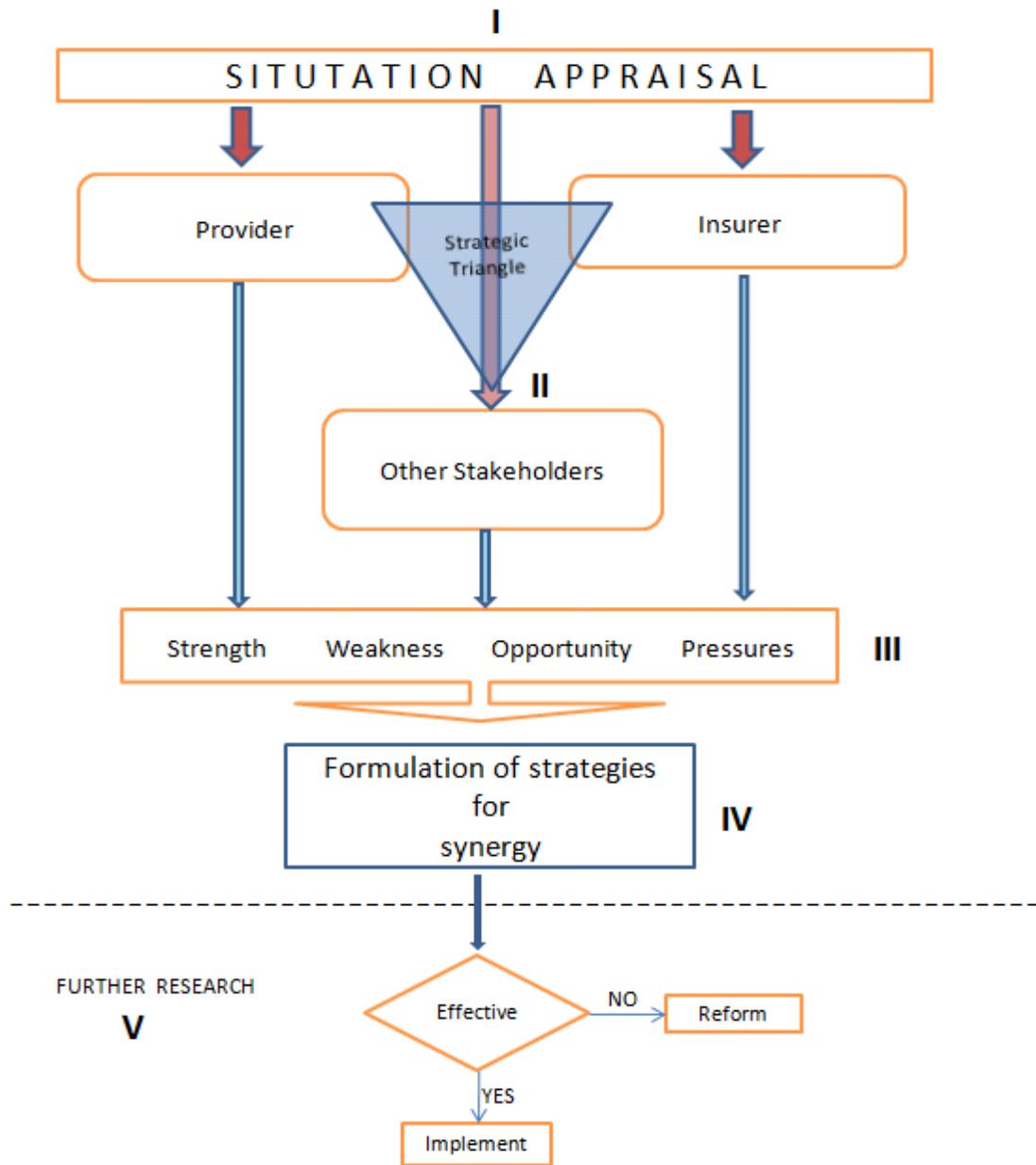
**Figure 3.1: Health Insurance in India: Cashless Process and Players**



*Source: Author's own creation*

In cashless hospitalization since there is an agreement between the insurer and the provider, the provider gets paid by the insurer directly after submitting the claims documents. The major players involved in the cashless process are the insurers, providers and the insured customer. The regulator i.e. IRDA does regulate the insurers but does not have a direct linkage with either the insured or the providers. There are different intermediaries like the TPA, Agents, Brokers, etc. and multiple stakeholders involved at different levels. Figure 3.1 describes the cashless process and players in the Indian health insurance industry.

**Figure 3.2: The Research Framework**



*Source: Adopted from “Basic Design School Model” as proposed by Mintzberg, Ahlstrand and lampel (1998) for strategy making.*

As focus of this research is primarily in the area of health insurance and related to developing strategies for synergy among insurers and providers, studying both insurers and providers become quite evident. In addition to this since the relationship between the insurers and providers does not exist in vacuum and affects a host of other stakeholders and

in turn gets affected by them like from the customers, doctors, intermediaries, regulator, etc. therefore it is important to include other stakeholders as a unit of study.

