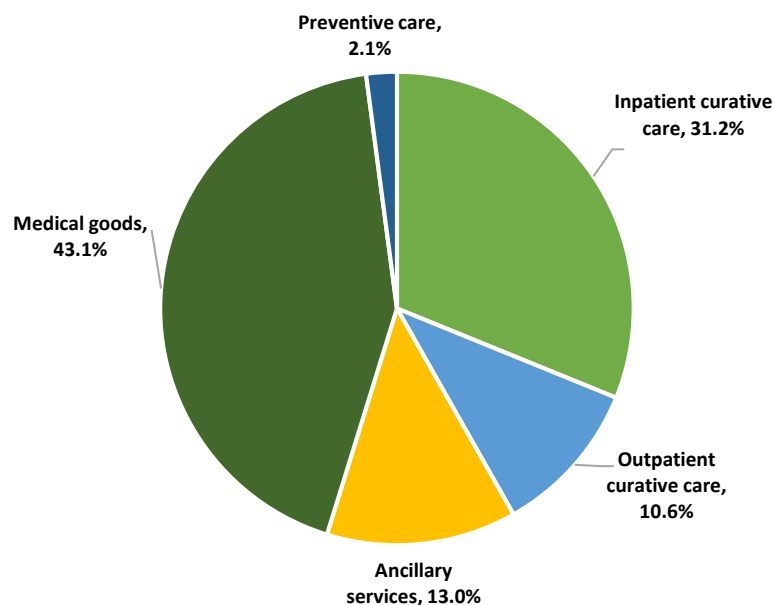


other medical appliances and goods constituted 43.1% of the total out of pocket expenditure incurred by households (see Figure 2).

Figure 2: Household Out-of-Pocket Expenditure by Healthcare Functions



Source: National Health Accounts Estimates for India – 2016-17, Ministry of Health and Family Welfare, Government of India

On both quality of products and services, Malhotra et al. (2018) used consumer complaints to assess how satisfied the health insurance consumers are in India. Their analysis shows that the consumer complaints rate⁴ in India is higher than other jurisdictions such as Canada, Australia, United Kingdom and California where a common law legal system similar to India is in place. They further found that most disputed claims were nevertheless provided for in the contract and the insurance company therefore did not have legitimate grounds to reject those claims. Other types of complaints by health insurance consumers included absence of crucial information from policy documents such as network hospitals covered by the insurance policy, use of technical terms which are defined vaguely, and differences between the advertised product and the actual product.

2.3. Efficiency

‘Efficiency’ as a performance measure has been used here to assess the cost at which health insurance products are at present offered by insurers. In their analysis, Malhotra et al. (2018) have used claims ratio to measure the efficiency of the health insurance market. Claims ratio is defined as the percentage of the total premium collected that is paid out as claims by an insurer. The difference between the two indicates the magnitude of operational costs and profits of the insurers. A claims ratio closer to 100% is considered to indicate an efficient insurer. A similar analysis with the most recent data indicates that private insurers, specifically stand-alone health insurers continue to record low claims ratio which have not gone beyond 63% in the period

⁴ Measured as a ratio of total number of complaints received in a year per million persons covered by health insurance. Complaints made to independent adjudicators, unresolved at the insurance company level were used by Malhotra et al. (2018) to measure this.

between 2014-15 and 2018-19 (see Table 5). This is suggestive of the insurers charging high prices from customers raising customer protection concerns. On the other hand, claims ratio of government insurers continue to be above 100% indicative of either cross-subsidization from surpluses generated from other businesses or utilization of capital to pay out claims (Malhotra et al., 2018).

Table 5: Net Incurred Claims Ratio of Health Insurance Companies

Category of Insurer	2014-15	2015-16	2016-17	2017-18	2018-19
Public Sector General Insurers	112%	117%	122%	108%	105%
Private Sector General Insurers	84%	81%	84%	80%	84%
Stand-alone Health Insurers	63%	58%	58%	62%	63%
Industry	101%	102%	106%	94%	91%

Source: IRDAI Annual Report 2018-19

Efficiency can also be interpreted to indicate whether the right products are being offered by health insurers, i.e., products which can maximize the health financing benefits derived by customers in satisfaction of their healthcare needs (Roberts et al., 2004). In this context, the earlier discussion on quality of products in Section 2.2 becomes equally relevant.

