ASPI | Afarand Scholarly Publishing Institute; Turkey
ISSN: 2345-2897; Health Education and Health Promotion. 2023;11(3):425-434. 10.58209/hehp.11.3.425

Emergence of Health Insurance as an Alternative to Out-of-Pocket Expenses

ARTICLE INFO

Article Type
Analytic Review

Authors
Vootukuri K. [1]* *MBA*
Venkateswara K. [1] *PhD*

How to cite this article
Vootukuri K, Venkateswara K. Emergence of Health Insurance as an Alternative to Out-of-Pocket Expenses. Health Education and Health Promotion. 2023;11(3):-425-434.

[1] Department of MBA, Koneru Lakshmaiah Education Foundation, Vaddeswaram, India

Correspondence
Address: Flat No: 8106, Prestige High Fields, Gachibowli, Hyderabad, India. Post code: 500032
Phone: +91 8008866799
Fax: -
kiranmayi.koduri@gmail.com

Article History
Received: June 10, 2023
Accepted: July 26, 2023
ePublished: August 2, 2023

ABSTRACT

Introduction In recent decades, India has witnessed a significant transformation in its healthcare landscape, with an increasing emphasis on reducing the burden of out-of-pocket healthcare expenses. Out-of-pocket expenditure, traditionally the primary means of financing healthcare in the country, often leads to financial distress and inadequate access to quality medical services for millions of Indians. The new Indian National Health Policy is in place to strengthen India's healthcare system and provide universal access to good quality healthcare services to all. To attain this target, the Indian government started Ayushman Bharat Yojana, the world's biggest health program, in 2018, which might represent a major step towards achieving universal health coverage in India. Even though the Indian government is taking steps to enhance public health, much more must be done to provide universal coverage. Individual spending on health care in India has increased significantly over the years. Although health insurance is a good alternative funding mechanism and has grown significantly over the years, the Indian population's spending on health has not decreased.

Conclusion This paper examines health insurance's emergence and growing adoption as a viable alternative for out-of-pocket expenditure in India. It delves into the factors driving the rise of health insurance as a preferred financial tool for managing healthcare costs and explores the impact of this shift on the Indian healthcare system. As the country continues to tackle the financial burden of healthcare, policymakers and stakeholders must work collaboratively to ensure the efficient and equitable implementation of health insurance initiatives throughout the nation.

Keywords Health Expenditures; Health Insurance Premium; Claims Ratios

CITATION LINKS

[1] Emerging health insurance in India-an ... [2] Health insurance sector in India: An analysis ... [3] Evolution of the Indian health insurance ... [4] Report on healthcare access ... [5] Increasing out-of-pocket health care expenditure in ... [6] Economic burden, impoverishment, and coping ... [7] Growth of health insurance sector post liberalisation ... [8] Changing pattern of public expenditure on health ... [9] Can insurance reduce catastrophic out-of-pocket health ... [10] Why publicly-financed health insurance schemes are ... [11] Quantifying the burden of out-of-pocket health expenditure ... [12] Key indicators of social consumption in India ... [13] 2021-22 IRDAI, Annual Report ... [14] Impact of publicly financed health insurance schemes on healthcare ... [15] Impact of public-funded health insurances in India ... [16] Challenges for lower-middle-income countries in achieving ... [17] World insurance ... [18] An use case of smart cards in Rashtriya Swasthya ... [19] Comparisons of health insurance systems in ... [20] Health insurance in India: What do we know and why ... [21] Global, regional, and national incidence, prevalence ... [22] Out-of-pocket (OOP) financial risk protection: The role ... [23] Disease-specific out-of-pocket and catastrophic health expenditure on ... [24] Impact of healthcare expenditures on healthcare ... [25] How effective health insurance schemes are in tackling ... [26] Health Insurance for India's Missing ... [27] TCcs project: Improving penetration of health ... [28] Impact of out-of-pocket health care financing and health ... [29] Top 10 technology trends in health ... [30] Annual report ... [31] Public expenditure on health in ... [32] Re-inventing customer engagement in health ... [33] Annual report (2019 ... [34] Out of pocket expenditure on non-communicable ... [35] Reimagining healthcare in India through ... [36] Global insurance industry insights an in-depth ... [37] National health profile (NHP) of India-2019 ... [38] Extending health insurance to the poor in ... [39] Riding the growth wave ... [40] SGI Reflections -International Journal of Science, Technology ...

Introduction

The introduction of health insurance in the context of out-of-pocket expenses is a crucial topic as it can potentially transform the healthcare landscape in India. By reducing financial barriers, health insurance not only enhances the accessibility and affordability of healthcare but also promotes a shift towards preventive and early intervention measures, leading to better overall health outcomes [1]. Health insurance is a safety net for individuals' finances during hospitalization, providing payment for medical bills. It is a yearly renewable insurance contract between the policyholder and the insurance company. Health insurance policy is now a must-have for everyone, regardless of family wealth. The world is experiencing a variety of diseases due to the multiple reasons for the changing lifestyle of all age groups, disturbances caused by an unsterilized economy due to many reasons like inflation, globalization, and uncertain conditions in every mode of life [2]. Insurance provides a positive wave of hope in the insured person's life. Though insurance is a futuristic activity that exhausts current consumption of saving people, it will help people who have experienced unexpected life threats against sickness [3].

India is one of the world's fastest-expanding economies. India has reduced poverty from 45.3% in 1993 to 22.8% in 2018. This is due to its fast growth. As a result of the increased income per capita, the average Indian longevity increased gradually from 33.94% in 1950 to 69.41% in 2016. One of the key issues with rising average life expectancy is the provision of appropriate public health care in such a highly populated country. Only 28% is served by 60% of hospitals and 80% of doctors in urban areas [4], whereas 69% of the Indian population is served in rural regions. Compared to people living in metropolitan areas, medical care is more difficult for rural residents. Better health facilities nationwide, especially in rural areas, are necessary for an emerging economy.

