



Health Insurance for India's Missing Middle





NITI Aayog

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October 2021

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Publishing Agency: NITI Aayog

Year of Publication: 2021

Book, English

ISBN : 978-81-949510-2-5

DOI: DOI: 10.31219/osf.io/s2x8r

Suggested Citation: Kumar Anurag, and Sarwal Rakesh. 2021. "Health Insurance for India's Missing Middle"

डॉ. विनोद कुमार पॉल
सदस्य
Dr. Vinod K. Paul
MEMBER



भारत सरकार
नीति आयोग, संसद मार्ग
नई दिल्ली-110 001
Government of India
NATIONAL INSTITUTION FOR TRANSFORMING INDIA
NITI Aayog, Parliament Street
New Delhi-110 001
Tele. : 23096809 Fax : 23096810
E-mail : vinodk.paul@gov.in

June 4, 2021

Foreword

India has made large strides towards Universal Health Coverage (UHC) with the launch of *Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)*. It is the largest fully Government subsidized scheme in the world, covering nearly 40% of India's population at the bottom of the pyramid. Nearly 70% of India's population is now estimated to be protected by some health insurance coverage including State Government schemes, social insurance schemes, and private insurance.

Despite this progress, 30% of the population – over 40 crore individuals – still lack any form of financial protection for health. Adverse health events can lead to financial hardships, and even push them into poverty. This segment is termed as the 'missing middle' because they are not poor enough to be covered by Government subsidized insurance but not rich enough to buy private insurance. The missing middle is characterized by informal employment with unstable incomes, and lack of social security benefits.

The missing middle has the financial capacity to pay for health insurance cover. However, the current insurance products are targeted towards high-income groups. A well-designed, appropriately priced, voluntary, and contributory insurance product catering to this segment will accelerate India's progress towards UHC while expanding the market for private insurance. The product needs to be built on principles of standardization, and simplicity. The *Aarogya Sanjeevani* policy is a first step in this direction. However, it does not include any out-patient care which poses large a large financial burden.

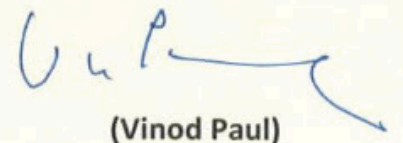
Significant challenges will need to be overcome to increase the penetration of health insurance. There is low awareness about health insurance. Further, identifying the missing middle population is challenging, and makes distribution costly. Finally, a large enrolment base or risk-pool is required to keep costs low and avoid adverse or preferred selection associated with many insurance schemes.

The Government and the private sector will need to come together in this endeavor. Private sector ingenuity and efficiency is required to reach the missing middle and offer compelling products. The Government has an important role to play in increasing consumer awareness and confidence, modifying regulation for a standardized product and consumer protection, and potentially offering its platforms to improve operational efficiency.

This report delves deeper into the characteristics of India's missing middle population, outlines the broad contours of a voluntary and contributory product, articulates the challenges to covering this group, and outline the potential role of the Government. It aims to spur a discussion and ongoing dialogue between policymakers and the private sector on designing solutions to increase health insurance coverage for India's missing middle.



एक कदम स्वच्छता की ओर


(Vinod Paul)

अमिताभ कांत
Amitabh Kant
मुख्य कार्यकारी अधिकारी
Chief Executive Officer



भारत सरकार
नीति आयोग, संसद मार्ग,
नई दिल्ली-110 001
Government of India
NATIONAL INSTITUTION FOR TRANSFORMING INDIA
NITI Aayog, Parliament Street,
New Delhi-110 001

Tel. : 23096576, 23096574 Fax : 23096575
E-mail : ceo-niti@gov.in, amitabh.kant@nic.in

Message

India must focus on strengthening its health systems. One important aspect of a strong health system is financial protection against health shocks. In recent years, this has been a focus area through the *Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana* (PMJAY). It entitles the bottom 50 crores of our population to avail fully Government subsidized health insurance, which can be used to seek free care for secondary and tertiary care.

However, a substantial portion of our population – at least 40 crores – lacks any financial protection for health. They have the ability to pay nominal insurance premiums but lack awareness of health insurance, or do not have access to suitably priced products. The fast-growing private health insurance industry can be a part of the solution. They can serve a larger customer base, diversifying their risk-pool, while providing financial protection against adverse health events at affordable premiums.

International experience shows there are several challenges to this approach. Addressing adverse selection requires a large and diversified enrolment base to ensure effective risk-pooling. The Government has an important role to play in facilitating the adoption of health insurance. It can help increase the awareness about health insurance, which is currently very low in India. The increasing awareness should be accompanied by generating a greater trust and confidence in the available health insurance products through a stronger regulatory mechanisms. Larger volumes will ensure that a comprehensive health insurance product with minimum exclusions and an out-patient cover, can be offered at an affordable premium to the approximately 40 crores people currently outside any insurance coverage.

The goal of increased financial protection for health through insurance does not rest on commercial health insurers alone. Existing Government purchasing agencies including the National Health Authority (NHA), and the Employers State Insurance Corporation (ESIC) can also offer contributory health insurance by leveraging their existing capacities and networks.

This report is an effort to re-invigorate the dialogue on increasing financial protection for health and the broader goal of Universal Health Coverage. It outlines the current landscape, existing gaps, and articulates broad recommendations and pathways to increase health insurance coverage. I hope the report serves as a starting point for discussions on, and leads ultimately towards achieving universal health coverage.

(Amitabh Kant)



एक कदम स्वच्छता की ओर

Acknowledgement



We are very grateful to the following for their invaluable contributions to this report.

1. Dr K Madan Gopal, Senior Consultant, NITI Aayog
2. Dr Nishant Jain, GIZ

We also thank the working group members, and others who have been associated with this report for their insights and support.

Working group members

1. Ms Meena Kalara, Chief Manager, Oriental Insurance company ltd.
2. Dr Viniti Rana, Assistant Manager, Oriental Insurance company ltd
3. Mr Mayank Mishra, Head Govt Business, Bajaj Allianz insurance company ltd.
4. Ms Renuka Kanvinde, Vice President, HDFCERGO Insurance company ltd
5. Mr J Sengupta, DGM, National insurance company Ltd
6. Mr Nikhil Apte, Chief Product Officer, Royal Sundaram Insurance company ltd.
7. Mr Chandrakant Mishra, Religare Health insurance company ltd.
8. Mr Angad Arun Karande, Program Coordinator, GIZ

Others

1. Shri Alok Kumar, Former Adviser (Health) NITI Aayog
2. Col (Dr) K Venkatnarayana, OSD NITI Aayog.
3. Dr S Rajesh, Former Director (Health) NITI Aayog
4. Mr R Shrinadh, Former RA NITI Aayog
5. Mr Sudesh Kumar, VP IFFCO Tokio
6. Mr Sumit Gupta, AVP Govt and Rural Business ICICI Lombard Ltd
7. Mr CS Attal, Chief Manger NIICL
8. Mr Angrup Sonam, DGM UIICL
9. Mr Traun Taneja, SVP Max Bhupa
10. Mr PC Tripathy, Sr VP Star Health
11. Mr Gourhari Jena, Reliance
12. Mr KU Bhaskar, AVP Chola
13. Mr Narendra Bhatia, VP Cigna
14. Dr Renuka Kanvinde, VP HDFC Ergo
15. Mr Sajal Kumar Singh, Sr VP FGIL
16. Mr Joydeep Sengupta NICL
17. Mr Vivek Dhruga Area Manager Reliance GIL
18. Mr Saket Pandit, Sr Regional Manger BhartiAxa
19. Ms Geetika Kaushal, Sr Manager TATA AIG
20. Mr Gaurav Tripathi, Joint VP Aditya Birla
21. Dr Ashwani Aggarwal, Associate Director PwC India
22. Dr. Shalabh Singhal, Associate Director PwC India
23. Ms. Kanika Gupta, Intern, NITI Aayog

Abbreviations



AB-PMJAY	Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana
BSF	Border Security Forces
CGHS	Central Government Health Scheme
CHE	Current Health Expenditure
CSMBS	Civil Servant Medical Benefit Scheme
ESIC	Employee State Insurance Corporation
ESIS	Employee State Insurance Scheme
GoI	Government of India
ICU	Intensive Care Unit
IEC	Information, Education, and Communication
IHDS	India Human Development Survey
IPD	In-Patient Department
IRDAI	Insurance Regulatory Development Authority of India
ITBP	Indo Tibetan Border Police

MoLE	Ministry of Labour and Employment
NLEM	National List of Essential Medicines
NFSA	National Food Security Act
NIPFP	National Institute for Public Finance and Policy
NRCMS	New Rural Cooperative Medical Scheme
NSSO	National Sample Survey Organization
OOPE	Out-of-Pocket Expenditure
OPD	Out-Patient Department
PLFS	Periodic Labour Force Survey
PM-KISAN	Pradhan Mantri Kisan Samman Nidhi
PVHI	Private Voluntary Health Insurance
RSBY	Rashtriya Swasthya Bima Yojana
SECC	Socio-Economic and Caste Census
SHG	Self-Help Group
SSS	Social Security Scheme
TPA	Third Party Administrator
UCS	Universal Coverage Scheme
UEMBI	Urban Employment-Based Medical Insurance
UHC	Universal Health Coverage
URBMI	Urban Resident Basic Medical Insurance
USBMI	Uniform Social Basic Medical Insurance
UT	Union Territory

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1

Executive Summary



HEALTH INSURANCE / ASSURANCE IN INDIA: NEED AND LANDSCAPE

Expansion of health insurance / assurance coverage is a necessary step, and a pathway in India's effort to achieve Universal Health Coverage (UHC). Low Government expenditure on health has constrained the capacity and quality of healthcare services in the public sector. It diverts majority of individuals – about two-thirds – to seek treatment in the costlier private sector. However, low financial protection leads to high out-of-pocket expenditure (OOPE). India's population is vulnerable to catastrophic spending, and impoverishment from expensive trips to hospitals and other health facilities (Figure 2). The catastrophic effect of healthcare spending is not limited to the poor – it impacts all segments of the population (Figure 3). Pre-payment through health insurance emerges as an important tool for risk-pooling and safeguarding against catastrophic (and often impoverishing) expenditure from health shocks. Finally, pre-paid pooled funds can also improve the efficiency of healthcare provision.

At least 30% of the population, or 40 crore individuals – called the missing middle in this report – are devoid of any financial protection for health (Table 1) (Figure 4). The *Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana* (AB-PMJAY) launched in September 2018, and State Government extension schemes, provide comprehensive hospitalization cover to the bottom 50% of the population – around 70 crore individuals. Around 20% of the population – 25 crore individuals – are covered through social health insurance, and private voluntary health insurance. The remaining 30% of the population is devoid of health insurance; the

actual uncovered population is higher due to existing coverage gaps in PMJAY and overlap between schemes. This uncovered population is termed as the missing middle. The missing middle is not a monolith – it contains multiple groups across all expenditure quintiles. The missing middle is spread across all expenditure quintiles, in both urban and rural areas, though they are concentrated in the top two quintiles of rural areas, and top three quintiles of urban areas. The missing middle predominantly constitutes the self-employed (agriculture and non-agriculture) informal sector in rural areas, and a broad array of occupations – informal, semi-formal, and formal – in urban areas (Figure 6, 7).

DESIGNING A LOW-COST COMPREHENSIVE HEALTH INSURANCE PRODUCT FOR THE MISSING MIDDLE

In the absence of a low-cost health insurance product, the missing middle remains uncovered despite the ability to pay nominal premiums. A comprehensive product designed for this segment – improving upon the existing Arogya Sanjeevani plan and offering out-patient cover – can expand health insurance coverage. Most health insurance schemes and products in the Indian market are not designed for the missing middle. Private voluntary health insurance is designed for high-income groups – it costs at least two to three times the affordable level for the missing middle. Affordable contributory products such as ESIC, and Government subsidized insurance including PMJAY are closed products. They are not available to the general population due to the risk of adverse selection. A modified, standardized product which builds on the *Aarogya Sanjeevani* hospitalization insurance product – launched by IRDAI in April 2020 – can be appealing to the missing middle. *Arogya Sanjeevani* has laid the foundation for a standardized health insurance product; it offers a basic benefits package which is common across insurers. However, it has limited uptake due to high premiums, and a two-to-four-year delay in covering several diseases / treatments. The modified product should firstly, have lower delays (and cover all diseases / treatments at the earliest) to increase its attractiveness. Second, it should offer out-patient benefits to demonstrate greater value to customers and help in delivering better outcomes. An indicative product is outlined in Table 3 for hospitalization insurance, and Table 4 for out-patient products. Finally, the proposed product must be offered at a third to half the cost of *Arogya Sanjeevani* – Rs. 12,000 for a family of four (Figure 8). Pricing plays an important role in the uptake of voluntary contributory health insurance. Most segments of the missing middle can afford to pay Rs. 4,000 to Rs. 6,000 per family per year for hospitalization insurance – the price indicated through industry consultations – and Rs. 5,000 for covering out-patient benefits through a subscription model (Table 5).

RECOMMENDATIONS AND PATHWAYS TO INCREASING HEALTH INSURANCE COVERAGE

1. **The success of a private voluntary contributory health insurance product requires the creation of a large and diversified risk pool.** There are multiple challenges which need to be solved to do so. First, low consumer awareness of the benefits of health insurance (and insurance more generally), and of health insurance products, limit its uptake. Second, the high cost or difficulty of identification, and outreach to customers is the primary hurdle on the supply-side to expanding private voluntary

insurance coverage. Third, there is a risk of adverse selection and cream-skimming as a response – as with all insurance programs – in the absence of large and diversified enrolment base. Finally, the cost of health insurance i.e., the premium needs to come down, in line with the affordability of the missing middle. The creation of a large and diversified risk pool requires a focus on group enrolment, and reduction in distributional and operational costs of insurers to bring the premiums close to the actuarially determined prices.