As could be seen in Figure 3.2, there is an inter-linkage between the provider, insurer and other stakeholders. These three broad units of study are considered as the “*strategic triangle*”. The justification for calling these three broad units as a strategic triangle is because they are interconnected with each other and each of the units has to be studied to arrive at a stage where strategies could be formulated. First, the insurer, they are the risk carrier of the potential financial loss which could affect an insured customer. They are also the primary payers of health insurance claims which directly or indirectly are paid to the providers. Directly is through the cashless mechanism and in-directly through the reimbursement mechanism. Here, the focus was primarily on the direct mechanism as there is a direct relationship between the insurers and providers. The insurers strategic decision making is affected by past, current and future business events and scenarios which include the trends in the industry, the regulatory environment, the competitive landscape and the internal environment. Therefore it is important to examine all these components while studying the insurers.

The second unit of the strategic triangle is the providers which are defined as those hospitals which extend cashless services to the insured customer and have a legal contract with the insurers (including the TPA’s) in place to do so. Also, going as per the definition of hospitals as per the health insurance policy the criteria’s to be qualified as the hospitals include factors like hospital beds, availability of qualified medical providers and appropriate infrastructure and medical facilities. However, the insurers have the option to violate any of the above listed factors at its own discretion. For example- in a rural space the minimum number of hospital beds could be ignored. Now, these providers like the insurers are also affected by both internal and external environment while making strategic decisions affecting the insured customers and the insurers. Thus, to identify different factors that may affect synergy among insurers and providers, one needs to understand the provider’s perception towards not only the insured customer and TPAs but also the insurers.

Since, there is lack of authentic published data on the relationship between insurers and providers it is important to undertake an exploratory study to identify different factors affecting synergy among insurers and providers. Here, it is also important to study the

relationship between the hospitalization cost paid by the insurers, components of hospitalization cost (i.e. room rent, consultation charges, surgeon fees, medicine, investigations etc.) and the risk covered by the insurers. Well, the measure of risk covered by the insurer could be either the sum-insured<sup>19</sup> or the age of the insured customer. This is because, while calculating the premium and accessing the risk, these two variables are mainly taken into consideration. In fact, the premium table includes only two variables i.e., sum-insured and age, based on which the health insurance premium is calculated.

The third unit and in fact the most important one are the other stakeholders which affect and get affected by the relationship between insurers and providers. Here, the stakeholders are defined as stated by R. Edward Freeman (1984) in his seminal book on '*Strategic Management – A stakeholder Approach*'. Also, the study of stakeholders is critical for any strategic initiative to be successful and help understand their priorities, attitude and preference.

While studying any phenomenon (in this case it is the relationship between insurers and providers) it is important to take into account both the internal and external stakeholders. The internal stakeholders would be the insurers and providers and the external would include the intermediaries, regulator, customers, doctors, nursing staff, pharmacy, etc. Therefore, while studying this unit it is important to include the insurers and providers also as stakeholders. The advantage of this would be that it will help make the outcome more robust and the disadvantage is that it would require additional resources and time.

Thus, studying the units of the strategic triangle become so important and it is only through its analysis that one would be able to identify different factors affecting synergy and formulate strategies for synergy among insurers and providers.

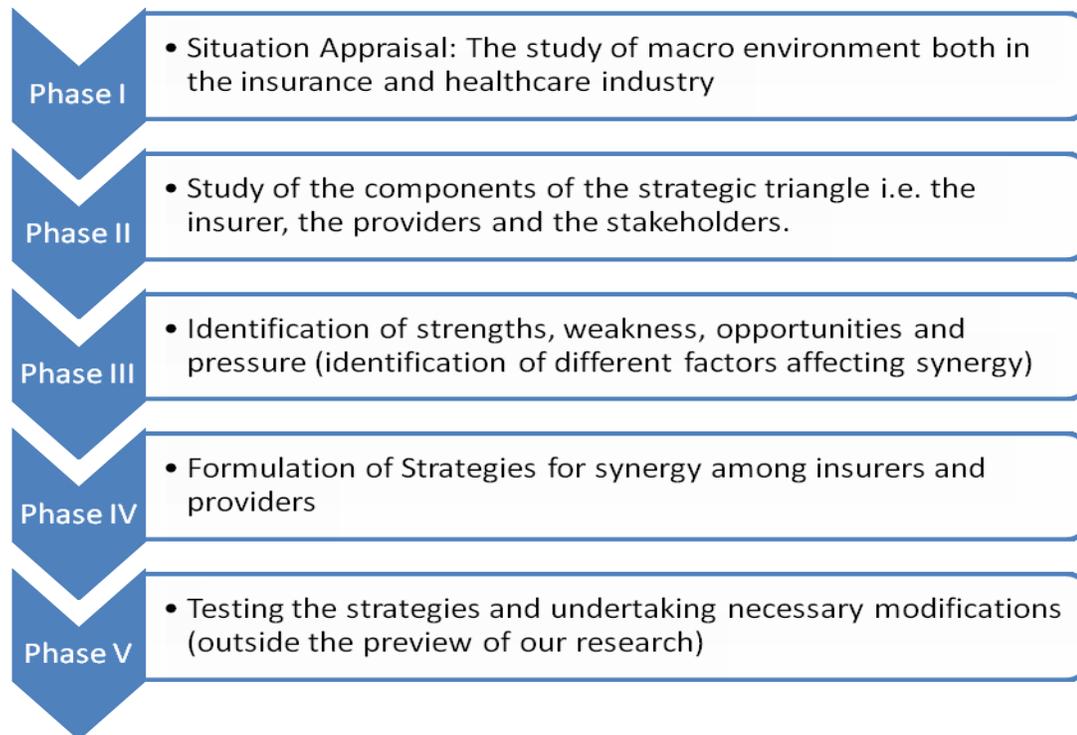
The research framework helps to break down the research work into five distinct phases, thus making it more manageable given the available resources and time in hand. The first being the situation appraisal stage, the second is where there is interaction among the different components of the strategic triangle takes place i.e. the insurer, the insured and the stakeholders. The third comprises of identifying the strength, weakness, opportunities and

