

# Comprehensive analysis of Utilization Trend and Opportunities to scale up a registered Health Insurance company's Preferred Provider Network.

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**Abstract** - The aim of the study is to analyse the utilisation trends and identify the opportunities to scale up the company's Preferred Provider Network and to provide recommendations and insights to the company so that they can increase their earnings and profits. The company's provider networks data of year 2019, 2020 and 2021 up to month of July was received. The secondary data thus received had details of all network and non-network hospitals and other necessary related information. The data was cleaned, classified and the study variables were analyzed. Appropriate statistical software and tools like Microsoft Power BI and Microsoft Excel was used for data analysis and the statistical result thus obtained were used for interpretation with respect to the outcome variables. This study that was carried out helped in understanding the utilization of the different pricing patterns within the provider network and helped in identifying why a particular pricing category is preferred over others. Furthermore, it also aided in accessing the company's savings and in framing recommendations for its better financial performance.

**Keywords** - Insurance, Preferred Provider Network, Network hospitals

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## I. INTRODUCTION

From time immemorial we hear the wise saying "Health is Wealth" and we do know that it is true in every sense. The importance of health in leading a good and happy life cannot be emphasised enough. Every now and then everyone falls sick or unforeseen medical issues happen to people which are unexpected and undesirable. These unforeseen medical problems adversely affect our long-term financial planning and goals. These problems can result in withdrawal of the savings that was planned for other goals in life and may sometimes even lead to financial crisis depending on the medical condition one is suffering from. Health Insurance play a major role in overcoming this limitation. Health Insurance policies help us in times of medical issues by maintaining financial stability. Health issues in the modern world have evolved from the past, therefore investment in Health by taking Insurance policies are becoming more common. Moreover, the insurance companies also make it more attractive for the customers with a wide variety of plans ranging from individual to family plans. [1,2,3,4]

Health Insurance was launched in India in the year 1986 and the has grown exponentially to the present day. In our country there are standalone as well as Government sponsored health insurance companies. With increased public awareness and health consciousness, the sharp rise in lifestyle diseases, more private healthcare financing, increased earning, inflation, and the ongoing pandemic has all resulted in people opting for health insurance rather than paying out from their pocket for healthcare needs. [5,6,7]

Health insurance companies work by putting out attractive health covers and they determine the cost of different policies. The insured will be expected to pay a monthly or annual sum as premium to the insurance company. When the insured faces a health crisis, the insurance company is informed and after proper scrutiny agrees to cover the applicable medical expenses. The expenses may be covered as a reimbursement or direct payment to the hospital by the insurance company through cashless payment. [8,9,10]

Preferred Provider Networks or Organizations are those schemes or plans of an insurer where the providers of healthcare are willing to accept a discounted rate in return for higher volume of consumers availing health service from the provider. Preferred provider organisations emerged as an alternative approach in organizing

health care services. The Preferred provider organisations started as a significant addition to the Health Maintenance Organisation (HMO), which were the only competitive health plan in early 1970s in the western countries. [11]

Preferred Provided Network is an arrangement between the hospital or healthcare provider and the Insurance company. The organization enrolled in the network will offer services to the insured at a reduced rate and the Insurance company direct the insured to the network hospitals thereby increasing the volume of patients. This is a beneficial partnership for all the parties involved. [12,13,14]

Generally, the induction of the healthcare providers into the network is after the carefully scrutinising all the necessary facilities of the provider and later the Insurance company and the Hospital are required to sign a Memorandum of Understanding which is done after formulation of a plan which benefits all the involved parties. [9,15]

Being part of a provider network puts the hospital in a lot of advantage as they are chosen by the insurers at the time of need and thereby significantly increase the number of patients. The hospitals also benefit from the fact that they have choices in the type of network hospital or provider they want to be. The Insurance company benefits by the discounted rate i.e,10-20% lower than the market price thereby increasing the company's profit. The insurer is benefitted in a way that they won't have to pay out of their pocket for the healthcare need. [2,16,17,11,18]

Preferred provider network is a common practice in most health insurance companies, and it is also a way for the company to earn profits. It provides discounts in the amount the company has to pay to the service provider and is preferred by the company. [19]

#### *About the Study Title:*

The current study focuses on the company's preferred provider network, giving importance to the utilization trends. The preferred provider network of the company consists of empanelled hospitals who have made an agreement with the company regarding the type of payment that they will be entitled to receive from the company. The company has various such payment type, and they are Unipay, Instapay and pre-negotiated discount types are different schemes based on payment types. The Unipay category is a scheme where the procedure price is determined by the Insurance company based on the city tier and the number of beds of the provider hospital. In case of Instapay, the price laid down by the provider/hospital is taken into consideration and as the name suggests the insurance company is liable for instant payment of the bills of the network hospital under this scheme. In case of the pre-negotiated discount type the price is negotiated between the hospital and the insurance company. The current study aims at a detailed analysis and evaluation of the Utilization trends of Registered health insurance company's Preferred Provider Network.