2. **The Government can play several different roles – which facilitates and complements the expansion of the private voluntary market – to increase the uptake of health insurance and address some of the outlined challenges.** First, and perhaps most importantly, the Government should build consumer awareness of health insurance through IEC campaigns. It should also improve consumer trust and confidence in health insurance through stronger regulatory mechanisms. Second, it can provide Government data and infrastructure as a public good to reduce operational and distribution costs of insurers. For example, it can share Government data (after taking consent) which aids identification and outreach to customers. It can also offer PMJAY's IT platform and network to reduce operational costs. Finally, and most directly, the Government can partially finance or provide health insurance. It can expand PMJAY coverage to the poorest segments of the missing middle population, and/or leverage NHA's PMJAY infrastructure to offer a voluntary contributory enrolment.
3. **A combination of implementation pathways – starting with commercial insurers and progressing to leveraging Government risk-pooling schemes for voluntary insurance – phased in at different times, will ensure coverage for the missing middle population (Figure 10). This report recommends the following.** The initial thrust and focus should be on expanding private voluntary contributory insurance through commercial insurers. The indicative product outlined in this report, can be scaled – through greater consumer awareness and focus on group enrolments – to build a large and diversified risk pool at low premiums. In the medium-term, once the supply-side and utilization of PMJAY and ESIC is strengthened, their infrastructure can be leveraged to allow voluntary contributions to a PMJAY-plus product offered by NHA, or to ESIC's existing medical benefits (in line with the proposed product in this report). The participation of NHA and ESIC will increase competition in the contributory voluntary insurance market, reducing premiums, and improving quality of care provided. In the long-term, once the low-cost, voluntary contributory health insurance market is developed, expansion of PMJAY to the remaining uncovered, poorer segments of the missing middle can be considered.

The primary purpose of this report is to recognize the policy issue of low financial protection for health in the missing middle segment. The report highlights health insurance as a potential pathway in addressing that, and in improving the efficiency and quality of healthcare delivered. In doing so, the report offers a starting point for broader discussions on solutions, and specific products, to improve insurance coverage for the missing middle. This report envisages wider industry and Government stakeholder consultations, and discussion with consumer groups to delve deeper into specific components of the problem, and potential solutions.

2

Background and Context



Expansion of health insurance coverage is a vital step, and a pathway in India's effort to achieve Universal Health Coverage (UHC). The increasing cost of quality healthcare combined with greater need and demand for health with increasing incomes, higher life expectancy, and epidemiological transition towards non-communicable diseases have made health coverage imperative. It is an important mechanism for individuals to safeguard against catastrophic, unpredictable health expenditures, which can push households into poverty. Health insurance can also improve efficiency and quality of healthcare provision. Insurers with pooled funds have more bargaining power and information against providers, as compared to individual customers.

India's health sector is characterized by low Government expenditure on health, high out-of-pocket expenditure (OOPE), and low financial protection for adverse health events. India's Government spending on health at 1.5% of GDP is among the lowest in the world¹. Persistently low Government spending on health has constrained the capacity and quality of healthcare services offered in the public system. Overburdened public hospitals often divert individuals to seek treatment in the costlier private sector. Almost 60% of all hospitalizations, and 70% of out-patient services are delivered by the private sector (NSSO's 75th Round survey on Social Consumption of Health, 2017-18)².

1 2020-21 estimates based on National Health Accounts, 2016-17, Union Budget, and RBI: State Finances: A Study of Budgets of 2020-21

2 IPD and OPD services exclude ante-natal care and deliveries which are predominantly provided by the public sector.

The private sector is characterized by high OOPE, leading to low financial protection.

Relatively low health insurance coverage, and costlier provision of health services in the private sector drive India's high out-of-pocket expenditure (OOPE). Despite the decline in the past few years, India's OOPE as percent of current health spending is 63%, significantly above the average for lower-middle income countries, and amongst the highest in the world (Figure 1). High OOPE poses financial risk to individuals.

They are vulnerable to impoverishment from expensive trips to the hospital and other health facilities. Analysis from Brookings India based on NSSO surveys shows that over 7% of India's population is pushed into poverty every year due to healthcare costs (Figure 2). The impoverishing impact of health expenditure is similar in both rural and urban areas. Further, incidence of catastrophic health spending – health expenditure exceeding a certain threshold share of consumption expenditure – has increased. At the 10% threshold level, 24% of households incurred catastrophic health expenditure in 2014, up from 21% in 2004 (Figure 2). Analysis from the National Institute of Public Finance and Policy (NIPFP) shows that incidence of catastrophic health expenditure at the 10% threshold is 58% for households that accessed any healthcare (2014) – over half the households who accessed any healthcare incurred catastrophic expenditure (Figure 3). The incidence of catastrophic expenditure – in the entire population and those accessing healthcare – is similar across expenditure quintiles, indicating the need for financial protection at all income levels.

Why expand health insurance in India?

Health insurance is a mechanism of pooling the high level of OOPE in India to provide greater financial protection against health shocks, improve efficiency in the organization and delivery of healthcare for better health outcomes. Increased health insurance coverage will reduce catastrophic and impoverishing health expenditure by imposing a ceiling on the maximum health expenditure incurred by an individual or household.

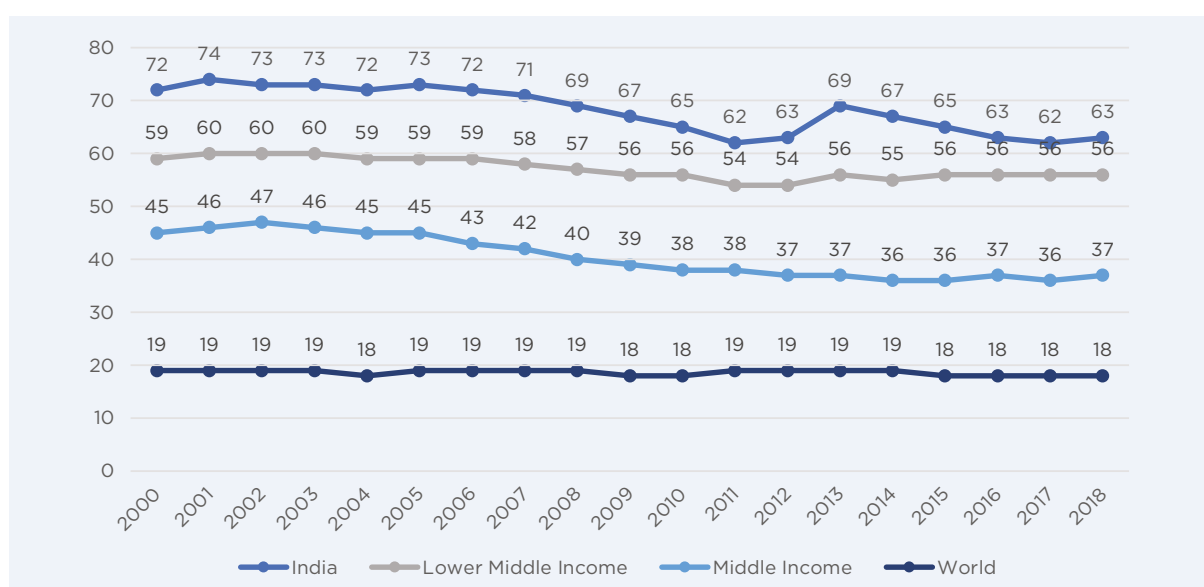


Figure 1: OOPE as percentage of current health expenditure, India, and select country aggregates, 2000-2018

Source: World Bank Open Data (accessed March 2021)

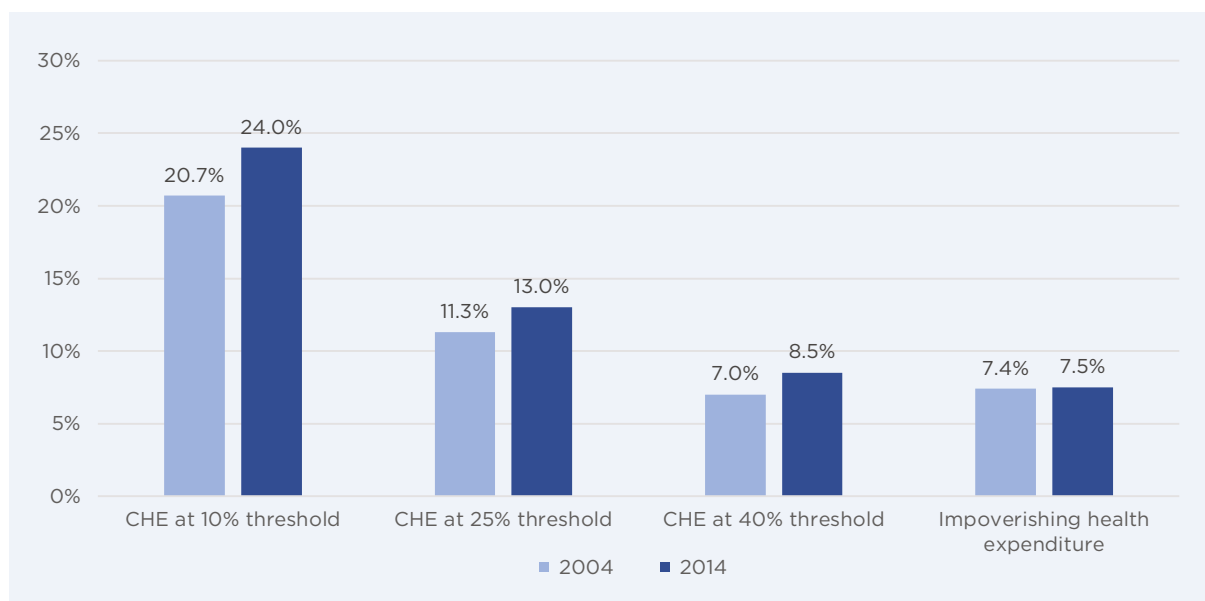


Figure 2: Incidence of Catastrophic and Impoverishing Health Expenditure, 2004 and 2014

Source: Ravi, S. et al. Health and Morbidity in India (2004-2014). Brookings India.

Note: The thresholds indicate the level of consumer expenditure spent on health beyond which it is considered catastrophic; Impoverishing health expenditure is calculated on state-specific poverty lines based on temporally adjusted Tendulkar committee poverty lines

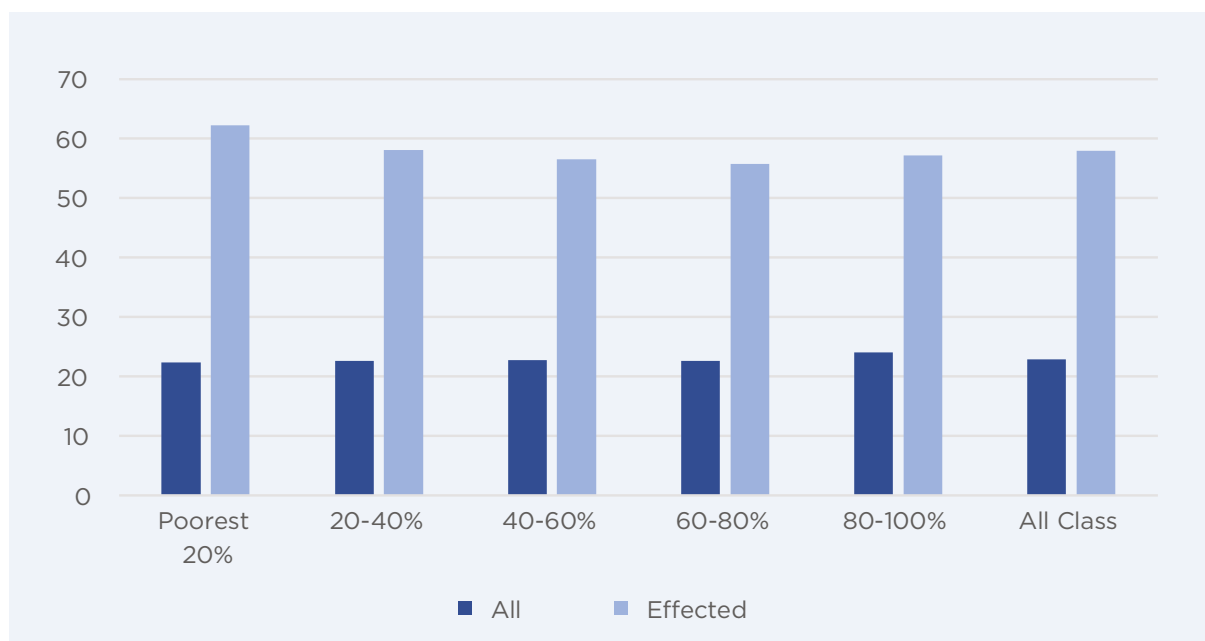


Figure 3: Incidence of catastrophic health expenditure (at 10% level) among total and affected households, by household expenditure quintile, 2014

Source: Choudhury, M., et al., 2019. Analyzing Household Expenditure on Health from the 71st Round of Survey by the National Sample Survey Organization in India (Report Submitted to the World Health Organization).

Note: Affected household refers to those that accessed any healthcare in the survey year

3

India's Health Insurance Landscape



The existing health insurance schemes can potentially cover 70% of the population – nearly 95 crores individuals, though actual coverage is lower (Table 1) (Figure 4). The potential coverage through India's existing health insurance schemes – government subsidized schemes, social health insurance schemes, and private voluntary schemes – is around 70% of India's population. Nearly 95 crore individuals or 21.5 crore families are eligible for or covered by health insurance. The actual current coverage is lower since not all households eligible for Government subsidized insurance are currently covered, and due to the overlaps between different health insurance schemes. However, since Government subsidized schemes are expected to eventually cover the eligible population, India has a potential health insurance coverage of 70% based on the existing landscape.

India has multiple types of health insurance schemes. They can broadly be bucketed into three categories based on financing source (Government tax revenue or contribution based), target group (e.g., formal sector workers), and compulsory versus voluntary nature of the scheme. The following paragraphs briefly detail India's health insurance landscape.

- 1. Government Subsidized health insurance schemes:** Government subsidized health insurance schemes provide fully or partially subsidized insurance coverage to specific targeted segments of the population. These schemes predominantly target the poor and the informal sector. *Ayushman Bharat Pradhan Mantri Jan Arogya Yojana* (AB-PMJAY) launched in September 2018 is the single largest health insurance schemes. It builds on the erstwhile *Rashtriya Swasthya*

Bima Yojana (RSBY). AB-PMJAY provides a fully subsidized comprehensive secondary and tertiary healthcare packages with an annual coverage of Rs. 5 lakhs per family on a floater basis. It entitles 10.9 crore families, or 49 crore individuals – identified as deprived in the Socio-Economic Caste Census (SECC) 2011 – for fully subsidized health insurance cover (Table 1). The scheme is operational in 33 States and UTs. Further, AB-PMJAY has a national portability feature which allows beneficiaries to avail benefits anywhere in India.

In addition to the Centrally Sponsored AB-PMJAY scheme, States have their own health insurance schemes – also known as extension schemes. Around 20 crore individuals are eligible under State extension schemes (Table 1). State extension schemes expand the population covered by health insurance beyond those covered by the CSS of AB-PMJAY. For example, State extension schemes may include groups such as the disabled, or individuals earning below State-specific income thresholds. Some State extension schemes also provide a broader or deeper benefits package. Most of these schemes were in place prior to the introduction of AB PM-JAY; they are aligning with PMJAY while extending coverage to additional groups. The focus of most State schemes is on the poor, though some schemes include the non-poor unorganized sector employees. Most of them are fully subsidized though some such as the ‘*Arogya Karnataka Scheme*’ are partially subsidized (annex: Review of State Health Insurance Schemes). The annex has further details on these schemes, including the target population and coverage.