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<sup>19</sup> Sum-Insured is the financial amount for which the insured (s) are covered for a given period of time and is the maximum amount an insurer has the legal obligation to pay).

pressures. The fourth phase is that of formulating the strategies and the final stage is to test those strategies and undertake necessary modifications (see Figure 3.3).

**Figure 3.3: Phases identified as per the research framework**



The process to develop strategy for synergy among insurers and providers starts by undertaking situation appraisal i.e., to know the context and the environment in which the different players like insurer, the provider and the stakeholder exist. It is a rational process for identifying and evaluating situations. This phase is primarily the phase where literature review was undertaken apart from identifying the research problems. It also includes studying the trends in the health insurance market.

In the second phase micro analysis is undertaken where the key players are studied closely. For the purpose of current study these players are the insurers, providers and the stakeholders. The objective of this phase is to understand the perceptions of the players and to identify factors that could affect synergy among insurers and providers. The third phase is to identify the strengths, weakness, opportunities and pressure which are nothing but the identification of different factors that could help bring synergy among insurers and

providers. The fourth phase is the formulation of strategies for synergy among insurers and providers by examining the different factors and then binding them in a way that helps formulate strategies. Here, further analysis is undertaken to draw the plans for the future keeping the broad long term objectives in mind.

The fifth phase is the testing phase where the formulated strategies are tested and necessary modifications are being made. This phase does not fall within the current research area but falls under the category of future research. This is not only because of its practicality but also due the time and resource constrains.

**Table 3.1: Research Objectives and Phase Mapping**

Research Objectives	Phase (Research Framework)
1. To study the trends in Indian health insurance market	➡ Phase I and Phase II
2. To find out the relationship between hospitalization cost paid by the insurer, components of hospitalization cost and the risk covered by the insurers in the Indian context.	➡ Phase II
3. To closely study the provider perception's in Delhi and NCR region in order to gain better insight about service, process and synergy.	➡ Phase II
4. To undertake stakeholder analysis in order to study their attitude, influence and interest toward insurer-provider relationship and identify the key factors affecting synergy	➡ Phase II and III
5. To study the business environments keeping in mind the competitive landscape to formulate strategies for synergy among insurers and providers	➡ Phase I, II, III and IV

The Table 3.1 summarizes the mapping of the research objectives with that of the different phases of research framework. The research objective one i.e. trends in the Indian health insurance market is linked with the phase I & II of the research framework. Here, the trends will not only help in undertaking the situation appraisal but will also help to examine the units of the strategic triangle i.e. the insurers, providers and stakeholders to some extent. The research objectives two and three are specific to the providers and insurers respectively. Since, it involves the units of the strategic triangle; it is mapped with phase II of the research framework. The fourth research objective i.e. to undertake stakeholder analysis in order to study their attitude, influence and interest towards insurer-provider relationship and identify the key factors affecting synergy has two parts. One is to undertake stakeholder analysis and