#### *About The health insurance company:*

This is a private insurance company in India, and they have strategized their provider networks based on preferred payment types. The health insurance company was established in the year 2007. It currently offers 13 health insurance plans.

The company has various plans for people in all walks of life at different age groups. These insurance plans are varied and attractive for the public and is available all over the country at over 125 locations. The company has a solvency ratio more than the IRDAI mandated ratio of 1.5 and has consistently performed in a similar manner over the last few years. The claims support of the company is at 93% and is comparable with other top health insurance companies in the market. The company also has a healthy share of empanelled network hospitals. The annual premium of the company is climbing for years and recorded yet another increase in the past financial year where it is almost about ₹ 382 crores.

The current study focuses on the company's preferred provider network, giving importance to the utilization trends and the ways in which the company can improve its financials. The preferred provider network of the company consists of empanelled hospitals who have made an agreement with the company regarding the type of payment that they will be entitled to receive from the company. The company has various such payment type, and they are Unipay, Instapay and pre-negotiated discount types are different schemes based on payment types. The Unipay category is a scheme where the procedure price is determined by the Insurance company based on the city tier and the number of beds of the provider hospital. In case of Instapay, the price laid down by the provider/hospital is taken into consideration and as the name suggests the insurance company is liable for instant

payment of the bills of the network hospital under this scheme. In case of the negotiated discount type the price is negotiated between the hospital and the insurance company.

## II. AIM AND OBJECTIVE

### A. *Aim:*

The aim of the study is to analyse the utilisation trends and identify the opportunities to scale up the health insurance company's Preferred Provider Network and to provide recommendations and insights to the company so that they can increase their earnings and profits.

### B. *Objectives:*

- To understand the utilization of the different preferred pricing types within the provider network.
- To do a comprehensive data analysis using different variables to understand the trends followed by the hospitals with respect to the preferred pricing type.
- To calculate savings from all the preferred pricing types and infer on savings aspect.
- To understand the impact of different variables on the provider network and the preferred pricing type.
- To give suitable recommendations with respect to provider networks based on the extensive analysis done.

## III. LITERATURE REVIEW

- The researchers calculated the average PPO discount provided by two private insurance companies and compared it with the Government Medicare scheme and found that the PPO by the private players were cost effective compared to the Medicare policies and suggested that if Medicare can reduce its fees and access is not adversely affected, it would more likely improve the physicians services market as they would be able to handle the provider network in a better suited way.[3]
- In this study is an assessment of medigap PPOs nationally for their viability and effectiveness are discussed on the early experiences with the staff of Blue Cross and Blue Shield of Arizona (BCBS/AZ) in Phoenix and CAPP CARE in Orange County, California through onsite interviews and also through interviews of insurance industry representatives and came into conclusion that introducing PPO under Medicare had many advantages like there was very little government involvement as it relied on the private sector, ease of incorporating the PPO into Medicare insurance that was already been purchased by consumers, there was no need for restructuring the schemes as network enrolment or empanelment was also with minimum added administrative burden. The limitations cited were the limited ability of the PPO to channel the consumers to network physicians or hospitals as it was critical to cost containment. Also, BCBS/AZ conducts physician profiling and utilization management and thereby restricting its medigap PPO network to physicians who are in its private sector PPO network, in order to attain cost control. They conducted the study for a 42-month evaluation and insisted that future research is essential to evaluate the viability and effectiveness of the Medicare PPO.[4]
- In an analysis of the data of Medicare health plan management system, it was found that most PPOs chose to offer their service providers in urban areas where other options already exist and not in rural area because of the difficulties and costs involved in developing provider networks in the rural regions. The constraints in lowering the premiums in case of PPOs also were found to reduce the enrolment. Age-rated policies by Medigap charge relatively lower premiums for younger beneficiaries further limiting PPO enrolment. Beneficiaries enrolling for PPOs were majorly those were willing to pay out of pocket at times but those who didn't want any access restrictions. The demonstration also showed that the price sensitive beneficiaries opted out of PPOs because of the premium and concluded that the enrolment of beneficiaries in the regional areas may take some time to reach the full potential. [5]
- In another study conducted on outpatient coverage of private sector insurance in India, the review was done after comprehensive literature search of peer review journals in PubMed and data of Indian private health insurance companies, on out-patient insurance coverage. They found that out-patient insurance coverage is an emerging trend in private sector health insurance. OPD cover assists the insured to claim expenses which

were incurred other than during hospitalization. The review also pointed out that there has been a growth of 25% in health insurance business in India during the last few years. [21]