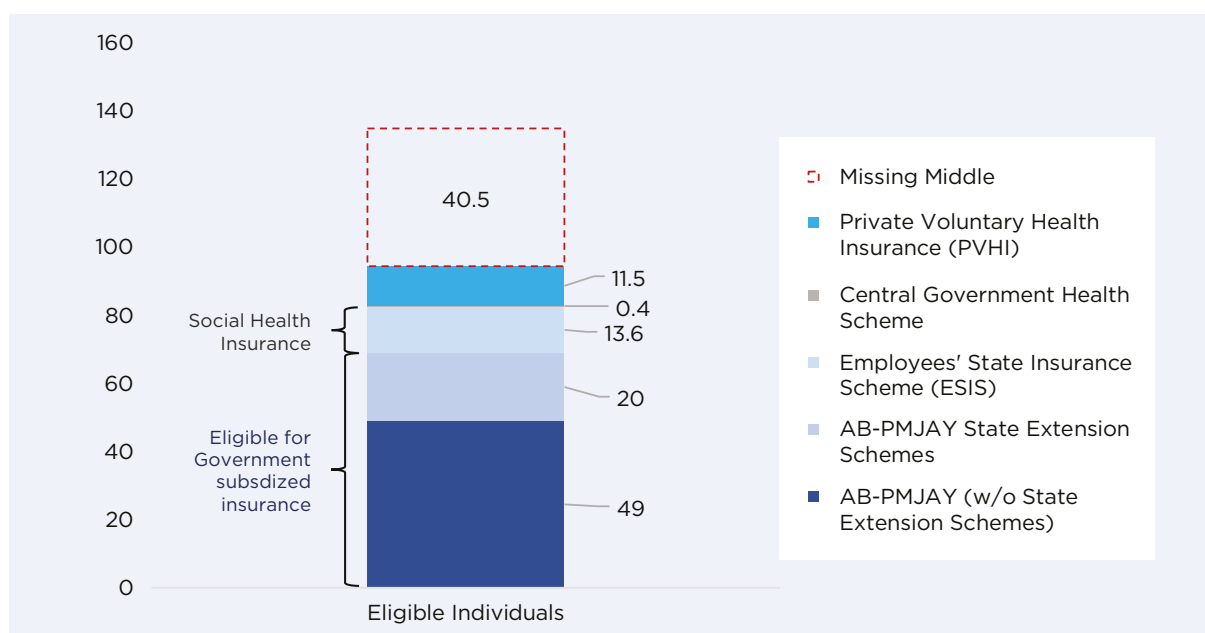


Figure 4: Number of individuals eligible or covered, by health insurance scheme type

Source: See Table 1 for sources and notes

2. Social Health Insurance (SHI) Schemes: These are compulsory, contributory health insurance schemes for organized sector employees. Both employees and employer (the Government or private enterprises) pay premiums towards Government mandated health insurance coverage. The Employee State Insurance Scheme (ESIS) run by Employee State Insurance Corporation (ESIC) in the Ministry of Labour and

Employment is the largest such scheme with 13.6 crore members (2019) (Table 1). ESIS provides comprehensive coverage – including in-patient and out-patient benefits – to private establishment workers and their families. It covers workers earning less than Rs. 21,000 per month in most industries with 10 or more employees. Another social health insurance scheme is the Central Government Health Scheme (CGHS) run by the Union Government for its employees with an enrolment of around 40 lakhs in 2021 (Table 1). Further, some Government departments have separate schemes for their employees. These are generally not insurance schemes. They directly provide healthcare services through self-owned and operated dispensaries and hospitals. For example, Central departments such as Railways and Defence have separate schemes for their employees, veterans and pensioners covering both inpatient and outpatient services. The Paramilitary under the Home Ministry has large hospitals in border areas under the operational control of Border Security Forces (BSF) / Indo Tibetan Border Police (ITBP).

3. **Private voluntary health insurance (PVHI) schemes:** PVHI are contributory and voluntary schemes. These are retail insurance products with a coverage of nearly 11.5 crore persons (Table 1). PVHI are broadly of two types — individual / family or group business (excluding Government). The former is targeted by individuals and families, as the name suggests, and covers 4.2 crore persons. The latter is targeted towards private enterprises for their employees; these cover 7.3 crore persons. Group insurance schemes target corporates and private enterprises where employee compensation is higher than the Rs, 21,000 ceiling under the ESIC. Though the PVHI market has nearly doubled from 6.1 crore in 2013-14 to 11.5 crore in 2018-19, it only covers 9% of the total population. Health insurance is a growing segment of India's economy. The total health insurance market – as measured by premium collected – more than doubled from Rs. 20,000 crores in 2014-15 to nearly Rs. 45,000 crores in 2018-19 as per IRDAI's latest annual report.

However, a substantial share of the population remains uncovered under existing health insurance schemes. Further, the above overview of existing health insurance schemes shows that coverage extends to deprived and poorer segments of the population, and the relatively better off in the organized sector of the economy. AB-PMJAY and State extension schemes cover the poor and deprived sections. Schemes like the CGHS provide coverage to public sector employees besides the schemes of individual central departments and State Governments. ESIS provides coverage to most private establishment workers earning less than Rs. 21,000 per month, and their families. Other private sector employees can opt for Private Voluntary Health Insurance (PVHI) through their employers or commercial insurers.

At least 30% of the population, or 40 crore individuals are devoid of any health protection through insurance (Table 1) (Figure 4). They are not eligible under Government subsidized health insurance schemes (PMJAY and State extension), covered by social health insurance schemes (ESIS, etc.), and have not paid for PVHI. They are referred to as 'the missing middle'. Estimates based on NSSO's 75th round survey indicate this section may be larger than 30% of the population. Even after adjusting for PMJAY (since the survey was done prior to PMJAY), estimates based on the survey suggest that nearly 50% of the population does not have health

insurance³. Part of this may be due to coverage overlap between different schemes. For example, ESIS members taking PVHI or being covered under PMJAY. However, the difference also indicates lack of awareness about health insurance entitlements, and coverage quality issues under the schemes.

Despite differences in health insurance coverage estimates, there is clearly a large 'missing middle' population devoid of financial protection despite the ability to pay. This document discusses the challenges in expanding insurance coverage through a contributory product, and potential solutions.

Table 1: Number of individuals and families eligible or covered, by health insurance scheme type

Insurance Scheme	Individuals Eligible or Covered (cr.)	Percentage of Population Eligible	Families Eligible or Covered (cr.)
Government Subsidized Schemes	69	51%	15.3
AB-PMJAY (w/o State Extension Schemes)	49	36%	10.9
AB-PMJAY State Extension Schemes	20	15%	4.4
Social Health Insurance Schemes	14	10%	3.6
Employees' State Insurance Scheme (ESIS)	13.6	10%	3.5
Central Government Health Scheme	0.4	0.3%	0.13
Private Voluntary Health Insurance (PVHI)	11.5	9%	2.6
Total Eligible or Covered (assuming no overlap)	94.5	70%	21.5
Total Population / Families	135		30
Uncovered Population / Families	40.5	30%	8.5

Sources:

1. **AB-PMJAY** and State extension scheme coverage numbers from National Health Authority document on 'PMJAY states at a glance'; SECC data taken for States which have not introduced AB-PMJAY. An average family size of 4.5 as per Census 2011 assumed to arrive at the eligible individuals.
2. **ESIS** data from 2018-19 annual report; reflects March 2019 enrolment.
3. **CGHS** data from CGHS dashboard on MoHFW (March 2021); number of cardholders taken as families covered
4. **PVHI** data from 2018 IRDAI annual report; assuming average family size of 4.5 to arrive at families covered.

Notes:

1. **The** numbers for AB-PMJAY and State extension schemes indicate eligible beneficiaries under the AB-PMJAY and State extension schemes. Actual coverage is lower as per the National Health Authority. Of the 49 crore individuals eligible for AB-PMJAY, 10.35 crores have been issued e-cards. Under State extensions schemes, out of the 20 crore individuals eligible for AB-PMJAY, 5.85 crore state e-cards have been issued.
2. **The** numbers for ESIS, CGHS, and PVHI indicate individuals or families actually covered by health insurance.

3 The estimate assumes the bottom two quintiles are nearly fully covered under PMJAY (launched after the NSSO survey period of 2017-18) i.e., the 36% of the total population eligible for AB-PMJAY is in the bottom two quintiles. It adds the health insurance coverage in the top three expenditure quintiles as per the NSSO 2017-18 survey – which is around 20% in the top 3 quintiles, or ~12% of total population. After adjusting for growth in ESIC and PVHI, the total estimated health insurance coverage is ~50%.

4

Missing Middle Population Characteristics



The 'missing middle' is a broad category which lacks health insurance, positioned between the deprived poorer sections, and the relatively well-off organized sector. The deprived and poor sections receive Government subsidized health insurance, while the relatively well-off in the organized sector of the economy are covered under social health insurance, or private voluntary insurance. The missing middle refers to the non-poor segments of the population who remain prone to catastrophic, and even impoverishing health expenditure, despite the financial capacity to pay for contributory health insurance. It is generally visualized as the left panel of Figure 5.

The missing middle is not a monolith – it contains multiple groups across all expenditure quintiles (right panel of figure 5). The actual composition of the missing middle is more nuanced. Though there is paucity of information on this group, analysis based on the NSSO's 75th Round (2017-18) can be used to infer some information on their consumption, health expenditure, and demographics. The missing middle is spread across all expenditure quintiles, in both urban and rural areas, though there is a higher concentration among the top two to three quintiles⁴. Majority of the bottom two expenditure quintiles are entitled for coverage through Government subsidized health insurance schemes, though some gaps will remain due to identification challenges and exclusion errors (right panel of figure 5). Urban areas, and the top expenditure quintile have relatively better insurance coverage through PVHI and social insurance schemes.

⁴ In urban areas, there is a higher concentration in the top three quintiles while in rural areas, there is a higher concentration in the top two expenditure quintiles

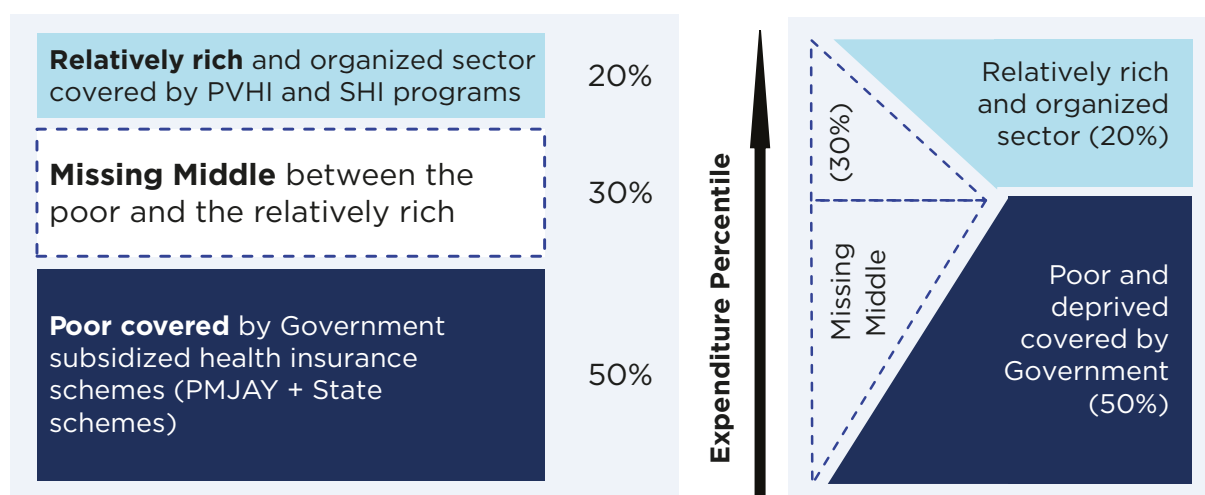


Figure 5: Schematic for Missing Middle population segment uncovered by health insurance

Methodology for estimating occupation, and sources of income of the Missing Middle

The occupations, or sources of income of the 'missing middle' can be inferred using the NSSO's 75th Round (2017-18) health survey. The NSSO social consumption of health survey asks for the household's principal occupation as per the National Classification of Occupations (NCO), 2004 codes. It also has the health insurance coverage status for all surveyed individuals. However, since the survey was conducted prior to the launch of AB-PMJAY, those entitled, or potentially covered by the scheme must be accounted for.

Two methodologies are used to estimate the occupations of the Missing Middle.

1. **Based on PMJAY eligibility and existing coverage status:** In this methodology, the primary occupation of those households who are neither eligible for PMJAY nor covered by health insurance, as per the NSSO survey is taken for estimating the Missing Middle occupations. The PMJAY eligibility is based on the SECC criteria. In rural areas, there are seven deprivation categories as per the SECC, of which six categories (D1 to D5, and D7) are entitled for PMJAY coverage. The total rural coverage is approximately 8.3 crore households. The two largest deprivation categories are 'D5: SC/ST Households', and 'D7: Landless households deriving a major part of their income from manual casual labour', comprising 3.9 crore and 5.4 crore households respectively. A household can belong to more than one deprivation category, and these two categories cumulatively comprise majority of the PMJAY eligible households. Those households classified as casual labour as per the NSSO survey (about the same proportion as D7 of total rural households in the SECC of 2011) or belonging to SC/ST category are categorized as eligible for PMJAY. In urban areas, 11 deprived categories, based on primary source of income as per the SECC, are eligible under PMJAY. The urban SECC occupation categories are mapped to the NSSO 2017-18 survey's NCO categories for identifying PMJAY eligible households in urban areas. One drawback of this methodology is that the proportion of PMJAY eligible households as per the SECC do not always align with the proportion of PMJAY households as per the NSSO survey using the above methods.

- Based on expenditure quintile and existing coverage status: In this methodology, the primary occupation of those households who are in the upper expenditure quintiles, and, not covered by health insurance as per the NSSO survey is taken for estimating the Missing Middle occupations. The assumption here is that the bottom three expenditure quintiles in rural areas, and bottom two quintiles in urban areas will be fully saturated with Government subsidized health insurance schemes. The drawback of this methodology is that inclusion and targeting errors may imply that some of the bottom expenditure quintiles are not fully saturated by health insurance.