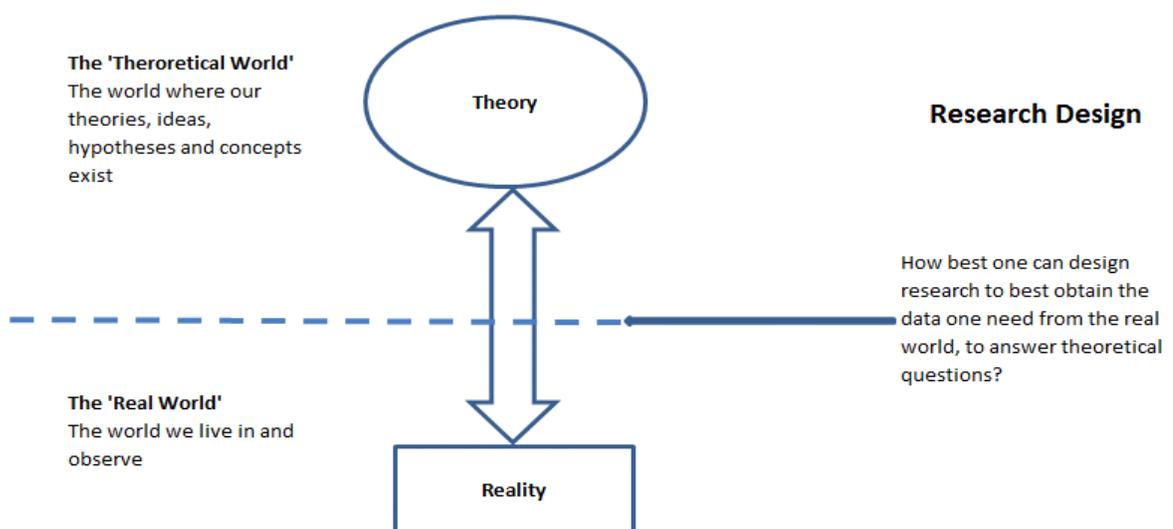
the other to identify the factors affecting synergy among insurers and providers. Since, stakeholder is one of the units of the strategic triangle and identifying factors of synergy involves the identification of strengths, weakness, opportunities and pressure, the research objective is mapped with phase II and III. The fifth research objective i.e. to study the business environments keeping in mind the competitive landscape to formulate strategies for synergy among insurers and providers involves a reflective process and analysis of the data collected during the phase I, II, III and IV. Thus, it is mapped accordingly.

Now, in the subsequent section, the research design would be discussed keeping in mind the above research objectives and its mapping with that of different phases identified as per the research framework.

### 3.2 Research Design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Selltitz et al., 1962). According to Kerlinger (1986) a research design is a plan, structure and strategy of investigation so conceived as to obtain answers to research questions or problems.

**Figure 3.4: Theory, reality and research design**



The plan is the complete scheme or program of research. It includes an outline of what the investigator will do from writing the hypothesis and their operational implication to the final analysis of data. The Figure 3.4 highlights the relationship between theory, reality and research design. As the research objectives are trying to address different problems, different methods were used to achieve them. The research designs of each research objective are discussed in details. The section on research design is then concluded by the methods used for validation of study findings.

### *3.2.1 Research Objective One*

To study the trend in the area of health insurance industry first the broad areas were identified based on the literature review. Here, global perspectives were studied along with the overview of the Indian healthcare system. This was followed by studying the healthcare financing in India. It was important to study the healthcare industry because of its direct linkage with the health insurance industry.

To study the trend in the area of health insurance industry secondary data was used. It was decided to arrange the major events taking place in the health insurance arena in chronological order. Since, the Insurance Act was passed in the year 1912; it was decided to study the major events shaping the industry starting the introduction of the Insurance Act, 1912 up to 2011. These events were categorized into pre-privatization and post-privatization. Company specific secondary data were analyzed for studying the competitive landscape in addition to analyzing the secondary data available with IRDA.

*Data Sources:* The following sources were used for studying the trends in the health insurance industry:

- a. Ministry of Finance, Govt. of India website i.e., <http://finmin.nic.in> (focus on insurance under financial services)
- b. Ministry of Health and Family Welfare, Government of India website i.e., <http://www.mohfw.nic.in> (focus on departments, annual reports and publications)
- c. General Insurance Council of India website i.e., <http://gicouncil.in> (focus on health insurance- key features, standard definitions and FAQ's)

- d. Annual reports of Insurance Companies (Public and Private)
- e. IRDA Journal and Annual Reports 2004 to 2011 (<http://www.irda.gov.in> )
- f. Book on “Health Insurance- The need of the Hour”, Raj Publication House, Jaipur, India, 2011.
- g. World Health Organization (website: <http://www.who.int/en/>, publications, data and statistics)
- h. World Bank report (India Country Overview September 2010)
- i. Tariff Advisory Committee (TAC), IRDA
- j. International Monetary Fund (website: <http://www.imf.org> , country specific data, research and publications)
- k. Swiss-re Economic Research and Consulting (website: <http://www.swissre.com> , focus on health insurance, Sigma publication since 2001 to 2011)
- l. Journal of Insurance Institute of India (website: <http://www.insuranceinstituteofindia.com> , 2003 to 2010)

### *3.2.2 Research Objective Two*

The research objective two is to find out the relationship between hospitalization cost paid by the insurer, components of hospitalization cost and the risk covered by the insurers in the Indian context.

*Unit of Analysis:* Claims<sup>20</sup> has been taken as the unit of analysis.

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<sup>20</sup> Claims can be of two types i.e. cashless and reimbursement. In case of cashless claim the payment is made directly to the provider by the insurance company and in case of reimbursement the insured customer first pay out of pocket to the hospital and then get it reimbursed from the insurance company.

*Data:* To study the relationship between the hospitalization cost paid by the insurer, components of hospitalization cost and the risk covered by the insurers, claims data available with IRDA and shared by the Insurance Information Bureau were used.