3. Scope for Regulatory Reforms

A review of the state of commercial health insurance in Section 2 indicated areas of concern across all three performance indicators of access, quality and efficiency, raising concerns around whether health insurers are helping customers achieve the twin objectives of appropriate healthcare and financial risk protection. In this section, we take a step further and examine the possible reasons for weak performance by commercial health insurers and identify areas where regulatory actions might lead to better outcomes for customers.

3.1. Competition

During the year 2018-19, 26 general insurers and 7 stand-alone health insurers received premium income from health insurance business. Between 2016-17 and 2018-19, while premium income from group business grew in the range of 20-27%, individual premium income grew steadily at 21.5% during the first two years of the same period and then its growth dropped to 14.6% in 2018-19 (see Table 6).

Table 6: Trends in Health Insurance Premium by Class of Business (In Billion Rupees)

Type of Business	2014-15	2015-16	2016-17	2017-18	2018-19
Government Business	24.25	24.74	30.90	39.81	56.72
Growth Rate, YOY		2.0%	24.9%	28.8%	42.5%
Group Business	88.98	116.21	147.18	177.57	216.76
Growth Rate, YOY		30.6%	26.7%	20.6%	22.1%
Individual Business	87.72	103.53	125.84	152.91	175.25
Growth Rate, YOY		18.0%	21.5%	21.5%	14.6%
Total	200.95	244.48	303.92	370.29	448.73
Growth Rate, YOY		21.7%	24.3%	21.8%	21.2%

Source: IRDAI Annual Report 2018-19

With 115 million lives covered by commercial voluntary health insurance during 2018-19 (see Section 2.1.1) and expenditure on this insurance forming only 5.1% of the total health expenditure in India (GoI 2019), we examine the following questions:

- i. How many more lives can be covered under commercial voluntary health insurance?
- ii. What can the regulator do to enable this expansion in terms of coverage?

Based on the insights we have gained from Section 2.1, if we were to assume that commercial health insurers would potentially target top 40% of the urban population who can afford their premiums, calculations made using data from National Sample Survey (NSS) 75th round on Household Social Consumption (Health) tells us that there are still around 98 Million people who can be brought under the ambit of commercial health insurance pool (see Annexure, though we stress that this is a first-pass exercise to get to a rough estimate). This would be in addition to the present 115 Million lives already covered by the insurers. Put together, this would sum up to 215 million lives or 15.7% of the total population.

If we were to consider Brazil's experience in providing health insurance coverage to its population, 15.7% of the total population is potentially a reasonable target for commercial voluntary health insurance coverage. Running parallel to its publicly financed Unified Health System, Brazil's private health insurance covered 22.8% of its population in 2017 (Massuda, Hone, Leles, Castro, & Atun, 2018). However, this could be a potentially harder target to achieve too. Any group/ employer covered insurance would in most cases result from an increase in formal employment opportunities. Unless this is realized, the additional coverage would have to reach the non-poor individuals in the informal sector. This would require addressing the market failures where insurers in seeking to cover individuals rather than groups of people can indulge in risk selection as a response to possible adverse selection (see Section 3.3).

In addition to addressing the market failures, the regulator can also consider increasing the competition in the health insurance market to drive better outcomes for customers and aid expansion in coverage. In order to do this, IRDAI can consider substantially lowering the capital requirements to allow entry of more insurers in the health insurance market (Ashraf & Mor, 2020). At present, the minimum capital required by general insurance companies, including standalone health insurers, is Rs. 100 crores or approx. \$ 13.7 million.⁵ This is significantly high compared to, for example, the state of New York in the United States, where the minimum paid in capital and surplus required to start an accident and health insurance business is \$ 0.2 million.⁶ In reducing the entry capital requirements, the regulator can consider examining the option of adopting a risk-based capital and solvency regime. Essential to moving towards this model would be the availability of reliable medical statistics that can be used by the regulator to set risk-based capital provisioning standards. Availability of such data can also help insurers (both incumbents and new entrants) to better understand the customer segment they intend to serve (K.T. & Sakthi, 2011) and help achieve greater coverage of hitherto unserved and underserved markets. Here, IRDAI can play an enabling role by sharing the aggregate claims data of all insurance companies

⁵ See Section 6, 'Requirement as to Capital' under *The Insurance Act, 1938*, accessible at: https://indiacode.nic.in/handle/123456789/2304?view_type=browse&sam_handle=123456789/1362; Exchange rate as on October 5, 2020 at INR 73.09/ USD has been used. <https://www.xe.com/currencyconverter/convert/?Amount=1%2C000%2C000%2C000&From=INR&To=USD>

⁶ See 'Statutory Minimum Capital and Surplus Requirements', accessible at: https://www.naic.org/documents/industry_ucaa_chart_min_capital_surplus.pdf

it has access to and aid insurers in underwriting and pricing their risks better (Public Health Foundation of India, 2011).