The missing middle constitutes the self-employed (agriculture and non-agriculture) in rural areas, and a broad array of occupations – informal, semi-formal, and formal – in urban areas. The occupations, or sources of income of the ‘missing middle’ can be inferred using the NSSO’s 75th Round (2017-18) health survey. Two methods are used (see box) for arriving at estimates of the occupations, and sources of income of this segment. Self-employed in agriculture constitutes the largest segment of the rural ‘missing middle’ with approximately 40% to 60% of the households (Figure 6). They are followed by the self-employed in non-agriculture, constituting around 20% of all households. In urban areas, approximately 45% to 70% of households are engaged in managerial, professional, or technical occupations (Figure 7). The category of ‘managers, senior officials, and legislators’ constitutes the largest urban missing middle occupation segment with 25% to 45% of all households. Under the second methodology, over 50% of the urban missing middle households are engaged as service or shop sales workers, craft & related trades workers (e.g., painters, welders), plant machinery operators & assemblers (e.g., glass or paper-making plant operators), and other elementary occupations (e.g., manufacturing labour, domestic workers) (Figure 7).

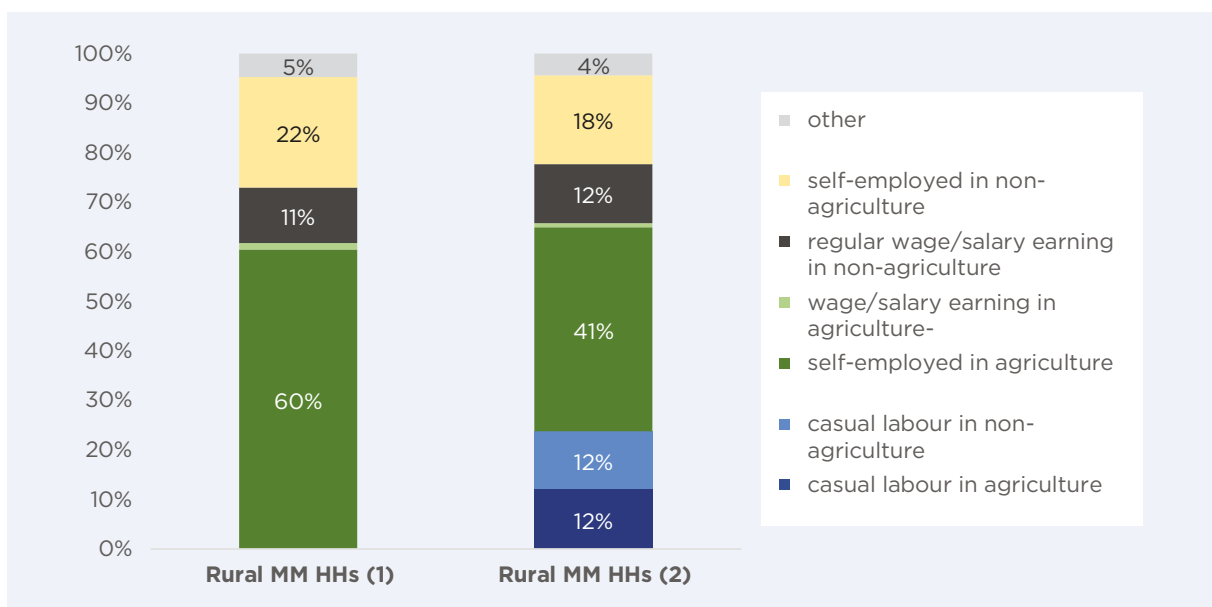


Figure 6: Primary occupation composition of rural ‘missing middle’ households

Note: There are an estimated 7.7 crore missing middle households (or ~35 crore individuals) using the first methodology while there are an estimated 5.8 crore households (or ~27 crore individuals) using the second.

Source: Analysis using NSSO’s 75th Round Health survey and SECC 20211 (see box for details on methodology)

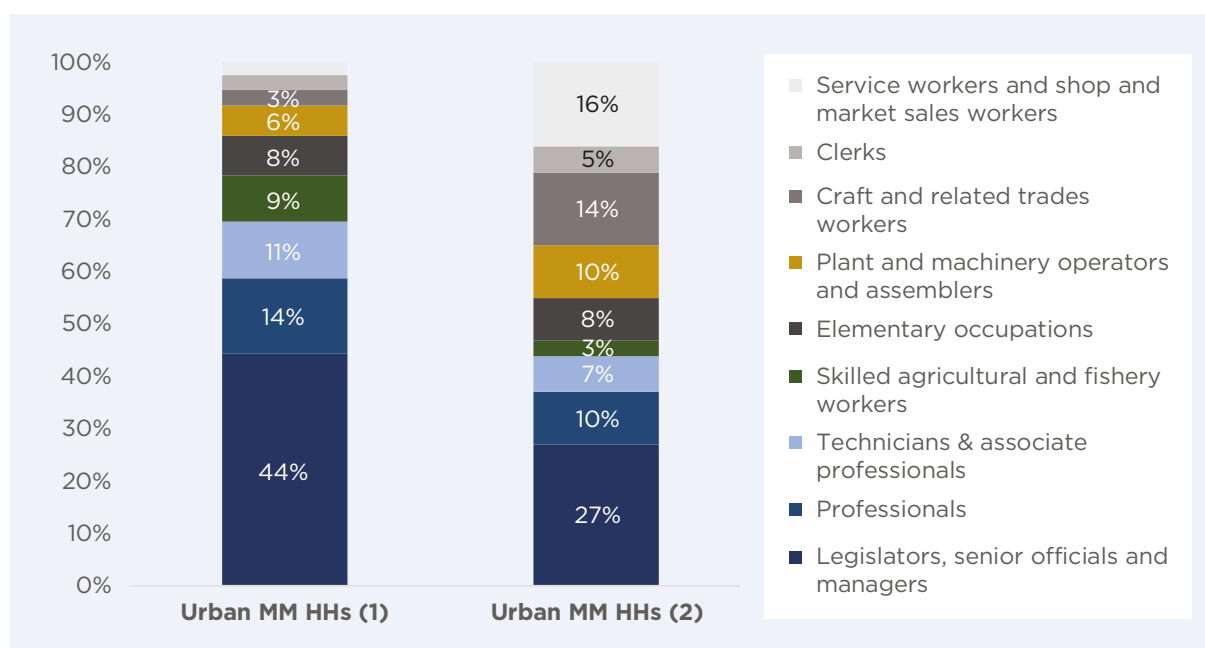


Figure 7: Primary occupation composition of urban 'missing middle' households

Note: There are an estimated 2.6 crore missing middle households (or ~11 crore individuals) using the first methodology while there are an estimated 2.9 crore households (or ~13 crore individuals) using the second.

Source: Analysis using NSSO's 75th Round Health survey and SECC 20211 (see box for details on methodology)

The missing middle in rural areas, and some segments of urban areas are characterized by informal or unorganized work (Figure 6 and Figure 7). The occupations and nature of employment of this segment of the missing middle have a bearing on their access to affordable healthcare, and ultimately health outcomes. Their employment is precarious, incomes are unstable, and most work without any formal contract. Further, they lack any representation through unions or associations. Consequently, they lack bargaining power to negotiate safer working conditions and basic social security benefits. They remain vulnerable to health shocks which can lead to catastrophic health spending. Absence of any financial protection against health shocks can push members of the missing middle into a vicious cycle of indebtedness, poverty, and poor health. Health insurance coverage can break this cycle which hinders India's progress towards poverty alleviation and Universal Health Coverage.

However, a substantial part of the urban missing middle is also engaged in formal or semi-formal, managerial, professional, or technical work. Their employment is likely more stable, and incomes less precarious than the above-described segment. However, the lack of health insurance also keeps them vulnerable to catastrophic health expenditure from health shocks, though likely to a lesser extent than the rural and urban informal missing middle.

This report discusses the contours of a product – including existing ones – tailored to the needs of the missing middle. One step and pathway towards UHC is increasing the penetration of contributory health insurance. Section 6 discusses the framework for such a product directed towards the missing middle. However, before delving into the framework of the product, this report reviews relevant schemes, and the health insurance landscape in select countries.

5

International Experience and Models



This section reviews the experience of three developing countries / regions — Thailand, China, and Latin America. Each country / region has adopted a different model to increase health insurance coverage. Some have increased insurance coverage through expansion of Government subsidized schemes while others have focused on developing robust voluntary coverage programs. Given the diversity in contexts, the intent is not to replicate these models, but to develop a deeper understanding of what has worked internationally, and whether they offer learnings for India.

The experience of Thailand, China, and Latin American countries offers two lessons. First, they demonstrate the difficulty of increasing coverage in the informal / unorganised sector. Thailand achieved UHC by fully subsidizing the informal sector while China has partially subsidized that segment. However, China's experience indicates the possibility of sustained coverage through a contributory and voluntary scheme. Second, the examples from Latin America highlight that adverse selection and inadequate risk-pooling is a pressing challenge for voluntary contributory schemes targeted towards the informal sector.

I. THAILAND

Thailand has three major health insurance schemes – government subsidized and compulsory contributory – which cumulatively cover its entire population. The Civil Servant Medical Benefit Scheme (CSMBS) covers civil servants (all public sector employees), their spouses, and immediate relatives. The Social Security Scheme (SSS) covers formal sector employees in the private sector. The largest of the three schemes is the Universal Coverage Scheme (UCS); it covers those excluded by CSMBS or SSS. The UCS covers almost 48 million people, or approximately 75% of the Thailand's population. Most of the rural population, and the urban informal sector falls under this scheme. By design, the poor also fall under the UCS.

The scheme offers a comprehensive set of services including inpatient and outpatient care, and medicines in the National List of Essential Medicines (NLEM). It also lays emphasis on health promotion and disease prevention. Healthcare services are offered by contracting public and private sector providers, including the district health system of health centres and a district hospital. The UCS has enabled a purchaser-provider divide in the public sector, and strengthened strategic purchasing. A mixed provider payment mechanism is used:

- ▶▶ Age-adjusted capitation for the district health systems based on registered members
- ▶▶ DRG paid out of the national global budget for hospitals
- ▶▶ Certain high-cost interventions such as dialysis, chemotherapy, etc. paid on a fee schedule.
- ▶▶ Health promotion and prevention mostly paid on a capitation basis with some combination of fee schedules.

The screening of eligible candidates for UCS is done using a national electronic database with citizen's ID base. The UCS has more effective purchasing compared to CSMBS solely because it focuses more on health promotion and disease prevention. It is also a much cheaper scheme as compared to the other available alternatives. However, the scheme still suffers from a serious challenge. UCS relies on annual government budget allocation and runs the risk of lower budgets during "lean years" of economic downturn with fiscal constraints.

II. CHINA

There are three main health insurance schemes in China. They cumulatively cover nearly the entire population of the country:

- a. Urban employment-based medical insurance (UEMBS)
- b. Urban resident basic medical insurance (URBMI)
- c. The new rural cooperative medical scheme (NRCMS)

In addition to these, there are private medical insurance schemes which act as top-ups for those wanting additional benefits beyond those offered by the above schemes.

The UEMBI is a compulsory contributory scheme for the urban formally employed population, and their families. It covers nearly 20% of China's population.

The URBMI is a government-run voluntary scheme at the city level i.e., for urban residents who are not formally employed. It covers around 23% of China's population including the unemployed, students, elderly people without previous employment, etc. URBMI covers inpatient and outpatient services along with critical illnesses. The scheme is financed by individual contributions and government subsidies shared between the central and lower-level governments. The central government contributed nearly a third of the total funds for this scheme. Local governments including provincial, prefectural, and county governments are responsible for administering the scheme, in addition to providing subsidies.

The NRCMS is a voluntary partially subsidized scheme, similar to the URBMI, but for rural areas. It provides health insurance cover to rural households. In 2016, the process of merging URBMI and NRCMS into the Urban and Rural Resident Basic Medical Insurance (URRBMI) began since they are broadly similar. The integration was a response to difference in benefit packages. First, there were differences in the benefits between both schemes — URBMI and NRCMS. Second, there were also differences in the benefits package by geography within each of the two schemes since the design and risk-pools were at the local – county or prefecture / municipality – level. In effect, there were thousands of different risk-pools and sub-schemes within the umbrella of URBMI and NRCMS. This led to inequities in utilization of services, and in some cases regressive contributions.

The integrated URRBMI also faces several challenges. First, there is a need to increase the scale of financing available for URRBMI to address the rapidly rising demands for healthcare. The scale of financing will determine the benefit package. Second, the role of the central and the local governments in financing URRBMI needs to be stated clearly to establish a sustainable financing mechanism. Third, the voluntary contributions are currently flat rates. Adjusting them based on ability to pay can improve progressivity of the scheme. At a later stage, China's URRBMI can evolve into a compulsory rather than voluntary contributory scheme. There have also been pilots to merge the UEMBI, URBMI, and NRCMS into one uniform scheme called Uniform Social Basic Medical Insurance (USBMI). This model was adopted by several high-income cities.

III. LATIN AMERICA

Several Latin American countries have expanded health insurance coverage to those outside the organised sector to move towards UHC. Bolivia, Colombia, Costa Rica, Dominican Republic, Mexico, Peru, and Uruguay have introduced health insurance schemes covering additional groups beyond the poor. They have done this through partially subsidised, contributory health insurance schemes for the non-poor, predominantly engaged in the informal sector. Additionally, there are also schemes to cover vulnerable groups including the disabled, pregnant women, the elderly, and indigenous people.

Aside of Bolivia and Uruguay, other above-mentioned Latin American countries classify their population based on income to determine eligibility. The households are targeted either through direct targeting, involving the use of surveys to determine eligibility, or through indirect targeting, which identifies and includes beneficiaries of other social assistance programs. Similarly, the enrolment process can take two forms:

1. **Active enrolment:** The beneficiary needs to fill out an identification questionnaire, or provide proof of vulnerability status (e.g., being listed on census lists). Mexico, Uruguay, Peru, Dominican Republic, Colombia, and Bolivia use active enrolment.
2. **Automatic enrolment:** Beneficiaries are automatically enrolled after data collected from direct and indirect targeting measures is validated. Costa Rica uses automatic enrolment.

Based on the described identification mechanism, the poor and medically vulnerable groups are fully subsidised. They do not have co-payments to utilize healthcare, and do not make any contributions for health insurance coverage. However, workers in the informal sector, and independent (self-employed) workers are only partially subsidised. Three of the eight countries discussed – Costa Rica, Uruguay, and Chile – integrate the risk pool for the contributory and the non-contributory groups at the national level. This form of risk pooling allows them to cross-subsidise the non-contributory group from the payments of the contributory group. There has been a gradual expansion of benefit packages. For example, since 2012, Chile, Mexico, and Colombia have offered a relatively comprehensive benefits package including in-patient, out-patient, and specialized care, as well as drugs.