- A detailed evaluation of Preferred provider organization reviewed the factors that influence a PPO's performance by studying the impact of the PPO on provider market share and on the source of health care, a description of PPO users and problems of defining a PPO member and assessing their risk characteristics and also the impact of PPO on cost assessed by a 3-year trend analysing PPO and non-PPO cost to bank and its employees. They arrived in the following conclusions that The PPO is less likely to be effective in channelling more expensive cases into its provider network. They also found that the PPO is simple in its basic concept, but demands a precision that makes it very difficult to be well implemented. It requires a precision in benefits design, structuring of the provider network, and systems support for managing that network that is new to managed care organizations. They also made an observation regarding the Med Network PPO that it grows and evolves on a day-to-day basis. The organization that existed at the start changed substantially during the 16-month evaluation period. They concluded that the PPO is a useful addition to the portfolio of managed-care products and will be an important competitor to both HMOs and indemnity insurance plans for the next three to five years.[11]
- A cross-sectional study to quantify network breadth and exclusivity among primary care physician (PCP), cardiology, and general acute care hospital networks for employer-based (large group and small group), individually purchased (marketplace), Medicare Advantage (MA), and Medicaid managed care (MMC) plans included 1192 networks from Vericred, found that narrower health care networks had a relatively large degree of overlap with other networks in the same geographic area, while broader networks were associated with physician, hospital, and insurance market concentration. Suggesting that the patients could shift to narrow network low-cost plans without losing in-network access to their physician.[24]
- A group of researchers, in their peer reviewed field action report, explored the Massachusetts model of public-private collaboration within the context of federal refugee health priorities and restraints affecting public health programs to demonstrate the model's accomplishments. They found that the public health authorities can successfully implement public-private collaborations using a preferred provider network model for conducting refugee health screening. They also found that screening using this model can integrate federal funding streams to reduce barriers to care for refugees. They also found that the use of a limited network of preferred providers facilitates program evaluation and monitoring for the changing health needs of refugees. [25]
- Another group of scientists in their review article assessed the role of provider network in affordable cancer care delivery with the objective to review the structure of provider networks, the regulations governing them, and the implications for patients with cancer who must navigate them and concluded that in order to control health care costs insurers contract with in-network providers to deliver care at negotiated rates, restricting access to out-of-network providers by denying or reducing coverage and suggested that Policy efforts of insurance agencies should focus on developing regulations that govern insurance plans that balance the dual goals of keeping health care affordable and optimizing access to cancer and other specialty care. [26]

#### IV. METHODOLOGY

##### A. *Study sample:*

Provider Networks data of previous two and a half years was provided by the company, comprising details of all network and non-network hospitals. The study sample in the secondary data provided included all the provider network hospitals across India that has been empaneled by the insurance company and tagged as Network hospitals. The sample also included non-network hospitals across India that have rendered services for the company's customers but have not signed the contract with the company and hence were not under the network providers. The information related to all network and non-network hospitals such as the hospital name, city and state the hospital is situated in, the preferred type, claims details, the amount claimed, procedure for which amount was claimed, the hospital bill amount, the Net payable after negotiable discounts if applicable were some of the important information used for data analysis.

##### B. *Study Design:*

The study was conducted as an analytical, cross-sectional study, as a detailed analysis of the secondary data had to be carried out to meet the objectives and arrive at the expected outcomes. It is a cross sectional study

as the data was from a specific point of time, i.e., provider networks data of previous two and a half years (from January 2019 to July 2021). The network and non-network hospitals in the data act as the parameters in the study and payment types of preferred provider network like the Unipay Instapay and negotiable discount types are all considered to be the variables in the data.

C. *Study procedure:*

Password protected provider networks data of past two and a half years was shared by the organization. Secondary data was collected, and the study variables were analyzed. Appropriate statistical software and tools like Microsoft Power BI and Microsoft Excel was used for data analysis and the statistical result thus obtained were used for interpretation with respect to the outcome variables. The prime tools used for the analysis of the data was Microsoft Power BI and Microsoft excel. The data was cleaned and thereafter broken-down year wise to a more systematic manner in both Microsoft Excel spreadsheet and on Microsoft Power BI. The data was then grouped based on various parameters like the type of provider whether network or non- network. Other parameters like the preferred payment type, the profits obtained using various types were all analyzed and recorded. Several graphs and figures were utilized for representation of the data analyzed. A final inference was made after carefully assessing and analyzing all the parameters.