Related to competition is the issue of effective competition at play currently in the health insurance market. As seen in Section 2.3, public sector general insurers have been recording claims ratio of more than 100% indicating cross-subsidization from other insurance segments. This has been seen as an indication of public sector general insurers penetrating the market with below-cost pricing on the backing of large financing reserves, causing potential distortions in competition (NITI Aayog, 2019).

3.2. Benefits Package

As discussed in Section 2.2, the benefits packages offered by health insurers in India are currently shallow, covering mostly hospitalization expenses. Most of these packages are in the nature of pre-payment products which do not provide true risk pooling to customers. They either have an upper limit on the maximum coverage offered, beyond which the customer would have to pay for healthcare expenses out of pocket, or they offer coverage which specifically exclude certain illnesses/ health risks. On the other hand, true risk pooling would provide risk coverage irrespective of the individual's contribution to the pool or their actuarial risk (NITI Aayog, 2019). Additionally, as observed in Section 2.2, these products also exclude a number of other expenses.

Figure 4 under Section 2.2 provides a good indication of such expenses by healthcare functions. This can be further examined to determine the type of coverage/ health expenditure support customers would require in order to avoid high out of pocket expenditure. A good question to ask here would be what proportions of these expenses fall under high-cost-low-frequency and low-cost-high frequency categories of expenditure. This can further help determine whether it would be commercially viable for insurance companies to offer cover through their insurance products. Provision of private health insurance can drive up demand for healthcare services (Mahal 2002). This could especially be the case where insurance seeks to provide coverage for out-patient, drugs and wellness (preventive) care, which are incurred by customers on a frequent basis. While high utilization rates can cause concerns for insurers on commercial viability, it has also been argued that providing benefits that cover these expenses can help reduce claims on avoidable hospitalization expenditure (K.T. & Sakthi, 2011).

Additionally, the purchase of insurance in India makes customers believe that they have insurable-events insurance coverage, when in fact, as discussed till now, they provide only pre-payment coverage. Introduction of a standard (basic) mandatory benefit as the basis for all health insurance coverage in India, including commercial voluntary health insurance, has been proposed as one way to address this. Such a benefits package would cover essential and insurable events and has also been seen as a path towards development of a commercial health insurance market that is sustainable in the long-term (NITI Aayog, 2019).