However, there are several challenges in the above discussed models. For example, there is adverse selection in Chile. Younger, healthier, and high-income people opt-out from the public health insurance scheme reducing cross-subsidization. Peru and the Dominican Republic suffer from high exclusion errors in their targeting and unequal coverage. Since, they do not have an integrated risk-pool enabling cross-subsidisation, the fully subsidised have access to smaller benefit packages relative to contributory members. Further, there are high exclusion errors i.e., eligible people are excluded from the scheme due to targeting and identification problems. Other Latin American countries, with multiple health insurance schemes for different socio-economic groups, also suffer from high premiums, and inequality in access to healthcare due to fragmented risk pools.

6

The Framework for a Contributory Product



Most health insurance schemes and products in the Indian market are not designed for the missing middle. Private voluntary health insurance is designed for high-income groups. It is unaffordable to large sections of the missing middle. Affordable contributory products such as ESIC are not available for the general population, including the missing middle due to the risk of adverse selection.

The design of a contributory product for the missing middle must ensure that it is appealing, accessible, and affordable for this segment. This section discusses the framework of such a product including broad features, specifications, and pricing. These are indicative – further discussions with stakeholders, and greater understanding of consumer preferences will refine the product.

I. STANDARDIZATION AND SIMPLICITY

Standardization and simplicity emerged as important design features based on international experience with similar policies, as well as consultations with stakeholder in the Indian health insurance market. Insurance in general, and health insurance in particular, is a complex product. Features such as exclusions, waiting periods, deductibles, co-payment, and sub-limits are difficult to understand. Though some are necessary by design to avoid adverse selection and moral hazard, the complexity associated with standard health insurance products can be minimized — for example, by reducing exclusion restrictions. This makes them

easier to understand, which in turn increases the product's acceptance. The proposition to minimise complexity is guided by the motive to reduce frictions in the entire health insurance purchase life cycle — from product selection, to enrolment, to effective benefit utilisation.

Standardization helps in simplifying the product. In the case of benefits package, standardizing helps ensure a basic minimum level of services to all consumers. The *Aarogya Sanjeevani* insurance policy, launched by IRDAI in April 2020, is a first attempt to create such a health insurance product (see box). The policy standardizes the benefit package across insurance companies. The basic benefits package is common, but the consumer can decide the sum insured amount (and consequently the premium), and their insurer. However, there are three key challenges with *Aarogya Sanjeevani* which need to be addressed if it is to target the missing middle segment.

- ▶▶ High premium which limits its affordability for the missing middle segment;
- ▶▶ Long waiting period of two to four years for certain diseases / treatments; and
- ▶▶ Age restrictions with those aged over 65 not allowed to enroll in scheme (but can continue their enrolment if they are already enrolled prior to turning 65)

In addition, introducing simplicity in benefit utilization – for e.g., from cashless and paperless coverage – is an important aspect in increasing the attractiveness of health insurance.

Aarogya Sanjeevani Health Insurance Plan

What is Arogya Sanjeevani, and what are its benefits?

The Insurance Regulatory Development Authority of India (IRDAI) launched a standardized health insurance product – Arogya Sanjeevani – in April 2020. The Arogya Sanjeevani has the same set of standardized benefits across all health insurers. All health insurers are mandated to offer those benefits though the sum insured, family composition, and consequently premiums may vary. Health insurance is a complex product. Individuals and families buying health insurance can be confused between the various products available in the market since their benefits and features vary. The Arogya Sanjeevani product aims to solve that problem by offering a common policy across health insurers where they can compete on the premiums, service quality, and provider network. Additionally, it will also facilitate seamless portability between insurers.

What does Arogya Sanjeevani cover?

The Arogya Sanjeevani is an indemnity health insurance plan covering hospitalizations, including pre and post hospitalization expenses. The sum insured is flexible – varying between Rs. 50,000 to Rs. 10 lakhs – based on the needs of the individual, or the family. Table 2 has the key features of Arogya Sanjeevani including the limits for room rent, overview of procedures covered, waiting periods, etc.

Who can be covered under Arogya Sanjeevani?

Anyone aged below 65 years can enroll for health insurance under Arogya Sanjeevani with any of the health insurance companies. It is available on an individual, family floater, and group insurance basis. Health insurance companies are free to decide the family configurations they want to offer. For example, some companies do not offer a plan which includes a dependent parent. Individuals greater than 65 cannot enroll into the plan but can continue the plan if they enrolled prior to turning 65.

What is the premium?

The premium for Arogya Sanjeevani is not fixed for a given sum insured and family configuration. It varies between insurers. Figure 8 benchmarks the premium for a sum insured of 5 lakhs for two different family configurations. The average annual premium for a family of 4 (2 adults and 2 children), and family of 5 with one additional dependent parent are ~Rs. 12,000 (or ~Rs. 8 per day per person), and ~Rs. 26,000 (or ~Rs. 14 per day per person) respectively.

Table 2: Key Features of 'Arogya Sanjeevani' Health Insurance Plan

Product Feature	Details
Sum Insured (SI)	Rs. 50 K – 10 lakhs
Waiting Period	<ul style="list-style-type: none"> ◆ 24–48 months based on disease / treatment ◆ (22 diseases / treatments specified)
Room Rent	2% of SI up to Rs. 5,000 per day for hospitalization; and 5% of SI up to Rs. 10,000 per day for ICU
Maternity	Not covered
Day-care Procedures	Covered
Disease wise sub-limits	Hospitalization expenses in addition to room rent covered except <ul style="list-style-type: none"> ◆ Dental treatment or plastic surgery unless necessitated due to disease or injury ◆ Cataract treatment at 25% of SI or Rs.40, 000, whichever is lower
Co-payment	5% of claims amount admissible
Alternative Medicines	Yes, AYUSH expenses covered
Pre-hospitalization expenses	Up to 30 days
Post-hospitalization expenses	Up to 60 days
Ambulance cover	Up to Rs. 2,000 per hospitalization
Tenure	1 year subject to lifelong renewal

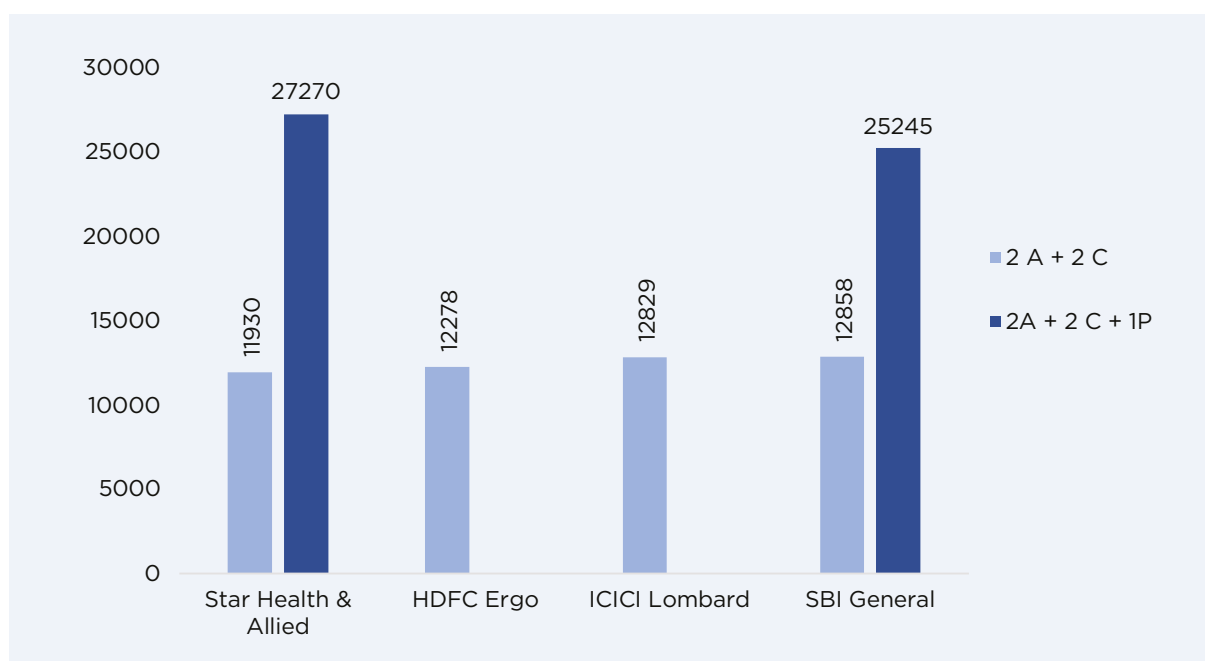


Figure 8: Annual Premium for a family of 4 (2 adults + 2 children) or 5 (family of 4 + 1 parent), for Rs. 5 lakhs sum insured, select insurance companies, in Rs.

Source: HDFC Ergo, Star Health & Allied, SBI, and Arogya Sanjeevani brochures and websites

Note: 1. The age of the two adult members are 40 and 37, children are 5 and 9, and dependent parent is 62.

2. Annual premium does not include 18% GST, or any discounts offered.

3. HDFC Ergo and ICICI Lombard do not offer any product for the above family of 5 configuration.

II. BASIC STRUCTURE

Based on the above outlined principle of simplicity and standardization, and discussions with stakeholders in the domestic health insurance market, Table 3 outlines the basic features of a contributory retail insurance hospitalization product for the missing middle. **The outlined product is a slightly modified Arogya Sanjeevani product with two specific changes:**

- ▶▶ Lower waiting period of one to two years for certain diseases / treatments with the potential of further reductions as overall demand increases; and
- ▶▶ Package rates for procedures to reduce costs, and consequently lower premiums

The features outlined below are indicative. Discussions with stakeholders, and greater understanding of consumer preferences can help further modify the product.

Table 3: Key Features of hospitalization insurance product for the missing middle

Product Feature	Benefit / Details
Sum Insured	Rs. 5 – 10 lakhs per family per year
Definition of Family	Self + Spouse + Dependent Children / Dependent Parent
Waiting Period	12 – 24 months (<i>can be further reduced if volumes increase</i>)
Room Rent	<ul style="list-style-type: none"> ◆ 2% of SI up to Rs. 5,000 per day for hospitalization; and ◆ 5% of SI up to Rs. 10,000 per day for ICU

Product Feature	Benefit / Details
Maternity	Not Covered
Day Care Procedures	Covered
Disease wise sub-limits	Hospitalization expenses in addition to room rent covered based on defined package rates for procedures; minimal exclusions
Alternative Medicines	Up to Rs. 50,000
Pre-hospitalization Expenses	Up to 30 days
Post-Hospitalization Expenses	Up to 60 days
Ambulance Cover	Up to Rs. 2,000 per hospitalization
Tenure	1, 2, 3-year renewable. All enrolled members allowed to be renewed.

In addition to hospitalization cover, a product for the missing middle should also include out-patient benefits. An indicative product is outlined in Table 4.

Rationale for inclusion of out-patient benefits in the proposed product

A comprehensive health insurance product for the missing middle should include out-patient (OPD) benefits. The product outlined in Table 3 only covers in-patient care expenses. Indeed, most insurance products in the PVHI market, including the recently announced *Aarogya Sanjeevani* policy do not include outpatient benefits. This exclusion remains a large gap. There are two key reasons to include OPD in the missing middle product:

1. **Inclusion of out-patient benefits will curtail catastrophic health spending** — the key objective of a health insurance product for the missing middle.
2. **An integrated product including OPD benefits can lower overall costs and improve health outcomes** – critical goals from a health systems and policy standpoint.

Inclusion of OPD benefits in a product for the missing middle will lower incidence of catastrophic health expenditure. The term catastrophic health expenditure indicates an exorbitant cost of healthcare, above a certain threshold of total household expenditure. High catastrophic spending can constrain other important consumption expenditure, and push household into poverty, especially lower-middle-class families. Section 2 shows that 24% of all households, and 58% of households accessing any healthcare are catastrophically affected at the 10% level i.e., spend more than 10% of total consumption expenditure on health (Figure 2) (Figure 3). A larger share of households are catastrophically impacted by out-patient expenses relative to in-patient expenses. 80% to 85% of catastrophically affected households incur OPD expenses compared to 45% to 50% for IPD — a difference of 35 percentage points (Figure 9). Similar findings on the larger impact of OPD expenses on catastrophic and impoverishing health spending bear out from other analyses. A study by NIPFP study on the 71st Round NSSO survey shows a higher incidence of catastrophic payments for outpatient care as compared to inpatient care. The Indian Human Development Survey (IHDS-II) highlights a more specific finding — it shows impoverishment effects of health expenditure are predominantly driven by outpatient spending, particularly for informal sector households. This finding is confirmed by a

previous World Bank report (on government-sponsored health insurance) using the NSSO's 60th Round survey. It shows OOPE on inpatient care is not a significant source of impoverishment compared to outpatient care and drugs. More broadly, the NSSO's 75th Round survey on social consumption of health shows that over two-third of total OOPE are on out-patient care, and most OPD – over 70% – is sought in the private sector. Consequently, the product should cover some OPD expenses to improve financial protection against adverse health events.

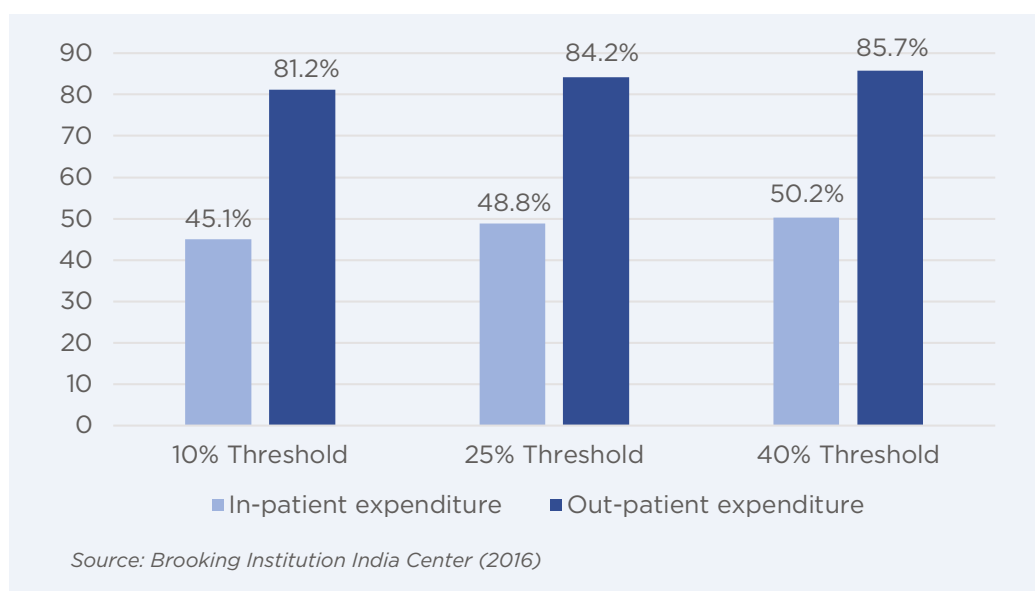


Figure 9: Percentage of catastrophically affected households, reporting in-patient and out-patient expenditure, by threshold levels

Source: Ravi, S. et al. *Health and Morbidity in India (2004-2014)*. Brookings India.