Fast-paced living, excessive pollution, sedimentary living, and poor food are the primary causes of severe health disasters in India. Millions of Indians are forced into poverty due to life-threatening conditions since they must spend a significant portion of their income on medical emergencies. Morbidity and healthcare spending have increased as life expectancy and chronic diseases have increased [5]. Because of the severity of the disease, a large portion of the population spends their resources on outpatient appointments. In contrast, people spend their savings on inpatient care from various sources, including borrowing, property sales, and donations from friends. Individuals are unquestionably safeguarded from catastrophic health risks by government and private insurance programs that help them save money. For example, the Rajiv Arogya Scheme (RAS) in Andhra Pradesh resulted in a considerable reduction in out-of-pocket spending and borrowing for inpatient treatment for people below the poverty line in 2007 [6].

Rising health spending and a lack of universal health policies in India are leading the Indian population to seek alternatives such as insurance. This would reduce the frequency of large medical and government spending on health care [7]. Until 2000, insurance in India was a relatively untapped and small market. Insurance companies have evolved with various advances as a tool for managing people's financial needs after their commercialization. At this point, it is important to understand how health insurance evolved to support the future path of the segment [8].

Through an in-depth analysis of existing literature, healthcare expenditure data, and governmental policies, this study aims to shed light on the factors that have catalyzed the adoption of health insurance in India. It also seeks to provide insights into how health insurance can alleviate the burden of out-of-pocket expenses, reduce disparities in healthcare access, and contribute to a more resilient and sustainable healthcare system in the country.

Health insurance is one of the essential instruments for reducing out-of-pocket expenses for most of the Indian population. Due to the lack of national health insurance coverage in India, OOP spending is relatively high compared to other industrialized countries. According to World Bank statistics, individuals/households bear 50.6% of India's overall health cost as 'Out of Pocket Expenditure.' Huge healthcare spending may limit the consumption of other products and services, putting families at risk of falling into poverty [9].

Savings from income continue to be the most popular way for low-and middle-income people to balance OOP spending. Because of a lack of trust in public healthcare facilities, poor and middle-income people have been drawn to private healthcare facilities for a long time; as a result, OOP expenditure has increased from time to time [10].

Unlike inpatient treatment, outpatient care is funded by the household's savings and income. In general, a large majority of the public may spend on outpatient appointments according to their ability to pay; however, inpatient care requires patients to use emergency measures if they do not have enough savings/income owing to the severity of the sickness. The government, particularly policymakers, must pay close attention to interstate differences in OOP health expenditure and the accompanying poverty [11]. Diagnostic tests for medicine, associated fees, physiotherapy, personal medical equipment, blood, oxygen, and other items will not be paid under the programs [12]. As a result, despite a significant rise in health insurance premiums, which currently reach Rs.73051 crores [13], OOP health spending remains stable.

An increase in health insurance coverage may result in a rise in the use of medical services due to changes in insured' and hospitals' behavior. The only services and costs connected to inpatient care covered by public health insurance policies for the poor are hospitalization costs [14]. Even though many people have health insurance, since the out-of-pocket costs are not covered by health insurance policies, many still pay these costs directly for medications, diagnostic tests, and post-treatment care. Thus, insurance may increase out-of-pocket costs for inpatient and inpatient-related treatment for the poor [15]. The study indicated that OOP costs for inpatient care accounted for 95% of their annual consumption spending. Inpatient OOP costs have remained high for India's poor. According to the study, those who participate in the poor people's health insurance program are more likely to be hospitalized than those who do not.

India has made significant strides in health insurance in recent years. However, it remains a very underdeveloped and minor market compared to fast-developing nations such as China, Vietnam, and Sri Lanka [16]. Health insurers in India seek to expand the market by increasing the number of policies sold. Rather than government-owned companies, private insurers have played a bigger role in increasing market share. The development of separate health insurance firms and the deployment of new technology are altering the direction of Indian health insurers. Robotic Process Automation (RPA) and Artificial Intelligence (AI) are two emerging technologies that are assisting insurers in refining operational efficiencies along with improving consumer experience [17].

Furthermore, by automating services, these technologies assist businesses in controlling false claims [18]. Besides, insurance firms can collaborate with healthcare providers to offer cheaper wellness benefits and OP coverages to deliver much quicker development in the next years.

This article focuses on the expansion of the Indian Health insurance industry during the last two decades by providing information on the companies dealing with health policies, progression of health insurance premiums, and experienced claims ratios in India. Data on health insurance was obtained for this study from IRDAI Annual Reports from 2001 to 2022. From 2000 to 2018, data on Out-of-Pocket Healthcare Expenditure from International Financial Statistics were collected and compared to India's needs.

Out-of-Pocket Expenditure and Health Insurance in India

The country's political, economic, social, and demographic features determine the proportion of the money allotted to health care. The%age of public health care spending is not the choice of the country; rather, it depends on regulations and budgets allocated within the country [19]. In most cases, developed countries spend more on health than developing countries as a%age of GDP. Public health spending varies from less than 1% to more than 10% of GDP [8], depending upon the country's profile. Except for Pakistan, India's public expenditure on health is among the lowest among developed and Southeast Asian countries. The low-income countries of Sri Lanka, Bhutan, and Indonesia, spend more public funds on health than India. Because India's health budget is among the lowest in the world, the majority of healthcare costs are borne by the patient [20]. According to the World Bank, overall health spending in India in 2017 was 3.6% of GDP, compared to the global average of 10.02%. The%ages of GDP's total health spending vary little between 2009 and 2018. The highest was 3.75 in 2013-14, while the lowest was 3.2 in 2011 [21]. The disparity between out-of-pocket and public expenditure is enormous, as depicted in Table 1.