D. *Significance of the study:*

This study is being carried out to understand the utilization trends of the Preferred provider network and understand the different pricing patterns of the company like Unipay, Instapay and negotiable discounts within the provider network. And also, to help and identify why a particular pricing category is preferred over others.

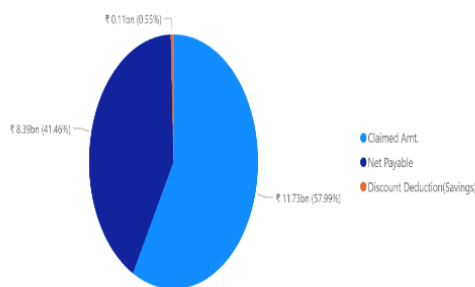
V. FINDINGS AND ANALYSIS

The analysis part was carried out using tools like the Microsoft Excel and Microsoft Power BI on the data obtained and findings were made on parameters like the amount claimed, payment type whether Unipay or Instapay or Negotiable discounts, overall savings, utilization based on the type preferred and a brief analysis of non-network hospitals.

Some of the important graphs prepared from the data were as follows:

1) *Analysis based on claimed amount –*

The total claimed amount for the past two and a half years was calculated to be 1,173 crores. The total net payable was 839 crores and the savings got from discounts was 11 crores.



Detailed analysis was done on all the three preferred pricing types i.e., Unipay, Instapay and negotiable discounts to arrive at the expected outcomes of the study.

2) *Analysis based on Payment type -*

When considering the whole of India, the maximum amount claimed was from the state of Maharashtra followed by Gujarat and Tamil Nādu.

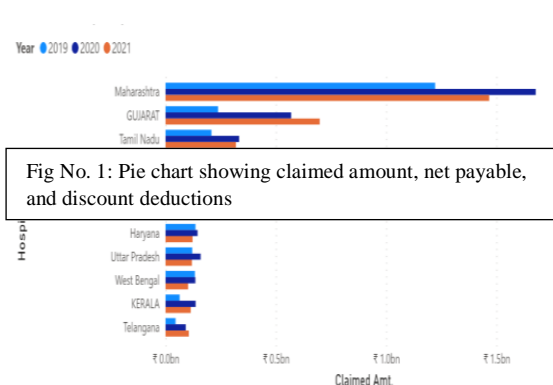


Fig No. 1: Pie chart showing claimed amount, net payable, and discount deductions

Fig No. 2: Chart showing year wise data of states with the maximum amount claimed

UNIPAY- In case of Unipay payment type, maximum utilization was from the state of Maharashtra followed by Gujarat and Delhi of which majority were settled as cashless claims.

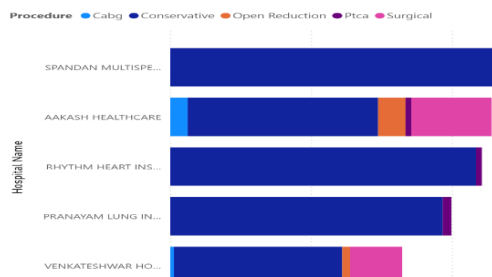


Fig No. 3: Chart showing top 5 utilized network hospitals and procedures under Unipay in the last two and a half

INSTAPAY - In case of Instapay payment type, maximum utilization was from the state of Maharashtra followed by Haryana and AndraPradesh of which majority were settled as cashless claims. Maximum payments were made in the year 2019 with respect to the data received and analysed.

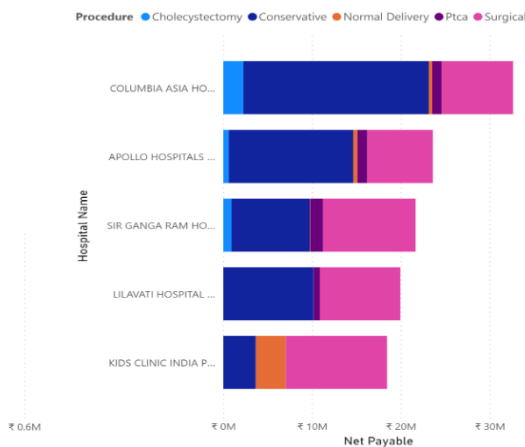


Fig No. 4: Chart showing top 5 utilized network hospitals and procedures under Insta-Pay in the last two and half

NEGOTIABLE DISCOUNT - In case of Negotiable discounts payment type, maximum utilization was from the state of Maharashtra followed by Delhi and AndraPradesh of which majority were settled as cashless claims. Maximum payments were made in the year 2020 with respect to the data received and analysed.