A combined product with both in-patient and out-patient benefits can lower overall costs and improve health outcomes. A combined product can facilitate the development of a coordinated or integrated care model by aligning providers at different tiers, to ensure patients can seamlessly transition across different levels of care. The insurer can contract with providers at all levels and develop an incentive structure to facilitate linkages between them. This model will help improve efficiency by reducing redundancy (e.g., repeated tests), and nudging patients to seek timely care at the right level. It can also improve outcomes through greater use of primary care which helps screen and manage chronic conditions early, and greater sharing of information between providers.

An out-patient product will also demonstrate additional value to customers – since most individuals use out-patient services every year but only a small fraction is hospitalized (~3% annually in 2017-18; NSSO 75th Round) – and increase the product's appeal. Table 4 outlines the broad features of an indicative out-patient insurance product.

Table 4: Key Features of outpatient product for missing middle

Product Feature	Benefit / Details
Sum Insured / Maximum Cap	Rs. 5,000 per family per year
Benefits package	Doctor consultation, medicines, and diagnostic tests
Healthcare service providers	Empaneled hospitals / General Practitioners / clinics
Definition of Family	Self + Spouse + Dependent + Children/Dependent Parent (max 5)
Claims Process	100 % cashless and paperless
Pre-existing diseases	Covered
Alternative Medicines	up to Rs. 1,000
Exclusions	Minimal exclusions
Waiting period	No waiting periods applicable
Tenure	1, 2, 3-year renewable. All enrolled members allowed to be renewed.

III. PRICING

The demand for health insurance will be very sensitive to its price for the missing middle. Current PVHI are very highly priced for the missing middle. The average price of Arogya Sanjeevani is Rs. 12,000 for a family of 4 per year (two adults and two children), and Rs. 26,000 for a family of 5 (family of 4 and dependent parent) (Figure 8).

Stakeholder discussions indicated a premium of Rs. 4,000 to 6,000 per family per year is commercially viable for hospitalization insurance. Discussions with stakeholders, including health insurers, indicated that a hospitalization cover for a sum insured of Rs. 5 lakhs for a family of 5 would cost between Rs. 4,000 to Rs. 6,000. The premium will depend on the size of the risk pool. For example, the average premium per family would be a little under Rs. 5,000 if 5 crore families were to enroll. However, it would increase to nearly Rs. 6,000 if fewer than 1 crore families enrolled.

The out-patient product will follow a subscription model instead of a premium model. The OPD benefits, capped at Rs. 5,000 (Table 4), are likely to be utilized by most households. Hence, the premium will be equal to, or near the cost of total sum insured for OPD care, effectively making it a pre-paid subscription model. The advantage of providing OPD benefits, alongside IPD care will be to increase the efficiency and value of the healthcare provided (as outlined in the previous sub-section) through integration of fragmented services which allow for protocol-based, timely care.

The current OOPE of the missing middle population can provide an upper-bound estimate of the segment's ability to pay the premium. The average person or family has some incentive to pool relatively small amounts of money to protect against future catastrophic health expenditure and receive higher value from healthcare. Actual willingness to pay will be lower since the benefit package may not cover all ailments, and due to adverse selection. The OOPE of 4th and 5th quintile of rural areas, and the 3rd to 5th quintiles of urban areas – where the missing middle is concentrated (Figure 5) – provides the upper-bounds estimate of their ability to pay.

- ▶ **In-patient expenditure:** The average annual per capita in-patient expenditure is approximately Rs. 500 and Rs. 950 for the 4th and 5th quintile in rural areas. In urban areas, the corresponding amount is around Rs. 850 for the 3rd and 4th quintile, and Rs. 1300 for the 5th quintile. For a family of 5, this amounts to an upper-bound premium in the range of Rs. 2,500 to Rs. 6,500, depending on the expenditure quintile and geographical location (Table 5). Aside of families in the 4th quintile of rural areas, all other missing middle segments – i.e., the top quintile of rural areas, and the top three quintiles of urban areas – can afford the proposed premium of Rs. 4,000 to Rs. 6,000 per family per year for in-patient coverage.
- ▶ **Out-patient expenditure:** Average annual out-patient expenditure for a family of 5 is much higher – between Rs. 5000 to Rs. 12,000 – compared to in-patient expenditure (Table 5). The existing OOPE on out-patient care indicates the ability to pay for an out-patient, pre-paid, subscription product. As mentioned above, the out-patient product will likely be priced around the sum insured amount of Rs. 5,000 per family per year but will provide greater value for money than spending that money through OOPE.

The above analysis indicates the proposed price is in line with ability to pay though some subsidy maybe required for the lower end of the missing middle. Hence, given the right health insurance product, majority of the missing middle segment – except the 4th quintile of rural areas – should be willing to pay. The price of the product will ultimately be controlled by market mechanisms, including the composition, and the size of the risk pool.

Table 5: Average OOPE per capita and for family of 5, on in-patient and out-patient care, by consumption expenditure quintile

Expenditure Quintile	In-patient (exc. childbirth)				Out-patient			
	Avg. OOPE per capita		Upper premium limit Avg. OOPE for family of 5		Avg. OOPE per capita		Upper limit Avg. OOPE for family of 5	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
3rd quintile		831		4156		1669		8347
4th quintile	487	876	2435	4381	1044	1833	5220	9165
5th quintile	931	1311	4654	6554	1839	2301	9194	11503

Source: Analysis based on NSSO's 75th Round Social Consumption of Health survey

7

Key Challenges



There are four key challenges in increasing the coverage of health insurance through voluntary contributions. The ability to pay for health insurance does not automatically translate into a willingness to pay, and the existence of a supply-side – providers and insurers – to match that demand. This section discussed those challenges.

I. AWARENESS

Low awareness and the difficulty in understanding a complex product like health insurance limit its uptake. There is limited awareness of insurance, including health insurance products, even amongst the middle class which hinder its uptake. Further, those who are aware of health insurance, may not see the need to purchase it. The concept of paying for a product which one does not hope to use is not intuitive. Though catastrophic health expenditure, and its impact on savings and standard of living is experienced by a substantial share of the population, almost 1/4th at the 10% threshold level (Figure 2), connecting it to the purchase of health insurance as an investment for health security is not intuitive ex-ante. In other words, paying for financial protection against some (uncertain) risk of future adverse health events at the cost of present consumption is a complicated decision.

Consumer education of health insurance, especially amongst the missing middle, is important to increase its uptake. A comprehensive awareness campaign which intricately explains the importance and benefits of health insurance can help increase its acceptance

and uptake. The awareness campaign can specifically focus on the standardized product outlined in Table 3 and Table 4. One key element of this awareness strategy is promotions at government hospitals and other hospitals, for example those empaneled under PMJAY. A study by Kansra and Gill (2017) on health insurance buying behaviour of informal sector workers in India shows that linking health insurance schemes with government hospitals – such as through awareness campaigns – increases the probability of enrolment in insurance scheme. Additional channels including Government health facilities, Anganwadi centers, and ASHA workers can also be leveraged to build consumer awareness. The second element of the awareness strategy centered around hospitals – public and private – comes from prospect utility theory. The basic idea that losses loom larger than gains –also called loss aversion – can have significant implications for the economic choices of the missing middle. As elaborated in Section 6, OOPE on out-patient care accounts for a larger share of catastrophic health expenditure compared to in-patient care. It causes great financial pain to those whose income is already low and unstable. Promoting the scheme in terms of loss aversion to those making frequent and costly visits to OPDs can potentially increase the insurance product's uptake. However, awareness will only be successful if the benefits offered under the scheme are attractive enough compared to those already available for free or highly subsidized rates in public sector facilities.

II. IDENTIFICATION AND OUTREACH

Identification of, and outreach to customers is the primary hurdle on the supply-side.

From the standpoint of insurance companies, it is difficult to economically reach out to the missing middle segment to build awareness of health insurance and their products. A large share of the missing middle is employed in the informal sector – constituting 80% to 90% of India's labour force (PLFS 2018-19 and Report on Employment in Informal Sector and Conditions of Informal Employment, MoLE, Gol, 2013-14) – where there is a lack of a robust employee database or other sources for identification and outreach. Consequently, it is difficult for insurance providers to reach out to potential customers. Insurance companies have either failed to, or find it uneconomical, to identify and target this segment of the population. As a result, health insurance coverage remains largely inaccessible to the missing middle.

Targeting the missing middle segment will require a different outreach strategy which distinctly focuses on this population, and their sub-segments.

The voluntary contributory health insurance product will only be successful if there is a large and diversified risk pool. Ensuring scale enrolment requires a substantial push on outreach to potential customers – in addition to greater health insurance awareness – for demand-generation. First, insurers and third-party administrators (TPAs) should experiment with incentive structures which can drive enrolment volumes. For example, incentive clauses can be incorporated in contracts which reward reaching a critical mass of customers within a particular period. Second, Government databases such as National Food Security Act (NFSA), Pradhan Mantri Suraksha Bima Yojana, or the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) for agricultural households can be shared with private insurers after taking consent from these households. Such databases will help ease the identification of, and outreach to potential customers by insurers.

III. ADVERSE SELECTION AND PREFERRED SELECTION

Adverse selection is a common market failure in health insurance markets. It arises out of asymmetric information — where one party knows something relevant to the transaction that the other does not. In the context of health insurance, it occurs when the insured does not disclose information about underlying health conditions to the insurer. These conditions make the insured more likely to require frequent and expensive healthcare interventions. For the insurance company, this implies a greater cash outflow and higher frequency of claims from its policyholders than anticipated by the insurer. If the undisclosed health conditions are considered, the premium amount paid by the insured would be inadequate to cover the claims sanctioned against it. Consequently, adverse selection can lead to large financial losses for insurers. As a mitigation measure, the insurer increases its premium to cut losses and cover the costs of increased amount and frequency of claims from adversely selected policyholders. As more and more sick people are adversely selected into the risk pool, healthy people are priced out of the insurance market. This leads to a vicious cycle which results in low-risk pooling, and high premiums.

Implementing measures to avoid adverse selection are likely to lead to preferred selection or cream-skimming. Private insurers may test eligibility of potential insurance buyers through medical history assessment, diagnostic screenings, etc. to avoid adverse selection. Insurers can choose to avoid individuals at a greater risk of developing health problems. However, not all insurers exclude high-risk individuals. Instead of trying to actively avoid adverse selection, they try to minimise the losses incurred from it, and cover the additional costs of having more sick individuals in their risk pool. Those more likely to get sick are charged higher premiums and recommended more expensive packages with generous coverage limits as compared to those who are healthy. Even though high-risk individuals are priced accordingly, the high premium amount can exclude them from accessing affordable healthcare.

The proneness to cream-skimming, resulting from attempts to avoid adverse selection has also been present in government-sponsored health insurance schemes. Insurance companies, hired by the government often carry out cream-skimming in the enrolment process. It is infeasible and undesirable for insurance companies and their TPAs to use cream-skimming measures to actively avoid adverse selection while catering to the missing middle. There are three reasons:

- a. It is uneconomical and administratively challenging to run a rigorous screening process on the scale required for the missing middle.
- b. The friction created by the screening process can reduce the uptake of the scheme and the overall coverage of the risk pool. Inadequate risk pooling of this sort – induced by preferred selection – can lead to financial losses for insurers.
- c. From a broader societal and Governmental perspective, cream skimming is inherently incompatible with India's goal of achieving Universal Health Coverage.

The focus should be minimizing adverse selection through a large and diversified risk pool, instead of cream-skimming. While imposing a limit on claim amounts does help to cut losses from adversely selected cases, increasing the number of participants in the risk pool is a much more effective approach. It reduces adverse selection and provides greater

predictability to insurers. The below box contains the statistical underpinnings of the principle behind increasing the size of the risk pool called the law of large numbers. It helps ensure that actual claims or payout by the insurers do not substantially deviate from the actuarially calculated expected claims.

Underlying principle for increasing the size of the risk pool:

The standard deviation from the average proportion of claims (which typically result in losses for the insurer on that policy) can be calculated per the below formula:

$$\sqrt{p(1-p)/n}$$

In the above formula:

- ▶▶ 'n' refers to the number of policyholders i.e., number of people in a risk pool.
- ▶▶ 'p' refers to the independent probability of each policy resulting in a claim.

Under the above assumption, the fraction of policies resulting in claims follows a binomial distribution. The formula above gives the standard deviation of the average proportion of claims resulting in losses. As 'n' increases, the standard deviation approaches zero. As a result, the fraction of claims gets closer to a stable, predictable, average number with minimum deviations from it. The insurance company can set premiums considering the stable average of claims. The large n allows it to minimize unanticipated financial risk from outliers that have large deviations from the expected average.

Group enrolment is the most effective way to increase the number of policyholders in the risk pool. It also has the advantage of providing greater bargaining power to individuals aggregated through groups against insurers. Greater bargaining power can help address grievances and improve efficiency of health insurers. Standalone health insurers have a low claims ratio of 64% indicating either high premiums, poor network, or denial of benefits. Large groups can put pressure on insurers to either reduce premiums or ensure that eligible benefits are timely provided. Targeting families, and other formal and informal groups will help build a large and diversified risk pool.

- ▶▶ Targeting informal and formal groups including associations, unions, societies, and self-help groups (SHAs) – they reduce the cost of identification and outreach while providing a diversified risk-pool.
- ▶▶ Enrolling families in group – diversifies age-related risks.

IV. AFFORDABILITY

The missing middle population is highly price sensitive. Lowering the costs of the product, where feasible, will be important to ensure affordable prices and high demand. The private health insurance market has a low claims ratio – 64% for standalone health insurers and 72.5% for health insurance segment of general private insurers (IRDAI, 2020) – indicating high distribution, and / or administrative costs. There are two focus areas for reducing the cost of the product by reducing the add-on charges i.e., costs above the actuarially fair premium.

