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Health Insurance Literacy and Health Outcomes: An Insured–Uninsured Study in North Bengal

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ABSTRACT: India's expansion of health insurance through schemes such as Ayushman Bharat and Swasthya Sathi has not automatically produced better comprehension, utilisation, or health outcomes. This study examines health insurance literacy (HIL) as a determinant of perceived quality of care and overall health outcomes, and maps the awareness profile of uninsured individuals to identify barriers to enrolment. Data were collected through a structured questionnaire from 470 respondents in Darjeeling and Jalpaiguri districts of West Bengal, 367 insured and 103 uninsured. Descriptive statistics, Pearson correlation, and multiple regression were used. Among insured respondents, HIL scores ranged from 3.54 to 3.84 on a five-point scale, with independent policy renewal the weakest dimension ($M = 3.54$, $SD = 1.06$). HIL predicted perceived quality of care ($R = 0.743$, $R^2 = 0.552$, $F = 126.785$, $p < 0.001$), with understanding of terms ($\beta = 0.356$), awareness of policy types ($\beta = 0.301$), and confidence in plan comparison ($\beta = 0.287$) as significant predictors. HIL also explained 49–50% of variance in health outcomes ($R = 0.698$–0.707, $B = 0.731$–0.735, $p < 0.001$). Among the uninsured, awareness scores ranged from 3.47 to 3.77, with document language the most reported barrier ($M = 3.47$, $SD = 1.08$). Despite this, 67.6% expressed willingness to purchase insurance if it were affordable and easy to understand. The coverage-to-outcome gap in these districts is, in large part, a literacy and communication gap.

1. INTRODUCTION

India's health insurance landscape has changed considerably since liberalisation in 1999. The entry of private insurers and the establishment of IRDAI widened the product range and extended formal coverage to millions (IRDAI, 2023; Sharma, 2018). Government schemes pushed this further—RSBY provided hospitalisation cover of ₹30,000 annually to below-poverty-line families from 2008, and Ayushman Bharat PM-JAY later extended ₹5 lakhs per annum to the bottom 40% of the population (Hooda, 2020; Garg et al., 2020). In West Bengal, the state's Swasthya Sathi scheme had enrolled over 10 crore residents by December 2021, nominally covering more than 90% of the population. On paper, these are remarkable gains. In practice, coverage and comprehension have moved at very different speeds. West Bengal is an example of this problem. Even though every household in the state is part of a health scheme, more than 70% of them still have to pay a lot of money for hospital

care, which is higher than the national average of 64% (NSS 2015–16). When people get sick they have to pay for most of their health care costs themselves, which is over 60% of the total cost nationwide (Barik & Thorat, 2015). In Darjeeling and Jalpaiguri—the two areas we are studying—there are problems with health care: the mountains make it hard for people to get to hospitals, many tea garden workers do not know about health insurance, and because many people speak different languages they cannot understand the health insurance policies. Health insurance literacy, which means knowing how to choose, understand and use a health insurance policy, is a part of the problem. If people do not have health insurance literacy they may have health insurance but not know how to use it—like finding a hospital that is part of their network or getting free treatment. For people who do not have health insurance, not knowing about health insurance can also cause problems: they may think health insurance is too expensive or they do not know if they can get it, and this lack of knowledge is hard to change with awareness campaigns.

Most research on health insurance literacy in India looks at the country or states with better health insurance systems. The Darjeeling and Jalpaiguri areas have not been studied much. This study looks at a survey of 470 people from both areas. Two groups were considered: 367 people who have health insurance and how well they understand their health insurance and if this affects the quality of care they get; and 103 people who do not have health insurance and what they know about health insurance and what stops them from getting it.