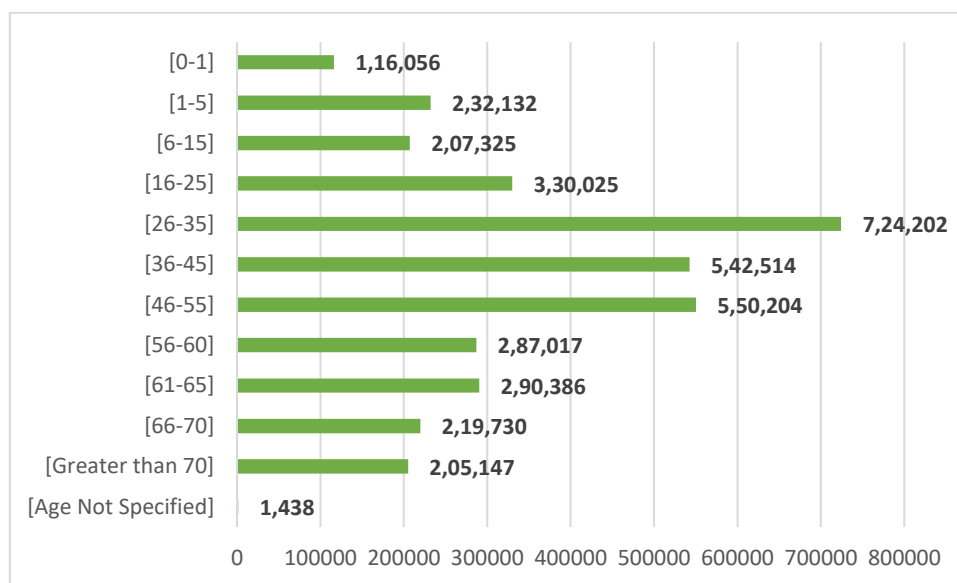
3.3. Problem of Risk Selection

Information asymmetry is a problem common to insurance markets where individuals are likely to have more information about their health status and future needs than insurance providers. This poses the problem of adverse selection where individuals who anticipate higher healthcare costs in the near future are more likely to buy insurance (Mahal, 2002; Sen et al., 2018). As a result, individuals expecting significant health expenditures in the near future will figure disproportionately in a given risk pool. In response to this, profit-oriented insurance companies adopt risk-selection procedures to weed out such 'bad risks'. Insurers incur high administrative

costs to carry out these procedures which are then passed on to the customers seeking health insurance in the form of loading charges (Mahal, 2002). Hence, in effect, through the process of risk selection, those who are seen as posing 'bad risk' such as older people, who are generally highly susceptible to health risks, or those who cannot afford the premiums charged by the insurers, are left out of risk pooling. A more obvious form of risk selection is where health insurers do not offer coverage for known pre-existing health conditions. As discussed in Section 2.2, this is pre-dominantly the case with health insurance products in India.

An analysis of claims recorded during 2017-18 by IIBI shows a possible indication of the problem of risk selection by insurers in India. Age band [26-35] formed the highest (19.5%) proportion of claims recorded during 2017-18, followed by age bands [36-45] and [46-55], which had similar proportions at 14.6% and 14.8% of the total claims respectively.

Figure 3: Number of Claims by Age-band during 2017-18*



*Excluding Claim Records where Claim Paid Amount is less than INR 1,000 and greater than INR 20 lakh; Break down of the claims by class of business – government and non-government business is not available.

Source: Health Insurance Fact Book 2017-18, Insurance Information Bureau of

India

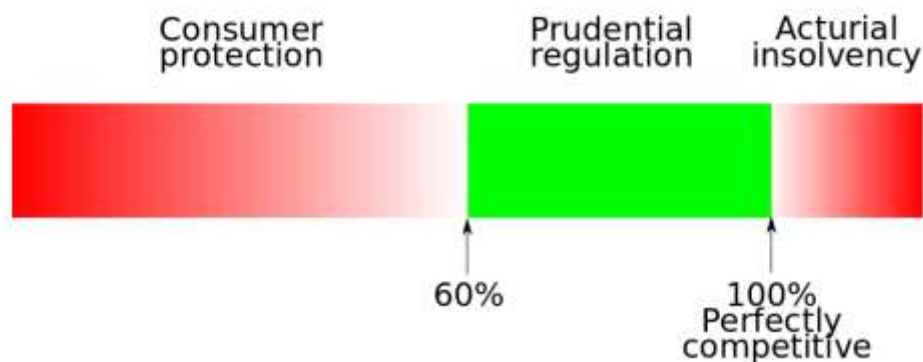
Regulation of exclusions and pre-existing conditions, thus increasingly reducing the space for insurers to cherry pick in the market, has been seen as one way to address the problem of risk selection to an extent (NITI Aayog, 2019). However, the adverse selection problem is likely to still exist, and high-risk individuals might still be left out of insurance coverage. Hence, an important point that emerges from this and Section 3.2 is that health insurance provided by commercial insurance companies by itself cannot provide complete risk protection/ health financing support. They tend to either provide narrow coverage or leave out individuals with high risks. Public subsidies to cover uninsured expenses/ high risk individuals might become necessary. The latter would take the form of high-risk pools. In Brazil for example, although the private sector is envisaged to act in a complementary fashion to the public sector in healthcare, it is partly subsidized by the government through tax breaks for privately insured individuals. These resources go towards subsidizing procedures which are not covered by private insurance plans or those with low levels of re-imbursment of patient costs (Massuda et al., 2018).

3.4. Cost/ Efficiency Concerns

As discussed under section 2.3, efficiency as indicated by claims ratio is a point of concern. Insurance regulators use the claims ratio range as an indicator of the quality of insurers in the industry (see Figure 5) (Malhotra et al., 2018). Mapping the observed claims ratio levels of insurers in India between 2014-15 and 2018-19 against the indicators used by insurance regulators points to the results we already discussed (see Table 5, also see below).