Table 1. India's health expense (GDP%age) [21]

Years	Public Health Spending	OOP Health Spending	Total Health Spending
2009-2010	1.11	2.37	3.48
2010-2011	1.08	2.21	3.29
2011-2012	1.11	2.16	3.27
2012-2013	1.10	2.25	3.35
2013-2014	1.01	2.76	3.77
2014-2015	0.99	2.65	3.64
2015-2016	1.03	2.59	3.62
2016-2017	1.18	2.50	3.68
2017-2018	1.29	2.33	3.62

Out-of-pocket spending is an important indication of financial security and specifies the private involvement stance required for health funding. For most Indian people, savings from income remain the foremost choice for dealing with Out-of-Pocket Expenditure on Health. Such high out-of-pocket expenditures each year force 7% of the population into poverty [22]. In India, the amount of OOP spending on health care is concerning. OOP payments in India averaged about 65% of overall healthcare costs from 2000 to 2018. Even though the OOP has fallen from 71.7% in 2000 to 62.7% in 2018, it remains higher than in many other nations [23].

Among the BRICS nations, China succeeded in decreasing OOP spending by establishing centralized and state-owned methods, pioneering various health insurance systems, and providing universal access to excellent health care to their whole population. As a result, China cut out-of-pocket spending from 60.1% in 2000 to 35.8% in 2018. Brazil has also reduced its unemployment rate from 36.6% in 2000 to 27.5% in 2018. Russia's figure rose from 30.2% in 2005 to 38.3% in 2018 [24].

The escalating cost of healthcare services and inadequate public healthcare infrastructure have exacerbated the situation, pushing millions of Indians into poverty due to catastrophic health expenses.

Recognizing the urgent need for a sustainable and equitable healthcare financing mechanism, health insurance has emerged as a viable alternative to mitigate the heavy reliance on out-of-pocket expenditure [25].

Health insurance is a powerful tool that can be used as an alternative financing method to reduce out-of-pocket costs. Offering compensation for medical expenditures protects an individual's funds in the case of sickness [26]. Health insurance is becoming a need rather than a choice due to rising medical costs and the growing burden of new diseases on the population. World Bank estimates that India's population will be 1.38 billion in 2021, roughly 36% of the population covered by health insurance coverage. Health insurance plans cover a total of 52.04 crore lives [13].

Non-life insurance firms, particularly independent health insurance companies specializing in health portfolios, sell most private health insurance plans. IRDAI has licensed 54 insurance companies to do health insurance business in India as of March 2023. Twenty-three life insurance firms are involved in the life insurance business, 30 non-life insurance companies are involved in various lines of general insurance business, and one reinsurance company. Five stand-alone health insurance businesses exist among the 30 non-life insurance firms, Star Health Insurance Company is the first ever firm licensed by IRDAI in India [13] (Table 2).

Table 2. Insurers in India that deal with health insurance products

Company type	Details	Products type
Life Insurance (23)	Public Sector-1 (LIC)	Offers in the form of Add-on benefits (Riders)
	Private Sector-22	Benefit based Plans
Non-life Insurance (30)	Public Sector-4	Indemnity based health plans
	Private Sector-21	Cash benefit plans for hospitals
	Stand-Alone Health Insurers-5	Plans for critical illness and plans for certain diseases
Reinsurance (12)	Public Sector-1 (GIC)	Travel and Personal Accident Plans
	Foreign Branches-11	Supports insurance companies for implementing Government sponsored Health Insurance schemes

Growth of Health Insurance Premium

The growth of health insurance in India from 2000 to the present has been remarkable and transformative. Over this period, several factors have contributed to the increasing adoption of health insurance, leading to significant changes in the country's healthcare landscape [27]. In the early 2000s, the Indian government recognized the importance of health insurance in improving healthcare access and financial protection for its citizens. Various policy reforms were introduced to promote health insurance coverage, such as establishing the Rashtriya Swasthya Bima Yojana (RSBY) in 2008, which aimed to provide health insurance to below-poverty-line families [28]. The entry of private insurance companies into the healthcare market significantly boosted health insurance offerings. These companies introduced various health insurance products catering to different population segments, including individual, family, and group health insurance plans. In recent years, initiatives to extend health insurance coverage to rural areas have gained momentum. Schemes like Ayushman Bharat, launched in 2018, aimed to provide health insurance to vulnerable populations in rural India, significantly expanding the reach of health insurance [20].

Health insurance premiums have experienced a gradual increase over time. Factors contributing to this trend include inflation in healthcare costs, advancements in medical technology, and increased demand for better healthcare services. Government policies and regulatory changes can also affect health insurance premiums. For instance, introducing new insurance regulations or mandates to cover specific treatments may influence premium rates. Adopting technology and digitalization in the insurance industry can improve operational efficiency, leading to more competitive premium rates [29].

After Insurance privatization in the year 2000, there was a noticeable growth in premiums for health insurance. The health insurance premiums increased significantly from Rs.761 crores in 2001 to Rs. 73,051.52 crores in 2022 because of increased competition among companies and aggressive actions by the Insurance Regulator. Health insurance is a booming market, with premium collections increasing by more than 17% per year for the previous three years. According to the IRDAI's latest annual report, the premium collection increased by 25.4% to Rs. 73,051.52 crores in 2021-22 from Rs. 58,238 crores in 2020-21 [30].