In order to estimate the relationship between risks covered by the insurers and the components of hospitalization cost the following variables were used:

- Age, sum-insured and ALOS<sup>21</sup> to represent the risk covered by the insurers.
- Paid amount as the hospitalization cost paid by insurer.
- Consultation charges, surgery charges, medicine charges, investigation charges, room rent and nursing (clubbed together), and miscellaneous charges to represent the components of hospitalization cost.

Necessary data cleaning was done based on following parameters:

- a. Data where the ALOS was negative were removed, as it is not possible that the date of discharge could be before the date of admission.
- b. Date where the total paid amount was more than the claim amount was removed, as this could be possibly a clerical error.

*Sample:* The claims data available and shared by the IRDA was used to do the analysis. The said claims data represents all the insurance company and TPAs. The sample data is primarily for the year 2007, 2008 and 2009.

*Methodology:* As the objective is to find the relationship between variables, both the methods for searching for association i.e. correlation and regression were used to analyze the data. SPSS 17 was used to run the analysis.

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<sup>21</sup> Average Length of Stay was calculated by subtracting the date of discharge with date of admission. For example if the date of admission is 5<sup>th</sup> of the month and the date of discharge is 11<sup>th</sup> of the month, then the length of stay in the hospital is 6 days.

### 3.2.3 Research Objective Three

*Area:* To study the provider perceptions so as to gain better insight about service, process and synergy, primary data was collected. Survey method has been used to collect primary data. To conduct the survey for collecting data, it is important to select a sample where one can get good data without much difficulty. Delhi and NCR<sup>22</sup> was selected as the area where survey was undertaken. Being the national capital Delhi has its own advantages. Both Delhi and NCR area is a hub for most of the network hospitals (providers) those who are in the panel of insurance companies. It also has a range of providers from super specialty to nursing homes. In addition to this the customer segment in Delhi and NCR region is a mix of retail and corporate clients. In addition, the advantage of using this area for the study includes getting a variety of providers with high exposure to health insurance. As most of the big chain hospitals like Apollo, Max, Fortis, and Columbia Asia have their set-up in the Delhi and NCR region it would help gain insight from these categories of hospitals. Also, as Delhi and NCR has good career prospects both in the area of healthcare and insurance, there is continuous inflow of manpower from all parts of the country. Due to which there is sharing of best practices in the area of health insurance and there is a potential to survey managers those who have been in the other parts of the country.

In addition to this the other advantage is that in India the provider perceptions have been studied primarily in the Southern and Western part of the country including Chennai by Muraleedharan (1999), in Kerala by Thankappan's (1999), and in Gujarat by few research scholars of the Indian Institute of Management, Ahmadabad. Since study of providers had not been conducted in the northern region it was thought to be the right location for undertaking the field survey. However, a limitation of this would be that the actual geographical differences could not be studied.

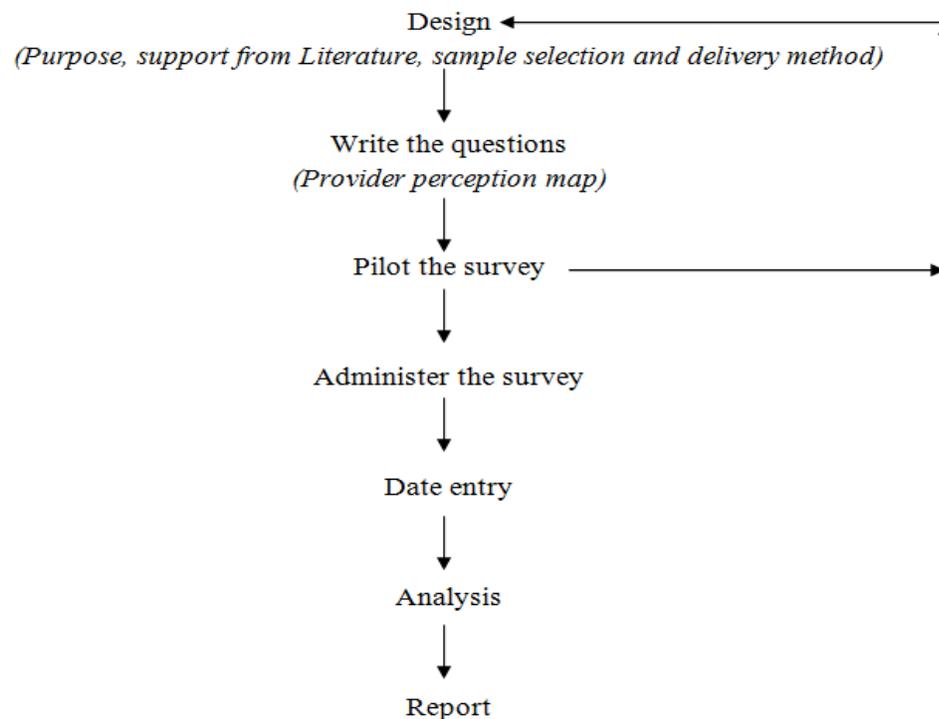
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<sup>22</sup> The concept of National Capital Region was mooted in first master plan of Delhi, notified in 1962. The aim of the concept was to develop a metropolitan area around Delhi, so as to divert increasing pressure of population from the region. The concept was essential in order to protect Delhi's infrastructure from excessive pressure and a planned development of the region. NCR is the metropolitan area of Delhi which encompasses satellite cities like Faridabad, Gurgaon, Ghaziabad and Noida.