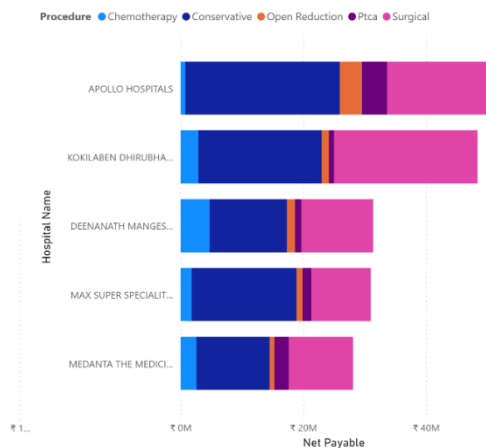


Fig No. 5: Chart showing the top 5 utilized hospitals and procedures under the Negotiable discounts type in the last two and a half years



3) Analysis on overall savings and percentage analysis of savings-

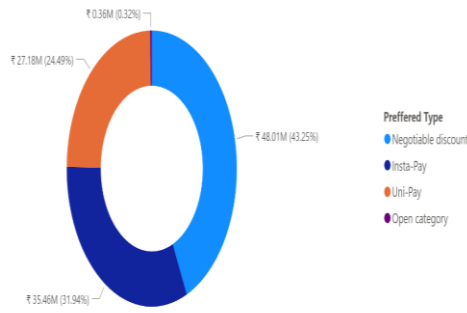


Fig No. 6: Donut chart showing the savings got based on the preferred type.

Preferred Type	Net Payable	Discount Deduction(Savings)	Savings in %	Type of Hospital
Uni-Pay	₹ 598,674,361.1	₹ 27,025,447.29	4.54	Network
Open category	₹ 3,556,228,231.93	₹ 359,420.82	0.01	Network
Negotiable discount	₹ 3,482,328,592.72	₹ 47,974,166.22	1.38	Network
Insta-Pay	₹ 749,430,370.67	₹ 35,433,514.18	4.73	Network
<b>Total</b>		<b>₹ 110,792,548.51</b>		



4) Analysis on non-network hospital -

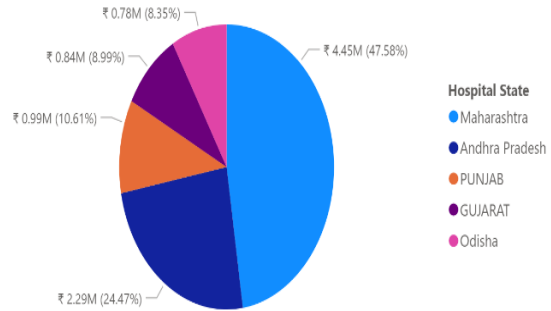


Fig No. 7: Pie chart showing top 5 highly utilised non-network hospitals based on the states they are in.

Hospital State	Hospital Name	Discount %	Type of Hospital	Net Payable
Maharashtra	GANPATI HOSPITAL	20.00	Non-Network	₹ 708,748.8
Maharashtra	INDRAVATI HOSPITAL & RESEARCH CENTER PVT.LTD	10.00	Non-Network	₹ 1,972,625.24
Andhra Pradesh	MEDICOVER HOSPITALS	12.00	Non-Network	₹ 751,299
Maharashtra	MUSALE HOSPITAL	20.00	Non-Network	₹ 641,846.69
PUNJAB	NEW LIFELINE HOSPITAL	15.00	Non-Network	₹ 992,853.45
Andhra Pradesh	Q1 HOSPITALS (A UNIT OF BONE & JOINT HOSPITAL)	15.00	Non-Network	₹ 568,986.27
Maharashtra	RUBY HOSPITAL AND CRITICAL CARE CENTER JALGAON	15.00	Non-Network	₹ 1,128,848
Andhra Pradesh	RUSSH SUPER SPECIALITY HOSPITAL	10.00	Non-Network	₹ 969,281
Odisha	Sunshine Hospitals	10.00	Non-Network	₹ 781,730
GUJARAT	VIHAR HOSPITAL	10.00	Non-Network	₹ 640,983
<b>Total</b>				<b>₹ 9,357,201.45</b>

Table No. 2: Table showing the top 10 non-network hospitals in India that were highly utilized and their net payable amount and discounts given by them

## VI. DISCUSSION

The health insurance company Insurance has different Preferred Provider Network plans depending upon the MoU made by the empanelled hospital and the company. The different Preferred Provider Network plans of the health insurance company include the Unipay, Instapay and the last being Negotiable discounts type.

Unipay is a scheme where the company fixes the tariff rates for various common procedures after carefully examining the capacity of the hospital, i.e., considering the number of beds and other facilities, the area where it is located, i.e., considering the city tier and also by considering the normal range of pricing for that particular procedure in that area.