The General Insurance Corporation of India (GIC) established voluntary Mediclaim insurance in India in 1986. However, before 2002, the health insurance premium collection was poor due to insufficient awareness and product innovation. Premium growth has been remarkable since 2003, rising from 32% in 2003 to 59.7% in 2008, the highest level since privatization [31]. The rising popularity of health insurance, the introduction of new plans, and the improvement of current ones have all contributed to this development. In 2006, the Indian Insurance Regulatory and Development Authority (IRDAI) made history by changing legislation to allow for the establishment of a stand-alone health insurance business [3]. Consequently, Star Health and Allied Insurance became the first separate health insurance business. Star Health has carved out a position in the health insurance market since its establishment, followed by the rest of the independent insurers (Figure 1).

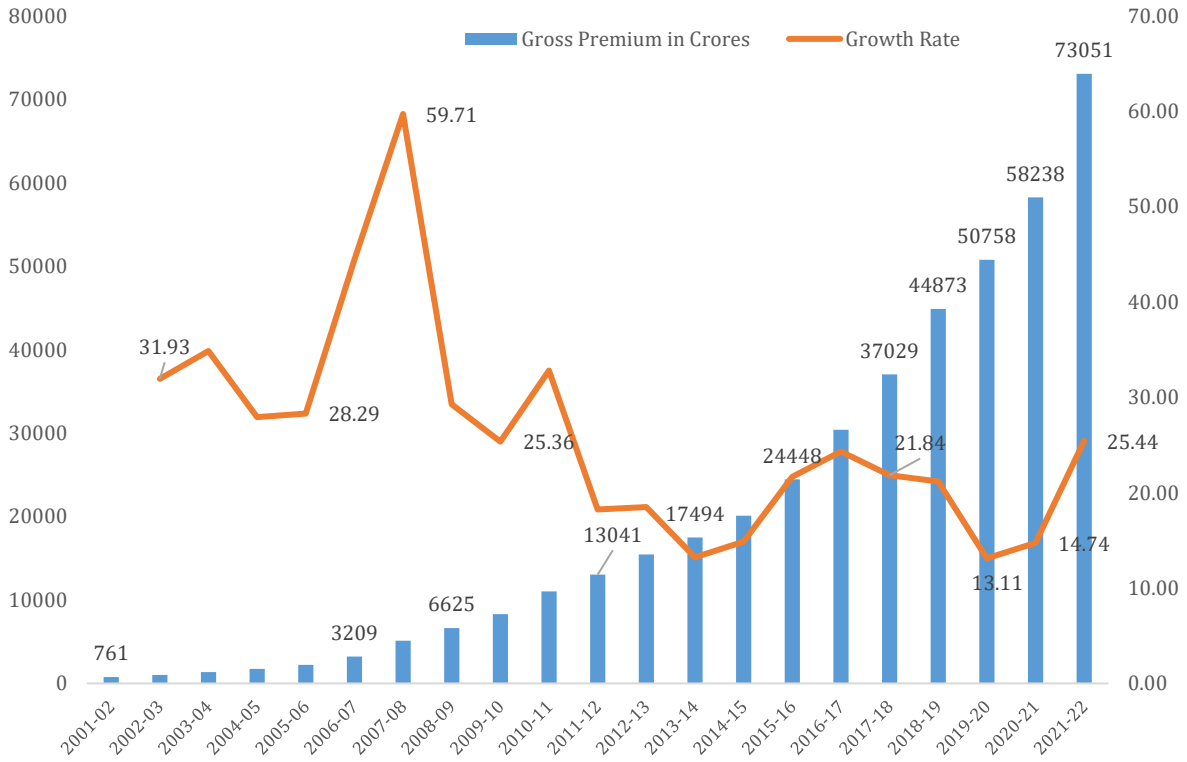

Figure 1. Health Insurance Premium and the growth rate over the years

Table 3. Comparison of public and private company health insurance premiums and claims ratios

Year	Gross Premium	Claims Paid	Claims Paid Ratio	Public Sector	Private Sector	Stand-alone
2009-10	8.30 lakhs	7.45 lakhs	89.75	119.85	92.22	86.25
2010-11	11.03 lakhs	10.79 lakhs	97.82	106.31	85.15	67.82
2011-12	13.04 lakhs	12.28 lakhs	94.17	100.28	77.80	60.33
2012-13	15.45 lakhs	14.52 lakhs	93.98	103.21	79.08	61.36
2013-14	17.49 lakhs	16.97 lakhs	97.02	106.19	87.62	61.49
2014-15	20.09 lakhs	18.22 lakhs	90.69	109.97	79.17	66.06
2015-16	24.44 lakhs	21.75 lakhs	88.99	115.45	74.59	62.18
2016-17	30.39 lakhs	27.54 lakhs	90.62	120.15	74.70	56.47
2017-18	37.02 lakhs	30.24 lakhs	81.69	109.86	71.32	59.58
2018-19	44.87 lakhs	34.98 lakhs	77.95	107.12	75.85	61.00
2019-20	50.75 lakhs	40.02 lakhs	78.85	102.91	72.55	64.13
2020-21	58.23 lakhs	40.71 lakhs	69.92	103.61	85.78	78.09
2021-22	73.05 lakhs	69.49 lakhs	95.14	126.71	105.11	81.18

In the 2010s, there were a lot of reforms characterized in the Indian Health Insurance sector, resulting in a steady increase in premiums from Rs.6625 crores in 2008-09 to Rs.20096 crores in 2014-15. It also assisted in the company's expansion, which deals with health insurance products. Health insurance providers introduced innovative products to cater to specific healthcare needs, such as critical illness insurance, maternity insurance, and disease-specific coverage. These customized offerings addressed the diverse requirements of policyholders, further fueling the growth of health insurance in the country. Many employers started offering health insurance as part of their employee benefits package. This trend gained traction over the years, leading to a substantial increase in the number of individuals covered under group health insurance plans provided by their employers [32]. Proactive regulations, healthy competition, and enhanced products helped strengthen the health insurance business during the period 2015-20, and as a result, the premium achieved a 50000-crore mark in 2020 [33]. Subsequently, COVID-19 turned Health insurance into a pull product instead of a push product, and the premium reached Rs.73000 crores.