- i. Claims ratio of stand-alone insurers raise customer protection concerns indicating overcharging from their customers. In certain jurisdictions, like some states in the United States, claims ratio falling below a pre-defined lower threshold would lead to insurers having to return some part of the premium to the customers. In India, there are no such regulations mandating minimum claims ratio (Malhotra et al., 2018). This is a question that IRDAI might wish to consider as a mechanism to protect customers from high premium charges.
- ii. Claims ratio of public sector general insurers and claims ratio of group insurance business and government sponsored insurance schemes on a product level also raise concern as discussed in Section 3.1.

Figure 4: Regulatory Concerns Associated with Claims Ratio



Source: Malhotra et al., 2018

While claims payouts form one portion of the expenses, there are other key expenses which are incurred by health insurance companies in conducting their business. These include commission expenses, fees to Third Party Administrators (TPAs) and other operating expenses. While a large portion of the premium has been found to be used to pay commissions to intermediaries selling health insurance, health insurance companies in India have been observed to have an overall high administration costs which can lead to an increase in premiums charged to customers (Malhotra et al., 2018; NITI Aayog, 2019).

Health insurance companies handle claims settlement process in two different ways. One is through the use of claims management and re-imbursment services offered by TPAs and the other is through insurer's own in-house claims processing department. During 2018-19, 72% of the claims were settled through TPAs and as on 31st March 2019, there were 25 TPAs registered with IRDAI (IRDAI, 2019). While these TPAs are expected to help ease the process of claims management and increase customer convenience, there have been concerns raised about

artificial claims control and the lack of incentives for TPAs to consider customer's interests in carrying out their business. Controlling/ eliminating TPA cost and moving claims processing completely in-house has been argued as one way of bringing down the premiums charged to customers (Rajivlochan, 2015).

Apart from the above costs, differential use of Goods and Service Tax (GST) on health service provision (not subject to GST) and health insurance products covering the same services (subject to GST) has been viewed as creating an additional load on the premiums charged by insurers which can potentially act as a disincentive for customers intending to buy health insurance products (NITI Aayog, 2019).

3.5. Customer Experiences with Health Insurance

In India, use of insurance products as a financial instrument to protect against uncertain life events is still finding its place. Lack of awareness of health insurance, familiarity with health insurance, and the perceived need for such coverage on the part of the population have been identified as some of the demand-side problems acting as barriers to purchase of health insurance products (Sen et al., 2018). However, experiences of customers with the health insurance industry have led to the harboring of mistrust, which also has a key role to play in insurance enrolment, expectations, and use (Ahlin, Nichter, & Pillai, 2016).

Misunderstanding of what benefits (treatment, limits, coverage) one is entitled to under a health insurance contract, when and where it can be used, can lead to a mismatch between customers' expectations and what is actually delivered through the contract. While these can be confusing for a customer to understand, lack of provision of crucial information by insurance agents/ intermediaries on their part (who work for premium based commissions) can lead to customer dissatisfaction and unpleasant experiences. Such misunderstandings can also have an impact on health seeking behaviour, where the insured seek far more expensive care than they can afford without realizing that the insurance contract offers a limited coverage (Ahlin et al., 2016). These are in addition to the issues which were discussed under Section 2.2 on quality of service.

Claims processing is another area of concern where the function of health insurance as a financial risk protection mechanism comes into picture. Experiences of customers in having their claims filed and reimbursed plays a key role in how they perceive insurance. However, Malhotra et al. (2018) found that customers often complain about rejection of legitimate claims by insurance companies. In addition to this, such experiences of denial of claim have also been covered by media, most recently, during the current pandemic.⁷

As discussed in Section 2.2, in most disputes, Malhotra et al. (2018) found that the insurance companies did not have legitimate grounds to reject the claims. They traced these failures in the insurance system to broadly:

- i. Gaps in regulations - Regulations are not clear on the information that insurance companies must disclose to the customers and the manner in which they must be disclosed, and there is lack of clarity on the procedure for settling claims and grievance redressal.
- ii. Poor enforcement of regulations – Lack of consequences for rejection of valid claims.
- iii. Design of insurance ombudsman – Problems of independence and poor capacity.

⁷ See <https://www.indiaspend.com/covid-patients-claims-denied-as-insurers-private-hospitals-battle-over-bills/>

Tightening regulations which ensures enhanced customer protection can help improve the experience of existing participants in the commercial health insurance pool.