Instapay type is where the health insurance company agrees to pay the hospital for various procedures in an instant type of payment with certain discounts agreed by the hospital. Under this type, the hospital is at an advantage of getting paid instantaneously for the procedure with no delay and it makes an attractive package for the hospital.

The negotiable discount type is where the company and the network hospital agree to a discount that can be negotiated at the time of payment as agreed upon before by the company and the hospital. [21]

The detailed analysis of the data from health insurance company Insurance company yielded results on various types of preferred provider network payment types and the comparisons between them. Careful assessment and detailed explanation of the data have been explained in different sections of the discussion.

### A. *Unipay:*

The majority of Unipay empanelled hospitals were in the state of Maharashtra, followed by Gujarat and Delhi. Based on the analysis of data, which was during a span of three years, the data showed that the company reaped maximum profits from this type in the year 2020. The top 5 hospitals which constituted the major players in increasing the profits under the Unipay payment type were Aakash healthcare, Venkateshwar hospital, Spandan multispeciality hospital, Pranavam lung institute and Rhythm Heart Institute. The savings earned through Unipay type by company over three-year period was ₹ 2.70 crores.

Although the savings from the Unipay type of payment seems to be low, the percentage in savings is approximately 4.54% which is similar in case of Instapay type of payment but much greater than the negotiable discount type of payment method.

The comprehensive analysis points to the notion that Unipay type was not preferred by the hospitals as the rate for procedures are fixed by the health insurance company and it is comparatively less considering the rates set by hospitals and hence it is less attractive option for the hospitals. However, the Unipay type of payment is more preferred by the company, as the tariff is fixed by the company after all necessary examination like the hospital capacity, the location, normal cost range for the procedure etc of the network hospital and also because it was profitable for the company.

### B. *Instapay:*

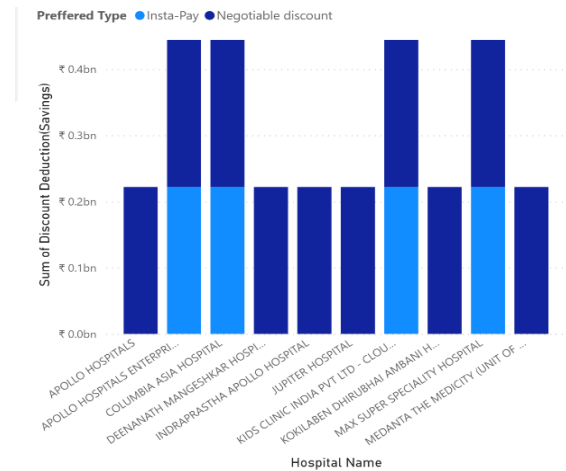
Most of the network hospitals which opted this type was from the state of Maharashtra followed by Haryana and Andhra Pradesh. The data showed that the company made maximum profits in the year 2019 and the overall savings for the company over three-year period according to the data mounted to ₹3.54 crores. The top 5 highly utilised hospitals that are under the Instapay type in the provider network are Colombia Asia hospital, Apollo hospital, Sir Ganga Ram hospital, Lilavati hospital and Kids clinic India Pvt Ltd.

The analysis of the data has shown that the Instapay type was vastly preferred over Unipay according to the data analysed. The factor that played a major role was that the payment type was of an instant type and the rate was not fixed prior by the insurance company.

Although a lot of hospitals prefer Instapay over the Unipay, the savings from this type for the company is comparatively a lot less than that from the Unipay type of payment. The company prefers a lot of hospitals to be empanelled under the Unipay type of scheme as that is more profitable for the company.



The only prior agreement in this type of payment is that the company is assured with a discount percentage in return of instant payments to the hospital by the company. The data also showed that the discount deductions or the savings earned by the company from even the top utilised hospitals mentioned above were almost non-existent. This points to the fact that even though the savings in projected numbers and percentage savings (4.54%) is more for Instapay type of payment the profits for the company per procedure is more for the Unipay



type of payment and that indicates Unipay to be more profitable for the company's growth.

#### C. Negotiable type:

The data analysed shows that maximum number of hospitals empanelled by health insurance company prefer negotiable discount type compared to the other two types owing mostly to the flexibility and the option to negotiate the discount that needs to be given to the company at the time of payment.

Most hospitals empanelled under this type is again from the state of Maharashtra, followed by Delhi and Andhra Pradesh. The analysis showed that maximum savings were in the year 2020 and it amounted to approximately ₹4.80 crores over the three-year period. The savings is seen to be more than Unipay and Instapay type of payments yet in percentage it is much lower than both the types of payments. The savings from negotiable type of payment was analysed to be 1.36% which was almost 3 times lower than that of Unipay and Instapay type of payment.