- a. Distribution Costs:** The high sales / distribution cost of health insurance substantially increases the product's price. Industry consultations highlighted that the existing distribution strategies, and the retail nature of the product must be changed to reduce the cost of customer acquisition. IRDAI allows for a commission of up to 15% to agencies and brokers, which increases the premium. Standalone health insurers incur commission expenses of 12.5% while the health insurance segment of private insurers incurs 8.5% commission as percentage of premium collected. Driving down these costs can substantially reduce premiums. First, the distribution strategy of the product should target groups – including organizations, teacher associations, and trade unions – to advocate health products. Group targeting reduces the average distribution cost per policy as compared to individual targeting. Second, greater focus on digital channels for health insurance sales will bring down commission costs. For example, the JAM trinity (Jan Dhan accounts, Aadhar, and mobile) can be leveraged to reduce sales costs. Third, Government assets including post offices, and regional rural banks can be leveraged as distribution channels to increase the reach of insurance without incurring high costs.
- b. Operational Costs:** The total health insurance costs are further increased from actuarially determined prices (based on estimates claims costs) due to high operational / administrative costs. The operational expenses for standalone health insurers are around 25% of the total premium collected driven by a high claims processing cost. Insurers will have to improve their operational efficiency to drive down premiums. Greater use of analytics, standardized formats for easier data flows, and other digital tool to drive efficiency, and achieving economies of scale through higher volumes can reduce operational costs.

The increase in the affordability of health insurance will be driven by higher volumes and greater use of digital technologies. As elaborated in the above sub-section, not only will higher enrolments mitigate adverse selection through risk-pooling; they will also lower costs by improving operational efficiency of insurance schemes.

8

Implementation Pathway and The Role of Government



The Government has several policy levers, and potential roles in shaping the health insurance ecosystem, and increasing uptake of health insurance amongst the missing middle. The Government will play some, or all these roles depending on the implementation pathway for increasing health insurance coverage. This section first discusses the different roles of the Government and concludes by outlining an implementation pathway.

THE ROLE OF THE GOVERNMENT

The Government has five potential roles in increasing the uptake of health insurance amongst the missing middle. These roles span different functions – regulation, behaviour change, sharing Government infrastructure as a public good, provision and financing.

1. **Increasing consumer awareness of health insurance:** First, the Government has a key role to play in increasing consumer awareness and building consumer confidence in health insurance through information, education, and communication (IEC) campaigns, especially in hospitals. The Government's promotion of health insurance will establish greater acceptance and faith in the product. It can use several channels to build consumer awareness of health insurance, and of specific products, including in hospitals, health facilities, Anganwadi centers, and through ASHA workers.
2. **Developing a modified, standardized health insurance product:** Second, the Government has a role to play in ensuring standardization and improving simplicity

of the product, to ensure consumer protection through a guaranteed basic minimum package of services. A slightly modified version of the standardized *Aarogya Sanjeevani* insurance product, as indicated in Table 3 and Table 4, will help increase the uptake amongst the missing middle. The modified product should have lower waiting periods. It should also include out-patient benefits through a subscription model to increase the value of healthcare provided.

3. **Sharing Government data and infrastructure as a public good to reduce operational and distribution costs:** Third, the Government can help improve the product's uptake by lowering the distribution and operational costs. The Government can offer its data and infrastructure as public goods to build distribution and operational efficiencies in private health insurers. First, it can offer PMJAY's platform and network, especially its IT capabilities, to private insurance companies for covering the missing middle. Leveraging PMJAY's platform as a public good will reduce operational costs, making it easier to scale, especially in underserved markets. Second, the Government can also share databases such as the NFSA, PM-KISAN, and Pradhan Mantri Suraksha Bima Yojana with private insurers after taking the family's consent. This will reduce the distribution costs by aiding outreach of insurers to potential customers. Finally, Government assets including post offices, and regional rural banks can be leveraged as distribution channels to increase the reach of insurance at low costs.
4. **Building consumer confidence by ensuring quality of services:** Fourth, the Government should build consumer confidence through swift grievance redressal mechanisms, and robust auditing procedures. Ensuring quality of health services will improve patient satisfaction and build confidence in health insurance as product. Such mechanisms ensure that the intended benefits of health insurance – reduction in catastrophic spending and improved access to quality health – are achieved. They can lead to a virtuous cycle of trust where satisfied health insurance customers recommend it to others, thereby increasing the size of the risk pool.
5. **Partial financing or provision of health insurance:** Finally, the Government can directly increase enrolment or reduce costs by subsidizing the poorest sections of the missing middle population, and/or using the PMJAY infrastructure to offer a voluntary contributory enrolment. The first option entails expanding PMJAY cover to the poorer segment of the missing middle – who may not be able to afford voluntary health insurance – on a full or partial subsidy basis. However, that should only be considered if there is low uptake among the poorer sections of the missing middle – and after ensuring full coverage of existing eligible beneficiaries under PMJAY – since it has fiscal implications. The second option is to offer the product outlined in this report on a voluntary and contributory basis through the National Health Authority (NHA). The Government can leverage PMJAY's scale including its network, systems, and infrastructure to ensure that premiums remain low.

IMPLEMENTATION PATHWAY

There are broadly three different models of increasing health insurance coverage. Each of these models will be suitable to certain segments of the missing middle and will have a different set of roles for the Government. The three models are outlined below:

1. **Expanding private voluntary insurance through commercial insurers:** The first model, which has been the focus of this report, is expansion of private insurance financed by private contributions through commercial insurers. Under this model, a modified standardized health insurance product developed for the missing middle (indicatively outlined in this report) will increase uptake of health insurance. Government IEC efforts will increase the awareness of health insurance. The anticipated large and diversified risk-pool through enrolment in groups will minimize adverse selection. It will also keep premiums at affordable levels, in line with the missing middle's ability to pay. The key challenge of this model is the level to which it is can contain adverse selection and enroll the informal sector.
2. **Allowing voluntary contribution using NHA-PMJAY infrastructure or ESIC scheme:** The second model, leverages NHA's infrastructure for PMJAY, or the ESIC scheme for voluntary contributory insurance to the missing middle. The NHA can offer a PMJAY plus product indicatively outlined in this report, while the ESIC can offer its existing set of benefits to those beyond its current mandate. The scale and network of PMJAY and ESIC can keep premiums lower than commercial health insurers (in model 1). However, there are two potential drawbacks of this model. The first is the same as for model 1 – the level to which a voluntary contributory scheme can manage adverse selection is unclear. The second is the potential overburdening of PMJAY and ESIC infrastructure and schemes through an additional mandate. Both schemes already face significant supply-side challenges leading to low utilization of services. In the short-run, adding a voluntary contributory scheme to PMJAY or ESIC, may detract them from their core mandate or serving existing beneficiaries.
3. **Expansion of coverage under the PMJAY scheme:** The third model expands government subsidized health insurance through the PMJAY scheme to a wider set of beneficiaries. This model can be utilized for segments of the missing middle which remain uncovered, due to limited ability to pay for the voluntary contributory models outlined above. This is the only model out of three proposed which has fiscal implications for the Government. Though this model assures coverage of the poorer segments on the missing middle population, premature expansion of PMJAY can overburden the scheme (as also outlined above).

A combination of the three models, phased in at different times, can ensure coverage for the missing middle population (Figure 10). In the short-term, the focus should be on expanding private voluntary insurance through commercial insurers. In the medium-term, once the supply-side and utilization of PMJAY and ESIC is strengthened, their infrastructure can be leveraged to allow voluntary contributions to a PMJAY plus product, or to ESIC's existing medical benefits. In the long-term, once the low-cost voluntary contributory health insurance market is developed, expansion of PMJAY to the uncovered poorer segments of the missing middle should be considered.

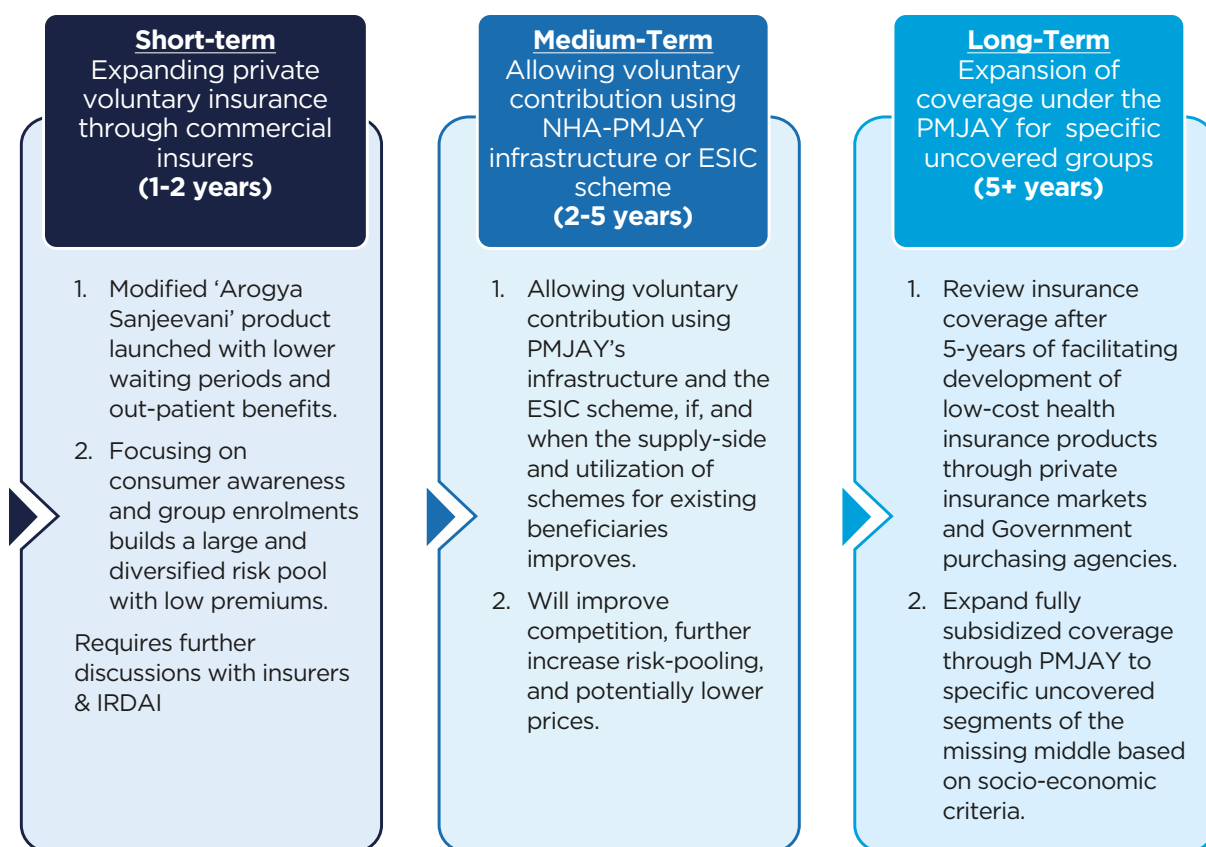


Figure 10: Implementation pathway for expansion of health insurance coverage to the missing middle

9

Appendix: Review of State Health Insurance Schemes



The below table outlines State Health Insurance schemes with particular focus on those covering the non-poor population. Please note that some of these scheme may have been recently modified, or merged with other health insurance schemes.

State	Scheme	Overview	Target population	Coverage	Comments
Karnataka	Arogya Karnataka Scheme	Packages all the existing risk pools like Vajpayee Arogyashree, Yeshaswini Scheme, Rajiv Arogya Bhagya Scheme, Rashtriya Swasthya Bima Yojana (RSBY) into one	a. BPL category and PDS cardholders according to the National Food Security Act 2013 b. Non-PDS cardholders in APL category	BPL Category: a. Free treatment at hospitals tied to the scheme For specified treatments, financial assistance up to Rs. 30,000/ year for a family of 5 members APL Category: a. Coverage on co-payment basis, 30% cost borne by the state government	Noteworthy success in reducing OOP. However, the missing middle is subsumed into the APL category and receives inadequate coverage relative to BPL category patients.
Andhra Pradesh	Arogya Raksha Scheme	Extends the ambit of the previously implemented Dr YSR Arogyashree scheme beyond the BPL category to cover the APL category.	To cover those who not covered by an existing scheme providing health insurance to BPL families, State government employees, and working journalists. Broadly, it targets those in the APL category.	a. Rs. 2 lakhs/annum/ individual for all members of the APL family for 1044 procedures b. New plans introduced as of May 2020 with a sum insured ranging from Rs. 1 lakh to Rs. 10 lakhs. c. Basic premium amount is Rs. 1200/person.	No explicit mention of the missing middle, it has successfully expanded insurance coverage beyond the vulnerable sections of society and the organized sectoremployees.
Tamil Nadu	Chief Minister's Compre- nsive Health Insurance Scheme	Introduced in 2009 to provide free treatment at empaneled government and private hospitals to the poorest of the poor/ low income/unorganized groups. However, it has not been comprehensive enough to cover the missing middle.	Annual incomes are less than Rs. 72,000/ annum	a. Cashless hospitalization facility for certain specified ailments b. Coverage of up to Rs. 5,00,000/ family/year, on a floater basis c. Covers 1016 procedures (23 diagnostic procedures & 113 follow up packages)	No specific mention of any plans that cover the missing middle Average annual income of those engaged in the Urban Informal sector is approximately Rs. 75,555 (ILO 2018, 45) Most of the missing middle is excluded from the scheme that only covers those earning Rs. 72,000 or less

State	Scheme	Overview	Target population	Coverage	Comments
Odisha	Biju Swasthya Kalyan Yojana	Aims to provide universal health coverage by expanding eligibility of the scheme beyond the vulnerable BPL section	<ul style="list-style-type: none"> a. Entire population of Odisha b. Special focus on economically vulnerable families c. BKKY Cardholder families, BPL & AAY Cardholders' families & families with income lower than Rs.60,000 in Urban area 	<ul style="list-style-type: none"> a. Most health services are free of cost for the general population at all Public Health Institutions up to MCH level b. Annual Cashless Health Coverage of Rs.5 Lakh/family and Rs.10 Lakh for Women members of the family/annum 	A comprehensive health insurance scheme with extensive coverage that also covers the missing middle
Goa	Deen Dayal Swasthya Seva Yojana	<ul style="list-style-type: none"> a. Financed through the state budget b. Aims to provide health insurance coverage for the entire resident population of Goa 	<ul style="list-style-type: none"> a. Any person residing in the State of Goa for five years or more 	<ul style="list-style-type: none"> a. Rs. 2.5 lakhs/annum for a family of three or fewer members b. Up to Rs. 4 Lakhs for a family of four and more members 	Could use a more specific focus on the missing middle. The scheme covers a good chunk of the population but there is no differentiation in its insurance product. It is using the 'one size fits all' formula without realising the special needs of different section of the population without health insurance.
Maharashtra	Mahatma Jyotiba Phule Jan Arogya Yojana	Improve access of BPL and APL families to medical care involving hospitalization, and consultations through a network of empaneled hospitals	<ul style="list-style-type: none"> a. BPL families holding a yellow ration card/AAY card/Annapurna Card b. Saffron Ration Card Holders c. Farmers from 14 agriculturally distressed districts 	<ul style="list-style-type: none"> a. All expenses relating to hospitalization up to Rs. 1, 50,000/ family/year on a floater basis b. Covers all expenses incurred during procedure and hospitalization for 10 days, including complications c. Includes 971 procedures, 121 follow up packages and also exceptional cases where the Rs. 1,50,000 limits can be increased 	The scheme does cover the income bracket (ILO 2019, 45) of Maharashtra's missing middle. However, the sum insured is relatively low. Stringent criteria for eligible cardholders exclude a portion of the population needing a safety net regardless of the few assets they possess.