*Data:* Two techniques by which data can be collected to investigate the provider perception are the secondary data based method and primary data based methods. Some researchers have used secondary data while others have used primary. Secondary data analysis could also give good insight into the perception of provider's, but since the data related to provider perceptions is not available in public domain, that it why it was not possible to use secondary data based methods to study provider perceptions in Delhi and NCR region.

There are two basic approaches to gather primary data. One is to observe behavior, events, people, or processes and the other is to communicate with people about them (Cooper and Schindler, 2000). The survey method uses the latter. The Survey method is very popular in management research because it is versatile and has been used successfully in social science research for a long time. Since attitudes and opinions (parts of measuring the perception) can be elicited only by questioning either directly or through well designed questions, survey has been recognized as a standard way of collecting data in such context.

**Figure 3.5: The Survey Process**



Therefore, keeping all these things in mind, the survey method was used for collecting data to study the provider's perceptions. The survey process that was followed is depicted in Figure 3.5.

*Unit of Analysis:* As per the objective the units of analysis were providers i.e. network hospitals those who had a contractual relationship with either the TPAs or the insurers for extending cashless services to the insured customer. Under each provider to be studied, it was decided to first identify the hospital owner and administrator. Then, to find out the details of the person who heads the health insurance part in the hospitals. In few hospitals, they have separate TPA desk. Thus, the person heading the TPA desk or the hospital administrator or the medical superintendent was identified to be surveyed.

*Sampling:* As discussed, the providers in Delhi and NCR were taken those who were exposed to health insurance and had an active relationship with TPAs or insurance companies for extending cashless hospitalization benefit to the insured patients. The sampling frame included the network list of three major TPAs and one insurance company. The reason for including different TPAs and insurance company was to ensure that all the network providers in Delhi and NCR are captured as the population for sampling. In case of group hospitals (e.g. Fortis hospital, Max hospital etc.) only one hospital within the group was kept and the others were removed. This was done because in most of the group hospitals, there is a single hospital within the group which is responsible for managing the entire contractual relationship with the TPAs or insurance companies. The formula that was used for sampling is as under:

$$n = \frac{N \cdot x}{(N-1) E^2 + x}$$

$$x = Z\left(\frac{c}{100}\right)^2 r (100-r)$$

Where, N is the population size, r is the fraction of responses and Z(c/100) is the critical value for the confidence level c. The confidence level taken was 95% with 10% of margin of error. The total population size was 233 and the response distribution was taken 50%. Based on the above criteria's the sample size arrived were 69 which was rounded-off to 70. Random sampling was done using Microsoft excel. The list of hospitals (sampling frame) were captured in an excel sheet and random numbers were generated using the RAND formula. Once the random numbers were generated the list was sorted in ascending order to get the list of random samples.

*Data collection method:* The initial questionnaire was pre-tested and necessary modification was made based on the findings. The questionnaire was distributed in- person to the

respondents and the purpose of the study was explained in detail. In few cases the respondents filled the questionnaire on a later date and the same was collected accordingly. The response rate was 95% i.e. 67 respondents replied to the questionnaire.

The other sources of collecting data were from the un-structured interview which was conducted at the time when the questionnaire was handed over. The visits to the cashless counters in the hospitals were also made to observe the interaction between insured and the providers. Thus, a mix of data collection methods was used.

*Perception Variables:* See Table 3.2 for variable definitions and measures.

*Questionnaire:* Most questions have their roots in literature and the qualitative analysis. Some questions were modified and few were included based on the pilot study that was carried out. The questionnaire were designed based on the need to study the above discussed perceptions variables. The length of the questionnaire was restricted keeping the respondents in mind. As most of them were in senior management position, time for them is quite a precious resource. Both open and closed questions were asked. Most of the questions were closed in nature as it restricts the choice available to the respondents and is easy for the respondents to deal with. Few open ended questions were asked due to its advantage of exploring more depth (see Annexure II for Questionnaire).

#### *3.2.4 Research Objective Four*

To undertake stakeholder analysis and to identify factors affecting synergy among insurers and providers different qualitative methods were used. Here, the focus was on the stakeholders in the Indian health insurance industry. Secondary data was available primarily in the form of news (print media). Other than the print media there was not much secondary data available to identify and analyze the factors affecting synergy among insurers and providers, this was primarily due to the two reasons. First, the insurance market has been recently opened and second that there is lack of research in the area of provider-insurer relationship. Therefore, different qualitative methods were used to achieve this research objective. Qualitative methods compliment quantitative methods very well and many times with the help of qualitative methods one is able to get much deeper insights about the issue which are not possible through only quantitative methods.