Apart from the rejection of legitimate claims, another aspect which might lead to better claims experience for customers is the time taken for processing and settlement. As discussed earlier, while TPAs are meant to improve the claims experience of customers, there is an observed gap in the time taken by insurers to process claims through TPAs and through in-house settlement. Including all forms of claims settlement (cashless, reimbursement, and benefit based), settlement through TPAs was found to have a much larger share of claims in the 1 to 3 months bucket compared to settlement through an in-house department. This is another area of concern and might be another argument for bringing claims processing in-house.

Table 7: Ageing of Claims Paid by Insurers during 2018-19, % of total claims settled

Claims Paid Within	Through TPAs		In-house	
	No. of Claims	Amount	No. of Claims	Amount
< 1 Month	74.1%	63.5%	93.1%	82.5%
1 to 3 Months	19.4%	26.2%	4.5%	12.0%
3 to 6 Months	5.5%	8.3%	2.0%	2.2%
6 to 12 Months	0.8%	2.0%	0.4%	3.0%
1 to 2 Years	0.2%	0.0%	0.0%	0.2%
More than 2 years	0.0%	0.0%	0.0%	0.2%

Source: IRDAI Annual Report 2018-19

4. Managed Care Model

From the discussions covered in Sections 2 and 3, it is clear to a large extent that the Indian commercial insurance market is delivering sub-optimal outcomes to its customers. Improved regulatory oversight and enforcement of regulations in areas identified in Sections 2 and 3 can help expand coverage of commercial voluntary insurance, improve benefits package offered through health insurance products, and improve affordability. However, being pre-dominantly an indemnity-based insurance model, the problem of information asymmetry could prevent for-profit private health insurers from supporting the health sector in realising healthcare goals for its population.

Increased presence/ participation of private health insurance is generally seen to have a negative impact on aggregate cost of healthcare, quality of healthcare, and create inequity in terms of distribution of healthcare spending (Mahal, 2002). The 'Managed Care' model in the private sector, where the organization pooling risks and resources acts as both an insurer and provider, has been viewed as one way to manage/ mitigate these negative effects arising from increased provision of healthcare through private insurance. Here, the healthcare provider can launch their own 'Managed Care' plans or as in the case of United States, a private insurer can enter into arrangements with providers and provide exclusive healthcare service to its customer through its network of providers. Here, we briefly look at the issue of cost and quality of healthcare associated with indemnity-based models.

- i. Cost of healthcare – In an indemnity-based insurance model, pricing interventions by insurance companies can create incentives/ disincentives for specific type of healthcare procedures (Rajivlochan, 2015). Driven by the need to maximize individual gains, the

problem of information asymmetry and moral hazard can lead to supplier induced demand on the providers end and an increased use of healthcare facilities on the customer's end. The former can take the form of provision of more than necessary healthcare. Put together, these forces can lead to increased demand for healthcare services and healthcare personnel and push the cost of healthcare higher.

- ii. Quality of healthcare – Unlike other markets, in healthcare, uncertainty of outcomes of healthcare procedures and difficulty faced by customers in identifying effective doctors and medical facilities in the absence of appropriate information can have negative implications on the quality of healthcare generally available. Indemnity based insurance does not necessarily guarantee provision of healthcare through quality personnel and institutions (Mahal, 2002).

Two key features of the Managed Care model are envisaged to help control the issues of cost and quality as outlined above.

- i. Monitoring/ managing utilisation of healthcare by putting in place a referral system that emphasizes preventive care rather than expensive inpatient care, along with guidelines for hospital stays.
- ii. Controlling for quality of healthcare offered by empanelling only those healthcare personnel/ institutions which meet certain quality criteria (Mahal, 2002).

In India, given the presence of commercial health insurers and the potential role they can play in providing coverage to a significant section of the population, it might be useful for us to consider the following questions.

- i. Is the Managed Care model an option that India can consider as a mechanism to drive desired health outcomes for its population covered by commercial voluntary health insurance?
- ii. What are the regulatory hurdles that would need to be addressed to enable the adoption of Managed Care in India?