State	Scheme	Overview	Target population	Coverage	Comments
Bihar	Mukhya Mantri Chikitsa Sahayata Kosh	Subsidized healthcare for treating serious illnesses requiring hospitalization	Residents of Bihar whose income is less than Rs. 1 Lakh	Benefit amount granted according to the designated treatment packages	Though the scheme covers the missing middle concerning its approximate average annual income in Bihar, it has relatively low coverage with only limited benefit packages. The percentage of the state government's budget allocated for the scheme is also low compared to other states.
Haryana	Mukhya Mantri Muff Ilaaj Yojana	Aims to be a comprehensive scheme to provide free treatment to all citizens	All citizens	<ul style="list-style-type: none"> a. Free surgeries up to secondary level and subsidized at the tertiary level under Surgery Package Programme to all residents of Haryana b. Free supply of essential medicines c. Free investigations / diagnostic services including X-Ray, Ultrasound and ECG d. Free dental treatment 	No explicit mention on covering the missing middle
Gujarat	Mukhya Mantri Amrutum Yojana	Originally launched to cater to BPL people, it has recently been modified to include lower-middle-class families	<ul style="list-style-type: none"> a. BPL families b. MA-Vaatsalya Yojana extended the scheme to families having annual income up to Rs. 4,00,000 lakh per annum 	<ul style="list-style-type: none"> a. Sum assured is up to Rs. 5,00,000/ family/annum b. 1763 procedures including those covered under PMJAY 	The scheme's extension under MA-Vaatsalya is inclusive of the bracket in which the missing middle in Gujarat earns in terms of annual income. The sum assured is also high and the benefits packages are also comprehensive

State	Scheme	Overview	Target population	Coverage	Comments
Punjab	Ayushman Bharat–Sarbhat Sehat.Bima Yojana	Flagship state health insurance scheme for cashless and paperless treatment is at government and empanelled private hospitals. Cost of the premium is paid by central and state government on a 60:40 basis	<ul style="list-style-type: none"> a. SECC 2011 data families b. Include the urban poor c. Smart Ration Cardholder families d. J-Form holder farmers e. Small traders registered with the Excise & Taxation Department f. Building and Other Construction Workers Welfare Board 	<ul style="list-style-type: none"> a. Rs. 5,00,000 per family/year for secondary and tertiary care hospitalization (in-patient services) b. 1396 treatment packages that include hospitalization expenses, day-care surgeries, and treatment expenses of the new-born child 	The guidelines of the scheme are not transparent in terms of the income bracket in which eligible beneficiaries lie
Madhya Pradesh	Ayushman Bharat Nirmayam Yojana	Extension of the Ayushman Bharat scheme launched by Central Government in 2018	<ul style="list-style-type: none"> a. BPL population b. Occupational categories- Mechanics, Drivers, Construction workers 	<ul style="list-style-type: none"> a. Sum assured is Rs. 5,00,000/ family/ annum b. 1350 benefits packages with fixed rates for treatments and procedures c. Only includes costs associated with hospitalisation. No cover for OPD visits and consultations. 	The guidelines of the scheme are not transparent in terms of the income bracket in which eligible beneficiaries lie
West Bengal	Swasthya Sathi Scheme	Established to achieve universal health protection for every resident of the State	<ul style="list-style-type: none"> a. Deprived, BPL categories in the SECC survey b. Civil organisation volunteers c. Contractual staff of government departments d. RSBY policy-holders e. Unorganised workers 	<ul style="list-style-type: none"> a. Basic health cover for secondary and tertiary care up to Rs. 5 lakh/annum/ family b. Covers multiple procedures with fixed rates, across a wide range of specialities divided into 7 categories 	The scheme's documents vaguely mention 'Unorganized workers of any category as may be agreed' without specifying an income bracket and whether or not the missing middle is covered under it.

State	Scheme	Overview	Target population	Coverage	Comments
Assam	Assam Arogya Nidhi	Fully subsidized health assistance scheme that also provides financial protection from natural and man-made disasters	<p>c. BPL families</p> <p>d. Families having a monthly income of less than Rs. 10,000/-</p>	<p>e. The sum assured is up to Rs. 1,50,000/family/annum</p> <p>f. Coverage for diagnostic procedures and various treatments across 7 specialities</p> <p>g. Coverage for injuries and illnesses caused by natural and man-made disasters</p>	<p>The income bracket specified in the scheme includes the missing middle concerning their monthly income (ILO 2019, 45). Though the sum assured is relatively low, the coverage is comprehensive and also includes protection from disasters.</p>
Jharkhand	Chief Minister of Health Insurance Scheme		<p>h. BPL category families (MNREGA workers, Rickshaw & taxi drivers, Domestic workers)</p> <p>i. Those with annual income less than Rs. 72,000</p>	<p>j. Rs. 50,000 allotted for secondary health services/family/year</p> <p>k. Rs. 2,00,000 allotted for tertiary health services/family/year</p>	<p>General lack of transparency regarding the scheme's guidelines. According to the annual income parameter, the missing middle of the state is eligible for coverage under this scheme. However, information regarding benefit packages and the treatments covered under them is missing and premium coverage for the missing middle within the specified income bracket is possibly inadequate.</p>
Manipur	Chief Minister-gi Hakshelgi Tengbang (CMHT)	The scheme aims to provide cashless secondary and tertiary care on Hospitalization at empanelled Network Hospitals. Oriented only towards the BPL category	<p>l. Deprived and BPL sections identified in the SECC 2011 survey</p> <p>m. Widows</p> <p>n. Disabled persons</p> <p>o. Local Media Person & Newspaper hawkers</p>	<p>p. Sum assured is Rs. 2,00,000/eligible family/year on a floater basis</p> <p>q. 1844 procedures covered under 43 package categories; only covers costs associated with hospitalization</p>	<p>The scheme's guidelines do not state that it covers the missing middle of the income bracket its members fall under. It is primarily oriented towards the economically vulnerable and disabled people. Sum assured is also relatively low. Benefit packaged is comprehensive and inclusive of a range of procedures</p>

State	Scheme	Overview	Target population	Coverage	Comments
Tripura		Proposed state-specific scheme along the lines of Ayushman Bharat. No information is available yet			
Mizoram	Mizoram State Health Care Scheme	Linked with the RSBY and envisaged to provide health insurance coverage to the entire population of Mizoram including BPL and APL families	BPL and APL families not covered by PM-JAY	<ul style="list-style-type: none"> a. Rs. 70,000 assured sums for general illnesses b. Limit of the coverage can be extended to Sum assured Rs. 2,00,000/family/annum for serious illnesses c. 1,390 benefit packages spanning procedures under multiple specialities. d. OPD cost coverage also available for some diseases, but majority coverage is for costs associated with hospitalization 	Although there is no clear mention of any income bracket or occupations, the scheme's directives state its aim to cover those excluded by PMJAY and the schemes covering the organised sector.
Arunachal Pradesh	Chief Minister Arogya Arunachal Yojana	Cashless coverage for secondary and tertiary level of medical treatment along with follow-up care benefits	<ul style="list-style-type: none"> a. Arunachal Pradesh Scheduled Tribe (APST) and Non-APST members and their families b. State government employees and dependents 	<ul style="list-style-type: none"> a. Rs. 1,00,000/family/year for secondary ailments b. Rs. 4,00,000/family for serious tertiary ailments c. 1300+ procedures across 23 specialities are covered under this scheme 	No mention of coverage of the missing middle- or the-income bracket under which this group falls

State	Scheme	Overview	Target population	Coverage	Comments
Meghalaya	Megha Health Insurance Scheme	Complementary to PM-JAY and utilises the framework of RSBY. Promoted to provide financial aid to all the citizens of the state at the time hospitalization and reduce the out-of-pocket expenses	<ul style="list-style-type: none"> a. BPL citizens b. APL citizens 	<ul style="list-style-type: none"> a. Sum assured after the convergence with PM-JAY is Rs 5,00,000 /family / annum on a floater basis b. 630 packages containing fixed rates for various treatments across specialities 	Though there is no mention of income brackets or coverage of the missing middle, the scheme is extensive enough to cover APL families. Benefit packages are comprehensive in terms of the fixed rates available for a variety of treatments.
Himachal Pradesh	HIMCARE	HIMCARE scheme is an extension of PM-JAY with identical policy guidelines	<p>Extends eligibility beyond PMJAY:</p> <ul style="list-style-type: none"> a. Category- I: BPL and deprived not covered by PMJAY b. Category II: Select groups predominantly comprising of non-permanent Government workers (e.g., ASHAs, contractual employees, etc.), disabled, and those aged above 70 years c. Category III: Other beneficiaries not covered above 	Same coverage as PMJAY.	Allows coverage of the missing middle on a partially subsidized, voluntary and contributory basis.

State	Scheme	Overview	Target population	Coverage	Comments
Telangana	Arogyashree Scheme	Provides financial protection to families from medical expenses incurred during hospitalisation and treatment of serious illnesses	BPL families with ration cards	<p>a. The assured sum available is up to Rs. 1,50,000 /family/ year on a floater basis. An additional Rs. 50,000 is provided as a buffer if expenses exceed Rs. 1,50,000</p> <p>b. 949 treatments are covered under the scheme's benefits packages</p>	No coverage for the missing middle.
Rajasthan	Bhamashah Swasthya Bima Yojana	Objective of providing cashless treatment at government and empanelled private hospitals to reduce OOP expenditure	BPL families	<p>a. Rs. 30,000/family/year assured in case of general illnesses</p> <p>b. Up to Rs. 3,00,000/family/year on a floater basis for serious illnesses</p>	No coverage for the missing middle
Uttarakhand	Atal Ayushman Uttarakhand Yojana	Aims to enhance and extend the coverage provided by PM-JAY to provide free treatment of common and serious illnesses at empanelled healthcare institutions	<p>a. 11 defined occupational un-organised workers (in Urban Sector) of the Socio-Economic Caste Census (SECC) database of the State</p> <p>b. Those not covered by PM-JAY and organised sector schemes such as CGHS, and ESIC</p> <p>c. Economically vulnerable population under PM-JAY with unmet needs</p>	<p>a. Rs. 5,00,000/family/ year for secondary and tertiary care</p> <p>b. 1,557 treatment packages spanning 25 specialities</p>	The scheme does not state an income bracket to define eligibility of the missing middle. However, it does indicate to cover them because it claims to cover those left out by PM-JAY and organised sector schemes of CGHS, ESIC

State	Scheme	Overview	Target population	Coverage	Comments
Chhattisgarh	Dr. Khubchand Baghel Swasthya Sahayata Yojana (DKBSSY)	A state-specific extension of benefits provided under PM-JAY	<p>a. Economically vulnerable and deprived sections identified by SECC records and Antyodaya ration card</p> <p>b. APL category persons holding relevant ration cards corresponding to their income levels</p>	<p>a. Sum assured for BPL category is up to Rs. 5,00,000/family/annum on a floater basis</p> <p>b. Sum assured for APL category persons is Rs. 50,000/family/annum on a floater basis</p>	Lack of transparency in terms of treatments and benefits packages availableEven if the scheme covers the missing middle by including APL category persons, the sum assured is relatively low and possibly inadequate to meet their healthcare needs
Kerala	Karuna Arogya Suraksha Paddhati Yojana (KASPY) Comprehensive Health Insurance Scheme (CHIS)		Poor and deprived categories now covered under PM-JAY.	KASPY has similar benefits to PM-JAY, CHIS only assures a sum up to Rs. 30,000 per eligible family per year	These schemes do not cover the non-poor segments of the population
Uttar Pradesh	Mukhya Mantri Jan Arogya Abhiyan	Extension of PM-JAY with identical policy guidelines			No coverage for the missing middle
Uttarakhand	Atal Ayushman Uttarakhand Yojana	Aims to enhance and extend the coverage provided by PM-JAY to provide free treatment of common and serious illnesses at empanelled healthcare institutions	<p>a. 11 defined occupational un-organised workers (in Urban Sector) of the Socio-Economic Caste Census (SECC) database of the State</p> <p>b. Those not covered by PM-JAY and organised sector schemes such as CGHS, and ESIC</p>	<p>a. Rs. 5,00,000/family/ year for secondary and tertiary care</p> <p>b. 1,557 treatment packages spanning 25 specialities</p>	<p>a. The scheme does not state an income bracket to define eligibility of the missing middleHowever, it does indicate to cover them because it claims to cover those left out by PM-JAY and organised sector schemes of CGHS, ESIC</p>

State	Scheme	Overview	Target population	Coverage	Comments
Chhattisgarh	Dr. Khubchand Baghel Swasthya Sahayata Yojana (DKBSSY)	A state-specific extension of benefits provided under PM-JAY	<p>c. Economically vulnerable population under PM-JAY with unmet needs</p> <p>a. Economically vulnerable and deprived sections identified by SECC records and Antyodaya ration card</p> <p>b. APL category persons holding relevant ration cards corresponding to their income levels</p>	<p>a. Sum assured for BPL category is up to Rs. 5,00,000/family/annum on a floater basis</p> <p>b. Sum assured for APL category persons is Rs. 50,000/family/annum on a floater basis</p>	<p>Lack of transparency in terms of treatments and benefits packages available. Even if the scheme covers the missing middle by including APL category persons, the sum assured is relatively low and possibly inadequate to meet their healthcare needs</p>
Kerala	Karuna Arogya Suraksha Paddhati Yojana (KASPY) Comprehensive Health Insurance Scheme (CHIS)		Poor and deprived categories now covered under PM-JAY.	<p>KASPY has similar benefits to PM-JAY, CHIS only assures a sum up to Rs. 30,000 per eligible family per year</p>	<p>These schemes do not cover the non-poor segments of the population</p>
Uttar Pradesh	Mukhya Mantri Jan Arogya Abhiyan	Extension of PM-JAY with identical policy guidelines			No coverage for the missing middle

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