Claims ratios

Over the years, there has been a general upward trend in health insurance claims due to rising healthcare costs, advancements in medical treatments, and an aging population. As medical expenses escalate, policyholders claim higher amounts to cover their healthcare needs [34]. With changing lifestyles and increased non-communicable diseases, health insurance claims have also shifted towards covering treatments for chronic conditions, preventive care, and specialized medical procedures

[35]. The COVID-19 pandemic significantly affected health insurance claims, leading to a surge in COVID-19 testing, hospitalization, and treatment claims. The pandemic highlighted the importance of health insurance in providing financial protection during public health crises [33] (Table 3).

The generated claims ratio is essential for assessing an insurance company's financial stability. The claims ratio, also known as the incurred claims ratio, is the ratio of the total claim value to the total premium received each year. A claims ratio below 100% indicates that the insurer paid out less in claims than the premium revenue collected. This suggests that the insurer operated profitably during the period. A claims ratio above 100% implies that the insurer paid out more in claims than the premium revenue collected. This indicates that the insurer experienced an underwriting loss during the period. A claims ratio close to 100% suggests that the insurer's claims and premium revenue are almost balanced, indicating a break-even scenario. A lower claims ratio signifies better financial health and efficient claims management. A higher claims ratio may indicate that the insurer is exposed to higher risks or that the premiums charged are inadequate to cover the claims incurred. Regulators monitor claims ratios to ensure that insurers maintain prudent financial practices and adequately reserve funds for claims payments [14]. Table 3 shows that the health business of the four public sector enterprises has been a loss-making portfolio for all the years. The fact that they handle riskier profiles and underwrite the bulk of big group business, which includes corporate workers and their dependent family members, is one of the main causes for increasing claim percentages in the public sector. The public-sector companies' incurred claims ratio decreased from 119.85 to 106.31 in 2010-11 before falling to 100.28 in 2011-12. When a disproportionate number of high-risk individuals (People more likely to file claims) opt for health insurance coverage, sometimes, healthier individuals may choose not to purchase health insurance, leaving the insurer with fewer policyholders with higher expected medical expenses. This resulted in higher claims payouts and financial losses for the public sector health insurer. Public sector insurers may often be mandated to offer health insurance coverage for specific government schemes or marginalized sections of the population at subsidized rates. Providing coverage at subsidized premiums can lead to losses for the insurer if the claims exceed the premium collected.

Private insurance companies strive to keep their claim ratios around 100. Private company claims paid ratios dropped from 92.22 in 2009-10 to 77.80 in 2011-12. From 2014 to 2016, all companies' overall claims paid ratios dropped from 97 to 89%. This is because, throughout that time, premium collection significantly increased from Rs. 17,494 crores to Rs. 24,448 crores. After 2013, the lines for premium growth and claims paid were divided, and the discrepancy increased, demonstrating a significant surplus in the hands of insurance companies (Figure 2). In 2022, there is not much difference between the amounts of premiums collected and claims paid, and all firms' ratios of claims incurred to claims paid will have increased due to COVID-related claims.

The greatest incurred claim ratio, 126.71%, was experienced by public sector businesses in 2021-22 due to COVID-19, compared to all other years. All private insurance companies are performing decent and stand-alone firms are exceptionally doing well in maintaining incurred claims ratios below 100 for all the years. Private insurance companies have steadily increased their market share in the health insurance segment. They have successfully attracted many customers due to their diverse product offerings, customer-centric approach, and efficient claims management. Private insurers often have extensive tie-ups with a wide network of hospitals and healthcare providers. These tie-ups enable cashless claim settlements and a seamless experience for policyholders when availing of medical treatments (Figure 3).

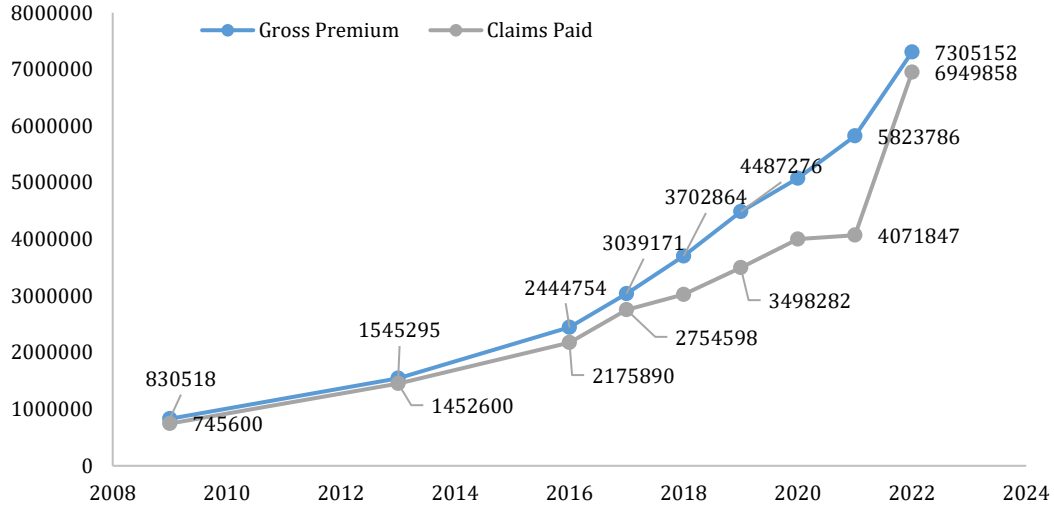

Figure 2. Premium collected *vs.* Claims Paid (in lakhs)