**Table 3.2: Provider Perception Variables**

<b>Provider Perception Variables</b>		
<b>Variable</b>	<b>Definition</b>	<b>Measure</b>
Insured Patient Flow	Percentage of insured patient getting admitted in the hospital	Rating 1 to 5 where 1 is lowest and 5 is highest
Awareness Level	Awareness about terms and conditions of health insurance policy	Rating 1 to 5 where 1 is lowest and 5 is highest
Customer Demand	Insured customer demand for services	Rating 1 to 5 where 1 is lowest and 5 is highest
Priority	Importance given by the provider to the insured patient	Rating 1 to 5 where 1 is lowest and 5 is highest
Cost of treatment	Cost of treatment and charges in case of cashless hospitalization	Rating 1 to 5 where 1 is lowest and 5 is highest
Payment timelines	Payments made by the TPAs to the network providers	Rating 1 to 5 where 1 is lowest and 5 is highest
TPA Model	Use of TPA for health insurance	Rating 1 to 5 where 1 is lowest and 5 is highest
TPA empanelled	Contractual agreement for extending cashless services	This is divided into four groups i.e. less than 5, between 5 and 10, more than 10 and none.
Discounts	Discounts offered to TPA(s)	This is divided into four groups i.e. all, few of them, most of them and none
Income group preference	Income groups preferred by the hospital in case of health insurance	This is divided into low income group, middle income group, high income group and none.
Hospital Tariff	Frequency of change of hospital rates agreed with insurer/TPAs	This is divided into four groups i.e. every year, every 3 to 3 years, every 4 to 5 years and never being increased
Health Insurance Fraud	Use of false bills or medical documents or to inflate the hospital bill in case of health insurance	There were four options i.e. Yes, No, Can't say and May be.
Hospital Room category	The category of rooms chosen by the patient while hospitalized	This is divided into 5 group's i.e. general wards, semi private/double occupancy, private/single occupancy, deluxe and super deluxe/suit.
Preference for Insurers	Does the hospital prefer any specific insurance company	There are option given i.e. Yes and No

Different qualitative methods which were used for data collection purpose are as following:

- Interviews
- Focused Group Discussion (FGD)
- Observation and
- Open-ended questions- These questions were asked during the time of Survey used to collect data for second research objective.

**Table 3.3: List of Stakeholders (In-depth Interviews)\***

Doctors- 15	Brokers- 5
IRDA- 2	Govt. Bodies- 2
TPA- 3	Re-Insurer- 2
Providers – 14	NGO- 3
Insured Customer – 25	Medical staff- 5
Insurance Companies – 12	Teaching inst.- 3
Pharmaceutical Company- 2	Medical Equipment & Information Technology - 2

\* Numerals besides each category in the following section represent number of people interviewed

Here, the idea was not to prove any hypothesis but to explore and to identify factors which affect synergy among insurers and providers in India. Multiple stakeholders were interacted with; to understand their attitude, influence and interest towards provider-insurer relationship (Table 3.3). These interactions were in the form of interviews, discussion, and observation. Field visits were made to providers, TPAs and insurance companies.

In-depth interview was used as a source for data collection. The theoretical roots of in-depth interviewing are in what is known as the interpretive tradition. According to Taylor and Bogdan (1984), in-depth interviewing is, ‘repeated face-to-face encounters between the researcher and informants directed towards understanding informants’ perspectives on their lives, experiences, or situations as expressed in their own words’. This definition underlines two essential characteristics of in-depth interviewing: one, it involves face-to-face, repeated interaction between the researcher and his or her informant(s); and two that it seeks to

understand the latter’s perspectives. Because of repeated contacts and hence extended length of time spent with an informant, it is assumed that the rapport between researcher and informant will be enhanced, and that the corresponding understanding and confidence between the two will lead to in-depth and accurate information. Semi-structured questionnaire were used for the interviews (see Annexure III) to collect the data.

**Table 3.4: Stakeholder Analysis Framework**

Stakeholder	“An individual, group or organization which has a share or interest in insurer-provider relationship and is a party that affects or can be affected (either positively or negatively) by the proposed strategies for synergy between provider and insurer” *
Interest	Stakeholders interests refer to their motives and concerns on the issues being addressed ( main three interest to be captured)
Attitude	Attitude refers to the potential reaction of various stakeholders to different decisions related to the issue in hand
Power	Stakeholder power refers to the quantity of resources: human, financial, and political resources available to the stakeholder and their ability to mobilize them.
Influence	The influence refers to the sum of power levels each stakeholder has in terms of human, financial and political resources
Outcome	Factors affecting synergy among insurers and providers
* The purpose of this definition is linked to our theoretical model, unit of study and the strategic triangle.	

To aid in achieving the research objective, the stakeholder analysis as listed out by R. Edward Freeman in his book *Strategic Management* (1984) had been consulted. The stakeholder analysis framework (Table 3.4) had been used to study the interest, attitude and influence of the different stakeholders in the health insurance business.