The flexibility in the discount rate is an attractive aspect for the hospitals to choose this type of payment over the others as this only requires the empanelment procedure and the hospitals will be able to follow their tariff system. The top 5 highly utilised hospitals that are under the Negotiable discount type in the preferred provider network are Apollo Hospitals, Kokilaben Dhirubhai Ambani hospital, Deenanath Mangeshkar Hospital, Max super speciality hospital, Medanta medicity. The discount deductions or savings for the company from these top 5 hospitals, were also analysed to be non-existent similar to the case of Instapay. [22]

According to analysis of data, the top 10 highly utilized network hospitals in all of India between 2019 – 2021 were Apollo Hospitals, Apollo Hospitals Enterprises Ltd, Columbia Asia Hospitals, Deenanath Mangeshkar Hospital, Indraprastha Apollo Hospital, Jupiter Hospital, Kids Clinic India Pvt Ltd, Kokilaben Dhirubai Ambani Hospital, Max Super speciality Hospital and Medanta Medicity Hospital. The analysis clearly points out that these top 10 highly utilised network hospitals preferred Instapay and Negotiable discounts as their most preferred payment type.

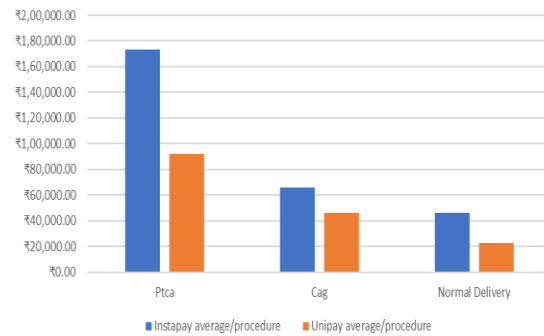
#### D. Non-Network Hospitals:

Most non-network hospitals are from the state of Maharashtra followed by the state of Andhra Pradesh, Gujarat, and Haryana. The total savings earned through discounts by the company from these hospitals is approximately ₹2.20 lakhs and is a meagre amount in comparison to the provider network type of hospitals.

The company obviously earns more from the network type of hospitals and prefer to empanel hospitals which satisfy the criteria set by the company in empanelment process.

The total savings earned by the company over a period of three years is analysed to be ₹11.10 crores out of which only ₹2.20 lakhs is contributed by the non-network hospitals whereas the rest is contributed by the provider network hospitals.

**E. Unipay vs Instapay:**



Procedure	Net Payable	No of procedures done	Average net payable per procedure
<b>Ptca</b>	₹ 2,15,06,765.08	124	₹ 1,73,441.65
<b>Cag</b>	₹ 1,40,91,180.19	214	₹ 65,846.64
<b>Normal Delivery</b>	₹ 1,31,73,085.05	286	₹ 46,059.74

**Instapay:**

Fig No. 8: Top 10 most utilized network hospital and procedures in the last two and a half years

**Unipay:**



This comparison between these two types of preferred types were made to analyse the better type of payment method which helped in growth of the company by reaping profits for the company. The Instapay type according to the data analysed showed earnings more than Unipay type both in numbers and in percentage.

Procedure	Net Payable	No of procedures done	Average net payable per procedure
<b>Ptca</b>	₹ 49,83,735.76	54	₹ 92,291.40
<b>Cag</b>	₹ 49,79,638.16	107	₹ 46,539
<b>Normal Delivery</b>	₹ 48,72,732.89	212	₹ 22,985

The Unipay type had the advantage of the tariff being set by the company and in-turn should have been more profitable, so this was considered a confounding finding in the data analysed and therefore called for a head-to-head comparison between the two types of payment types.



Fig No. 9: Graphical representation of the above table - Unipay Vs Instapay

An analysis was made by comparing the three most common procedures for which maximum claims were made by the customers. This brought out clarity to the confounded data which showed marginally better profits for the Instapay type of payment.

The procedures which were taken for comparison were PTCA (Percutaneous Transluminal Coronary Angioplasty), CAG (Coronary artery angiography) and normal delivery (OBGYN). The data showed that the average net payable per procedure was vastly less in case of Unipay type compared to Instapay type. For example, the average cost or tariff for PTCA under the Unipay scheme was calculated to be ₹ 92,291.40 whereas for the same procedure under the Instapay type of payment was ₹1,73,441.65 which was almost double the rate. This was found to be true in case of the other two procedures also and that lead to the inference that the company saves more through the Unipay type of payment by paying much less compared to Instapay type of payment.