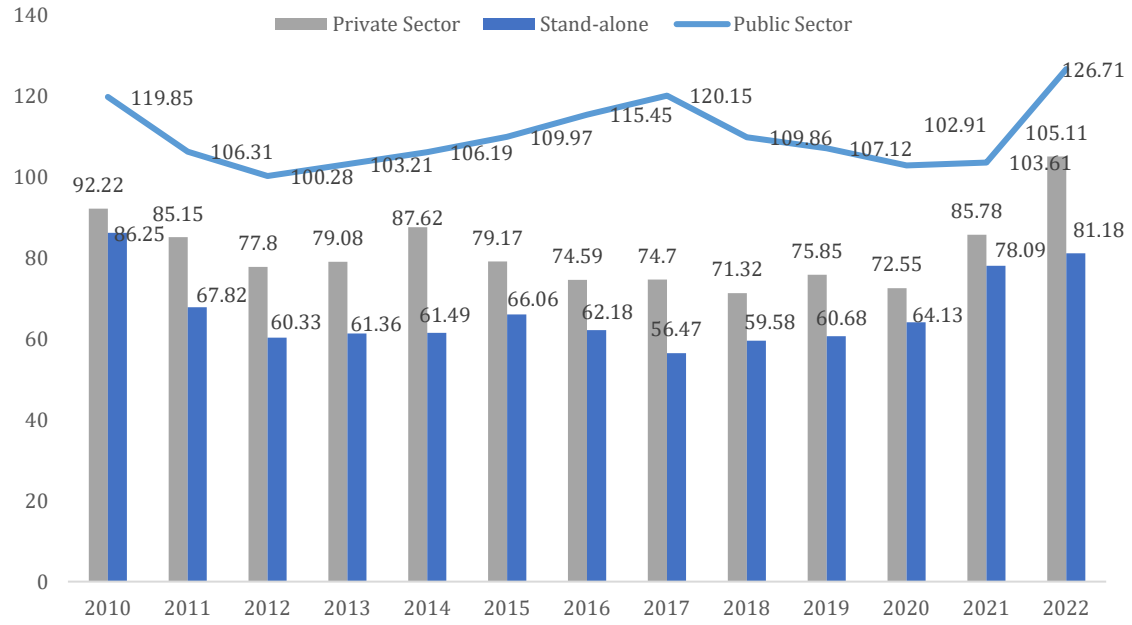

Figure 3. Incurred claims ratios of public *vs.* private insurance companies

Private insurance firms and freestanding health insurance companies stand out in controlling claims ratios and generating positive development in the health insurance sector. Private insurance firms could keep their incurred claim ratios below 100%, lowering them from 92% in 2009-10 to 72.5% in 2019-20. Standalone health insurers are specialized insurance companies exclusively offering health insurance products and services. These insurers focus solely on health-related coverages, which allows them to concentrate their expertise and resources on providing comprehensive and specialized health insurance solutions. Over the last decade, the claims ratios of stand-alone health insurers have been at an all-time low compared to public and private enterprises. Standalone health insurers have a deep understanding of the health insurance market and the unique needs of policyholders. Their specialized approach allows them to design customized health insurance products that cater specifically to the diverse healthcare requirements of individuals and families. Due to their singular focus on health insurance, standalone insurers are well-positioned to prioritize customer needs and provide dedicated support for health-related queries and claims.

Policy implications

The COVID-19 pandemic accelerated the adoption of telemedicine and digital health services. Health insurers increasingly integrated telemedicine into their policies, allowing policyholders to access virtual consultations, health monitoring, and online health platforms for enhanced convenience and care. Health insurers began focusing on wellness programs and preventive care initiatives to promote healthier lifestyles among their policyholders; by offering incentives for healthy behaviors, such as regular health check-ups or fitness activities, insurers aimed to reduce long-term healthcare costs.

Even though healthcare insurance is a growing industry, the uninsured should be included in the coverage group for further growth. Even though various initiatives have taken place at various levels to improve awareness and coverage, the prevalence of health insurance in developing countries remains in the single digits.

In India, most insurance firms' health policies only cover inpatient costs. In India, public and private insurance firms and government programs provide about 35% of total insurance coverage. In rural regions, only 12.9% of total health spending is covered, and health insurance programs do not cover a substantial amount of health expenditure, i.e., 85.9%. The situation is similar in cities, with 80.9% of expenditure not covered. Government-sponsored schemes cover 8.8%, individual health insurance reimburses 3.8%, and employer-paid insurance schemes cover 3.3% [37].

IRDAI's new proactive rules have prompted health insurers to focus on wellness and health coach programs to improve the segment. In the future years, digital interventions will transform the health insurance industry [29]. Automation in numerous aspects of health insurance will increase corporate profitability and improve customer experience. Smart cards in health insurance systems allowed multi-verification and assisted the business in preventing fraud. The government of India has established a new ambitious health insurance plan called Ayushman Bharath, which incorporates both wellness and technological initiatives [38]. Ayushman Bharath includes two components: Health and

Wellness Centers (HWCs), which provide comprehensive primary health care, and the Pradhan Mantri Jan Aarogya Yojana (PM-JAY), which provides poor and vulnerable families with health insurance coverage of Rs.5 lakhs a year. Because this program provides a substantial amount of health coverage of Rs.5 lakhs, compared to India's average medical spend per hospitalization of Rs.20,135, there would be a significant possibility for fraud in the form of exaggerated medical bills. However, using the newest techniques, such as Big Data, Artificial Intelligence, and Machine Learning to develop online submission and automated procedures can assist in decreasing fraud [17].