5. Role of IRDAI in Controlling the Healthcare Sector

As discussed in Section 1, healthcare financing forms only one component of the healthcare sector. The other important component is formed by healthcare providers who, on their part, also determine the pricing and the quality of care provided to the customers. Where financing for healthcare flows through the private health insurance sector who come under IRDAI's regulatory ambit, it might be useful to consider the role IRDAI can play in controlling the outcomes of healthcare providers. One of the issues which has been flagged as a concern is the lack of reliable medical statistics that can be used by insurance companies to better project illnesses and the costs of treatment (K.T. & Sakthi, 2011). IRDAI has access to claims data from insurance companies providing services through both government sponsored and voluntary insurance schemes. Sharing this data with insurers can help them underwrite risks in an informed manner and price products better. In addition to this, IRDAI can also push insurers to work with providers to put in place guidelines for clinical protocols. This can help standardize care and also help streamline prices and practice variations across different providers (Public Health Foundation of India, 2011). Given that government sponsored insurance schemes have shifted towards financing health expenditure through private health insurance companies, there is more space for IRDAI to drive these changes in the healthcare sector.

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Annexure

As discussed in Section 3.1, if we were to assume that commercial health insurers would potentially target top 40% of the urban population who can afford their premiums, National Sample Survey (NSS) 75th round on Household Social Consumption (Health) conducted between July 2017-18 tells us that the richest 20% (5th quintile) and the next 20% (4th quintile) of the urban population had around 67% and 79.6% of the population not covered by any form of health expenditure support (see Figure A1 and A2). As per the survey estimates, each quintile of urban population would consist of 67.2 million people. Applying the uninsured percentages to 67.2 million people in both 5th and 4th quintiles respectively and taking their sum would give us an estimate of 98.5 million people who can be potentially covered by commercial health insurance pool (See Table A1).

Table A1: Potential for Commercial Health Insurance Coverage

Urban Quintile	Population Size (in Million Persons)	% of Uninsured	Potential for Commercial Health Insurance Coverage (in Million Persons)
4 th Quintile	67.2	79.6%	53.5
5 th Quintile	67.2	67.0%	45.0
	134.4		98.5

Source: Authors' own calculations

Figure A1: Health Insurance Coverage by Household Expenditure Quintile*

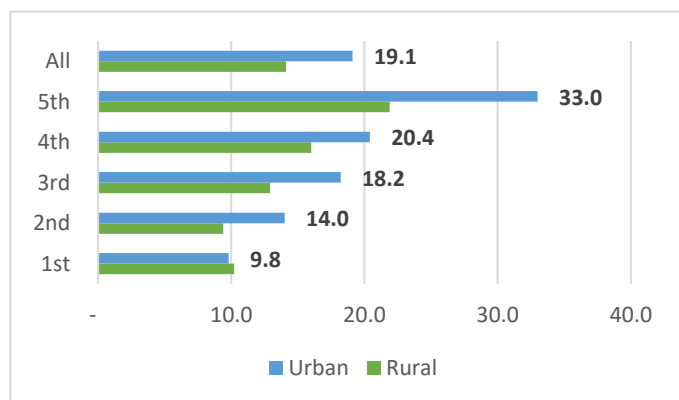
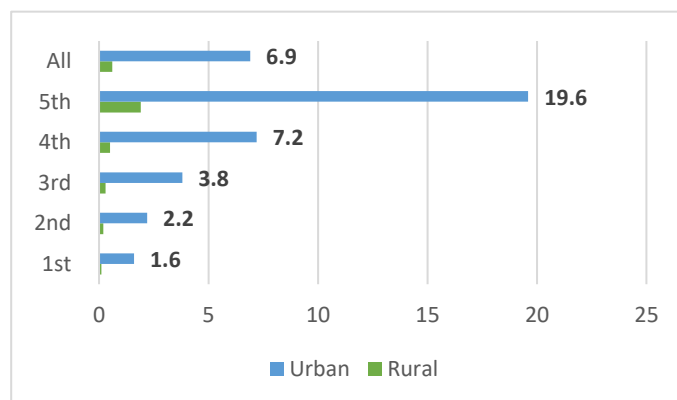


Figure A2: Non-Government Health Insurance Coverage by Household Expenditure Quintile*



*1st quintile indicates poorest 20% of the population, 2nd quintile the next 20% and similarly 5th quintile indicates the richest 20% of the population⁸

Source for Figures 3 and 4: Key Indicators of Social Consumption in India: Health, NSS 75th Round, November 2019

⁸ NSS 75th Round has used monthly consumer expenditure as a measure of living. Using this, estimates have been generated separately for 5 different equal-sized classes of population at different class of household expenditure. As per the survey estimates, each quintile of rural and urban sector consists of 160.8 and 67.2 million persons respectively.

See <http://www.mospi.gov.in/sites/default/files/NSS75250H/KI Health 75th Final.pdf>