The company was inferred to benefit from Unipay type of payment than any other type of payment and even though the data showed Instapay to be more profitable, it was found to be a confounding data and was proven wrong by this comparison.

## VII. LIMITATIONS

There may be some possible limitations in the study.

- It was a cross-sectional study and the study data received was from a stipulated period of two and a half years. So, the study results cannot be completely generalised.
- Ideally prior research provides good foundations for carryout the study. However, in this case, very few previous research studies were done on this study topic.
- The study data was a secondary data provided by the organisation and the raw data received had certain missing information which may or may not have had some impact on the study results.
- As this study involved working with the raw data and information provided by the organisation, there was limited access to data which posed a problem with gathering more information. The study had a drawback of the data not being verified with hospitals that were one of the main components in the study.
- There were time constraints as the results of the study had to be produced in a stipulated period, but the study was a comprehensive one and better study outcomes could have been got with more time.

However, despite these above-mentioned study limitations the study provides a comprehensive analysis of the data received and the results received seems to satisfy the expected outcomes which were established before the start of the study.

## VIII. CONCLUSION

The detailed analysis of the utilization trends of the Registered health insurance company's Preferred Provider Network provided with insights into how an insurance company works with the providers.

The data showed that the preferred provider network hospitals were the major providers of the company's savings and the major share of the profits seemed to come from the negotiable discounts type in terms of number and from the Instapay type in terms of percentage. However, the most profitable type of payment for the company is the Unipay.

The state of Maharashtra, where the company is based, was found to have maximum hospitals empanelled under the preferred provider network under the health insurance company and the state of Maharashtra turns out to be a major contributor in case of the claims made. The company settles most of their claims in the cashless form and less than 35% are settled as reimbursements.

The utilization trends of the provider network of the health insurance company points out that most of the hospitals empanelled as network hospitals preferred the negotiable type of payment as it was a more flexible scheme in comparison to the other two payment types and there were no fixed tariff plans set by the company and hence the hospitals are at a position to negotiate using the tariff rates set by them.

After detailed analysis of the data provided by the company regarding utilization trends of preferred provider network, Unipay type of payment was inferred to be the most profitable type compared to all the other types of payments. The utilization trends of the provider network of the health insurance company points out that most of the hospitals empanelled as network hospitals preferred the negotiable type of payment as it was a more flexible scheme in comparison to the other two payment types and there were no fixed tariff plans set by the company and hence the hospitals are at a position to negotiate using the tariff rates set by them.

After the analysis of the data provided by the company regarding utilization trends of preferred provider network, it is understood that in-order to improve the financials and growth of the company the type of payment that will be beneficial for the company would be the Unipay type of payment and the company should concentrate on increasing the number of hospitals to be empanelled under the Unipay type of payment scheme.

## IX. RECOMMENDATIONS

The data shows that highly utilized preferred type of payment for network hospitals is negotiable discounts the reason being that it is more flexible and its better from the hospital point of view. Whereas the most preferred from the company's point of view is Unipay. So, some of the recommendations is to convert negotiable discount category hospitals under preferred provider network to Unipay category. Hospitals prefer Instapay type of payment due to instant type of payment they receive whereas it is not very profitable for the company as some

Instapay hospitals give as low as 4% discounts for procedures costing more than Rs 1 lakh. In-order for scaling up growth of the company better control and conditions can be laid down with respect to instant payments to hospitals also.

Based on the analysis, the recommendations to scale up the opportunities of preferred provider network are:

- *Guaranteeing instant payment based on procedure:* A deal can be made with these hospitals, that instant payment shall be made, for a particular procedure (for e.g., obstetrics/orthopedics), provided they get into the category of Unipay
- *Guaranteeing instant payment based on price:* A deal can be made with these hospitals, that instant payment shall be made, up to a particular price point (for e.g., below Rs 15000), provided they get into the category of Unipay
- *Linking Comprehensive health checkup insurance plan to only Unipay hospitals:* Customers claiming for Comprehensive health check-up or linking Comprehensive health checkup insurance plan to only Unipay hospitals with respect to location of the customers.
- *Making a Deal:* If the net payable is above a specific amount (eg:1 lakh) for an Instapay hospital, a minimum discount of 15-20% must be negotiated for the payment to be done on instant basis. If not, regular period should be considered to process the payment to the hospital.
- *Empaneling Top Non network hospitals:* Top Non network hospitals, which meet the standards for the insurance company's empanelment, who are negotiating good discounts, can be approached, and asked about empanelment after considering necessary factors and can be brought into one of the preferred types.

By following some of or all these recommendations the company will be benefitted to have a good opportunity to grow both as a major market player and financially.

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