Wellness ideas that enhance individual health via good nutrition, exercise, stress management, and sickness prevention are increasingly becoming more popular among insurance companies. Fitness challenges, smoking/drinking cessation, relaxation treatments, and other programs to improve an individual's general health may all be included. Physicians, insurers, and employers recommend these programs to enjoy the long-term advantages of remaining active and healthy [39]. Many health insurers reward their members by lowering rates if they adhere to wellness guidelines. Insurers are also pushing their customers to use fitness bands and smartwatches. Insurers may collect useful data from these wearables to enhance their risk choices. Sensor-based gadgets will assist insurers in better underwriting risks based on real-time data. It will also give a wealth of data for researchers to assess future disease threats and aid in illness prevention.

Insurers started offering more personalized health insurance plans tailored to individual needs. This included specialized coverage for specific medical conditions, critical illness insurance, maternity benefits, and family-oriented plans. With growing awareness of mental health issues, health insurance providers expanded their coverage to include mental health treatments and therapies, addressing the overall well-being of their policyholders. Some insurers explored usage-based insurance models, where premiums were determined based on individual health behavior and lifestyle choices, utilizing data from wearable devices or health apps. As the population aged, there was an increased focus on health insurance products catering specifically to senior citizens, addressing their unique healthcare needs, and offering extended coverage.

As health insurance is emerging as an alternative to out-of-pocket expenses in India and experiencing increased growth, it has several implications for individuals, healthcare providers, and the overall healthcare system. Health insurance provides individuals with financial protection against unexpected medical expenses. With rising healthcare costs, having insurance can prevent individuals from facing significant financial burdens due to medical treatments, hospitalization, or surgeries. Health insurance coverage makes individuals more likely to seek timely medical attention without worrying about the immediate financial impact. Health insurance helps reduce the reliance on out-of-pocket payments for medical services. The growth of health insurance can lead to expanding the healthcare industry, including insurance companies, hospitals, clinics, and pharmaceutical companies. This growth can create job opportunities and stimulate economic activity in the healthcare sector. With health insurance becoming more prevalent, it becomes essential for individuals to understand their coverage, benefits, and claim procedures. Improved health literacy can empower people to make informed decisions about their healthcare needs and utilize their insurance coverage effectively. The increased growth of health insurance may necessitate stronger government regulations to protect consumers' interests, ensure fair practices, and maintain the stability of the insurance market. The increased growth of health insurance in India can bring significant benefits in terms of financial protection and improved access to healthcare.

As India continues to address the challenges of providing affordable and accessible healthcare to its vast population, the role of health insurance in mitigating out-of-pocket expenditure becomes increasingly significant. By understanding the dynamics of this emerging healthcare financing mechanism, policymakers and stakeholders can formulate effective strategies to harness its potential and ensure that health insurance plays a transformative role in advancing the nation's healthcare agenda [40].

Conclusion

The expansion of health insurance after privatization is prominent. Premium growth of health insurers from Rs.761 crores in 2001 to Rs.73051 crores in 2022, demonstrating a 95-fold increase in two decades. For independent and private health insurers, the claim paid-out proportions have shown improvement and stayed under 100%. Companies in the public sector are continuously expanding while balancing their claim proportions. In general, premium collection and claim proportions have significantly improved in recent years. Proactive regulations aided the sector's strength, particularly after 2013, and played a significant role in its expansion. The increasing health care expenses, the ambiguity of infections and treatments, greater public alertness, and the National Health Policy's aim of providing high-quality health care, among other factors, demonstrate the vast potential for extending health insurance in the forthcoming years. As a long-term strategy, health insurers should form lasting relationships with individuals to aid processes and goods in the long run. Robotization of polychrome procedures is a precursor to reducing fraud in the

partition and demonstrating good growth in the approaching spaces. The need for sap generalization has only recently been introduced in India, and there is still a long way to go. The notion of combining sap with the primary health insurance policy should be supported by technology. Health insurers are progressing to the next level, encouraging individuals to be healthy and live happy lives.

Acknowledgments: We would like to thank the IRDA, the Indian Insurance Regulator for the data support of the study.

Ethical Permission: This section can be removed as the data analysis is done basing on the secondary data provided by IRDAI.

Conflict of Interests: The Authors declare no conflict of interests in this study.

Authors' Contribution: Vootukuri K (First Author), Article Writer/Main Researcher (75%); Venkateswara K (Second Author), Methodologist/Discussion Writer (25%)