In case of print media two options were available i.e. either to study the different media and pick samples of each to identify key areas of concern for each stakeholder for a given period of time or to choose one single medium and analyze all that has been printed during a given

time frame. Here, the second option was used primarily due to two reasons. First, by using single medium, the duplications could be avoided and second, that by studying the total census of data published within a single print medium would give a holistic picture and would help in undertaking comparative study over the years.

*Data Analysis:* Broadly, a grounded theory approach was followed in the analysis of qualitative data apart from the content analysis undertaken for the data available in the print media. A grounded theory is one that is inductively derived from the study of the phenomenon it represents. That is, it is discovered, developed and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon. Therefore, data collection, analysis, and theory stand in reciprocal relationship with each other (Strauss and Corbin 1990).

The interviews with different stakeholders of the Indian health insurance industry were analyzed. They gave good insights into the problems associated with the health insurance sector that affects the relationship between insurers and providers. Here, the focus was more on the richness of content and corroboration of factors from different sources. The factors which came out in common from different stakeholders were considered more important while doing the analysis as they represented common concern among different stakeholders.

Content analysis is an approach to the analysis of documents and texts that seek to quantify content in terms of predetermined categories and in a systematic and replicable manner. As per Berelson (1952), content analysis is a research technique for the objective, systematic and quantitative description of the manifest content of communication. Holsti (1969) defines content analysis as a technique for making inferences by objectively and systematically identified characteristics of message. The advantages of content analysis includes that it's a very transparent research method. The coding scheme and the sampling procedures can be clearly set out so that replications and follow-up studies are feasible. It can allow a certain amount of longitudinal analysis with relative ease. Several of the studies allow the researcher to track changes in frequency over time (Beharrell 1993; Miller and Reilly 1995; Warde 1997). Content analysis is a highly flexible method. It can be applied to a wide variety of different kinds of unstructured information and most importantly content analysis can allow information to be generated about social groups to which it is difficult to gain access. Content analysis suffers from certain limitation too, like it is almost impossible to devise

coding manuals that do not entail some interpretation on the part of the researcher. It is difficult to ascertain the answer to ‘why?’ questions through content analysis.

In case of content analysis the following four steps were followed:

Step 1: The unit of analysis was identified as health insurance. All the five words i.e. insurance, insured, cashless, mediclaim and insurer were used to retrieve the data from the archive section (covering the news title) of the newspaper.

Step 2: All the news articles for the period of three consecutive years i.e. 2007, 2008 and 2009 containing any of the above listed five words were identified and was documented in chronological order.

Step 3: Coding sheet was developed capturing the date, location, headline, key statements, stakeholder involved and the issues and concerns highlighted. The issues and concerns based on subject and themes were then summarized stakeholder wise.

Step 4: Conclusions were drawn and compared for different years so as to identify any patten.

### *3.2.5 Research Objective Five*

Research objective five was to study the business environments keeping in mind the competitive landscape to formulate strategies for synergy among insurers and providers. This research objective had three components i.e. to study the business environment, to understand the competitive landscape and finally to formulate strategies for synergy among insurers and providers. Since, the first two components are an outcome of the earlier research objectives and to develop strategies one needs to examine both the internal and external environment, which again is covered, as an outcome under research objective one, two, three and four. Thus, the final objective is a summation of the phase I, II, III and IV (refer to Table 3.1). Here, the findings of the study linked to the earlier four research objectives are used to achieve the fifth objective. However, few tools have been used during this activity, primarily to validate and re-validate the overall study findings. These tools are discussed in the section on ‘validation of study findings’. The limitation of the study is listed out in the last chapter i.e. Chapter 7.

### **3.3 Validation of the Study Findings**

To study the phenomenon and achieve the overall objective of the current study *Triangulation* has been used. Many researchers have discussed complementing survey with field work to arrive at better results. “The combination of methodologies in the study of the same phenomenon” (Denzin, 1978, p.291) in order to arrive at a better understanding of a given setting or community without spending too much time in any one setting is called triangulation. The assumption underlying triangulation is that when a researcher uses two methods, the weakness of each method can be overcome by the other. In addition to use a combination of methodologies the following methods were used to re-validate the study findings:

*Expert Opinion Interview:* The findings of the study were re-validated by undertaking expert opinion interview. Here, in-depth interview were undertaken with experts in the field of health insurance and the same was recorded using audio-visual means (refer to the Annexure IV, Video CD). Experts were defined as those individuals those who have more than 10 years of managerial experience in the area of health and insurance and are in the senior management position. The list of experts was gathered through different sources and contacts.

*Expert Opinion Questionnaire:* All the factors identified during the course of the study were presented in the form of a questionnaire (refer to Annexure IV) and experts were asked to rate each factors on a scale of 1 to 5 based on its ability to either develop or destroy synergy among insurers and network hospitals. To seek inputs from the experts e-mail was used (please refer to Annexure V). The e-mail was preceded (in few cases) as well and followed by telephonic discussion. It was decided to remove the factors with average score of 2.5 or less.

*Recent Media Report and Publications:* Secondary data like the recent media report and the publication (2010 and 2011) also helped re-validate the findings.