Funding/Support: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

References

1- Anita J. Emerging health insurance in India-an overview. 10th Glob Conf Actuar. 2010:81-97.
2- Dutta MM. Health insurance sector in India: An analysis of its performance. Vilakshan-XIMB J Manag. 2020;17(1-2):97-109.
3- Bhatia M, Mittal S, Bansal A. Evolution of the Indian health insurance sector: A review. J Manag Res Anal. 2020;5(2):107-12.
4- KPMG, OPPI. Report on healthcare access initiatives. Amstelveen: KPMG; 2016.
5- Jayakrishnan T, Jeeja MC, Kuniyil V, Paramasivam S. Increasing out-of-pocket health care expenditure in india-due to supply or demand?. Pharmacoeconomics0 2015;1(1).
6- Sangar S, Dutt V, Thakur R. Economic burden, impoverishment, and coping mechanisms associated with out-of-pocket health expenditure in India: A disaggregated analysis at the state level. Int J Health Plann Manage. 2019;34(1):e301-13.
7- Shah AY, Patel RK. Growth of health insurance sector post liberalisation in India. Int Conf Multi Res Pract. 2014;IV(I).
8- Hooda SK. Changing pattern of public expenditure on health in India: Issues and challenges. New Delhi: ISID; 2013.
9- Joglekar R. Can insurance reduce catastrophic out-of-pocket health expenditure? Rama Joglekar can insurance reduce catastrophic out-of-pocket health. Res Artic. 2008:1-29.
10- Selvaraj S, Karan AK. Why publicly-financed health insurance schemes are ineffective in providing financial risk protection. Econ Polit Wkly. 2012;47(11):60-8.
11- Thakur R, Sangar S, Ram B,. Faizan M. Quantifying the burden of out-of-pocket health expenditure in India. Public Health. 2018;159:4-7.
12- Government of India. Key indicators of social consumption in India: Health. Natl Sample Surv Organ. 2019.
13- 2021-22 IRDAI, Annual Report. Mumbai: IRDAI J; 2022 Dec 22-[Cited 2022 Dec 22]. Available from: https://www.pvh.com/-/media/Files/pvh/investor-relations/PVH-Annual-Report-2020.pdf.
14- Prinja S, Chauhan AS, Karan A, Kaur G, Kumar R. Impact of publicly financed health insurance schemes on healthcare utilization and financial risk protection in India : A systematic review. PloS One. 2017;12(2):e0170996.
15- Reshmi B, Unnikrishnan B, Rajwar E, Parsekar SS, Vijayamma R, Venkatesh BT. Impact of public-funded health insurances in India on health care utilisation and financial risk protection: A systematic review. BMJ. 2021;11(12):e050077.
16- Sharma MG, Popli H. Challenges for lower-middle-income countries in achieving universal healthcare: An Indian perspective. Cureus. 2023;15(1):e33751.
17- Capgemini. World insurance report [Internet]. Paris: Capgemini Efma; 2019 May 14- [cited 2019, May 14]. Available from: https://www.capgemini.com/news/press-releases/world-insurance-report-2019/.
18- Maitra S. An use case of smart cards in Rashtriya Swasthya Bima Yojana. Ijetsr. 2017;7.
19- Ellis RP, Chen T, Luscombe CE. Comparisons of health insurance systems in developed countries. Amsterdam: Elsevier Press; 2014.
20- Ahlin T, Nichter M, Pillai G. Health insurance in India: What do we know and why is ethnographic research needed. Anthropol Med. 2016;23(1):102-24.
21- Metrics GH. Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990-2016 : A systematic analysis for the global burden of disease study 2016. Lancet. 2017;390(10100):1211-59.
22- Madheswaran S. Out-of-pocket (OOP) financial risk protection: The role of health insurance. Karnataka: Institute for Social and Economic Change; 2014.
23- Kastor A, Mohanty SK. Disease-specific out-of-pocket and catastrophic health expenditure on hospitalization in India: Do Indian households face distress health financing?. PLoS One. 2018;13(5):e0196106.
24- Balkhi B, Alshayban D, Alotaibi NM. Impact of healthcare expenditures on healthcare outcomes in the middle east and north Africa (MENA) region: A cross-country comparison, 1995-2015. Front Public Heal. 2021;8:624962.
25- Mahapatro SR, Singh P, Singh Y. How effective health insurance schemes are in tackling economic burden of healthcare in India. Clin Epidemiol Glob Heal. 2018;6(2):75-82.
26- Kumar A, Sarwal R. Health Insurance for India's Missing Middle. New Delhi: NITI Aayog; 2021
27- Pandey M, Prabhu G. Ccs project: Improving penetration of health insurance in India [Internet]. New York: United Nations Development Programme; [cited 2016, April 4]. Available from: http://hdr.undp.org/en/composite/HDI
28- Shet N, Qadiri GJ, Kalal BS, Saldanha S. Impact of out-of-pocket health care financing and health insurance utilization among the population: A systematic review. Int J Heal Sci Res. 2018;8(2):249-57.
29- Yenkataraman SSK, Kothamasu R. Top 10 technology trends in health insurance : 2018 what you need to know. Paris: Capgemni; 2018.
30- 2020-21 IRDAI, Annual Report. Annual report 2020-21. Hyderabad: Insurance Regulatory and Development Authority of India; 2020.

31- Mohapatra S, Mohapatra S. Public expenditure on health in India. ICFAI Univ Public Financ. 2008;VI(4):39-61.
32- Margan SK. Re-inventing customer engagement in health insurance. IRDAI J. 2017;XV:14-20.
33- 2019-20 IRDAI, Annual Report. Annual report (2019-20). Rwanda: Rwanda Transport Development Agency; 2019.
34- Das M, Das S. Out of pocket expenditure on non-communicable diseases among households: Evidence from a state of India. Int J Public Heal Epidemiol Res. 2020;6(1):138-46.
35- NITI Aayog. Reimagining healthcare in India through blended finance. New Delhi: NITI Aayog; 2022.
36- Insurance MG. Global insurance industry insights an in-depth perspective. Baku: McKinsey & Company; 2017.
37- Central Bureau of Health Intelligence. National health profile (NHP) of India-2019: Ministry of health and family welfare. 2019;(14).
38- Karan A, Yip W, Mahal A. Extending health insurance to the poor in India: An impact evaluation of Rashtriya Swasthya Bima Yojana on out of pocket spending for healthcare. Soc Sci Med. 2017;181:83-92.
39- PricewaterhouseCoopers International Limited (PwCIL). FICCI. Riding the growth wave. Dataquest. 2004;22(14):17-30.
40- Singh BJ, Khanduja D. SGI Reflections -International Journal of Science, Technology and Management. Int J Sci Technol Manag. 2010;2(2):106-115.