The conceptual foundation of this study draws on an established body of evidence linking health insurance literacy (HIL) to health behaviour and outcomes. HIL is understood to comprise three interrelated dimensions: terminological knowledge (familiarity with terms such as premium, deductible, co-payment, and exclusion), evaluative capacity (the ability to compare plans and identify appropriate coverage), and self-efficacy (confidence in navigating the insurance system when it matters). Bardy (2023, 2024) demonstrated that each dimension independently predicts health behaviour and that literacy is not a proxy for general education, meaning that even formally educated first-generation insurance adopters may score poorly if they lack direct exposure to insurance products. In India, Sharma (2018) and IRDAI (2023) found that low HIL is widespread in semi-urban and rural settings, persisting even among those enrolled in government schemes—a problem acutely visible in tea garden communities and in districts where PM-JAY enrolment has outpaced procedural comprehension. Research also establishes that HIL shapes how insured individuals perceive the quality of care they receive; policyholders who understand their entitlements are better equipped to evaluate and advocate for appropriate treatment, whereas those who do not tend to accept substandard care without recognising its cause (Adegboyega et al., 2020). The pathway from HIL to health outcomes operates through multiple channels—timely access, preventive behaviour, financial protection, and treatment adherence—and the financial protection channel is particularly significant in the Indian context, where out-of-pocket expenditure remains the principal driver of household impoverishment (Barik & Thorat, 2015) and where even nominally covered households fail to realise protection when they cannot navigate claims (Hooda, 2020). Among the uninsured, the evidence reveals a consistent paradox: conceptual awareness of insurance coexists with non-enrolment. Hooda (2020) found that official coverage figures overstate actual utilisation by approximately 68%, a gap driven by low benefit awareness and procedural barriers rather than outright indifference. In Darjeeling and Jalpaiguri specifically, overlapping barriers—document complexity, registration requirements, the absence of trusted village-level intermediaries, and the nominal but uncomprehended coverage of tea garden workers—sustain enrolment gaps even among eligible households, making these districts a particularly instructive site for examining the literacy-coverage disconnect.

2. RESEARCH METHODOLOGY

2.1 Study Area

The study is about Darjeeling and Jalpaiguri districts in North Bengal. These two districts are different in terms of geography and economy. Darjeeling is a comparatively more hilly area so it is hard to get to insurance offices, hospitals and registration centres. On the other hand, Jalpaiguri is flatter and has better connections to cities but it has a lot of tea gardens, low income per person and a lot of people living in rural areas who do not have much experience with insurance. Both Darjeeling and Jalpaiguri districts have a lot of people enrolled in Swasthya Sathi, yet people are still spending a lot of their own money on health care (Paul & Sarkar, 2023; Hooda, 2020). This makes these districts a good place to study the difference between having health insurance and actually understanding how it works.

2.2 Sample and Data Collection

In this study, 470 people were surveyed including 367 insured individuals and 103 non-insured individuals. The people with insurance answered questions about Health Insurance Literacy, how they used healthcare, what they thought about the service, if they were happy with it and how healthy they were. They answered these questions by choosing a number from one to five where one meant they strongly disagreed and five meant they strongly agreed. The people without insurance told us what they knew about insurance, what they thought about it and why they did not buy it. The sampling includes dynamics like different ages, income levels and places they lived such as cities, small towns, villages and tea gardens to keep the randomness of the process.

2.3 Analytical Approach

Descriptive statistics, including means and standard deviations, were computed for all Likert-scale items. Pearson correlation analysis was employed to examine the relationship between the Health Literacy Instrument and the outcome variables. Multiple regression analysis was conducted to determine the relative contribution of the instrument's constituent dimensions to respondents' perceived quality of care. Simple regression was subsequently used to assess the explanatory power of aggregate Health Literacy Instrument scores with respect to overall health outcomes. These analyses were undertaken to facilitate a deeper understanding of the instrument and its relationship to the measured outcomes. Significance was evaluated at $\alpha = 0.05$ and $\alpha = 0.01$.

3. RESULTS

3.1 Health Insurance Literacy Profile

Table 1 shows the scores for the eight HIL items (N = 470). The scores go from 3.54 to 3.84 which means people have a good understanding of HIL items overall. The highest average score, 3.84, was for understanding words like premium and deductible and co-pay and out-of-pocket expenses. A lot of people—72.4 percent—said they agreed or strongly agreed with this. This just shows that most people have an understanding of these words because they have learned about them from the scheme and from talking to agents (Bardy, 2023; Paez et al., 2014).

Table 1. Health Insurance Literacy (HIL) Items, Descriptive Statistics (N = 470)

No.	HIL Item	Mean	SD
1	I understand key health insurance terms (premium, deductible, co-pay, out-of-pocket expenses).	3.84	0.96
2	I am aware of the different types of health insurance plans available (individual, family, group).	3.71	0.99
3	I know what benefits are typically covered under a standard health insurance policy.	3.68	1.00
4	I am familiar with common exclusions and limitations of health insurance policies.	3.59	1.03
5	I feel confident comparing different health insurance plans and choosing the one that suits me.	3.62	1.01
6	I know whether preventive care services (vaccinations, screenings) are covered under my plan.	3.64	1.02
7	I generally renew my health policy without any reminder.	3.54	1.06
8	I am aware of the different types of policies available (individual, family, critical illness).	3.65	1.00

Note: Five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree)

The weakest dimension was independent policy renewal (M = 3.54, SD = 1.06), with 21.3% of respondents disagreeing. This shows that insurance companies are not doing a good job of managing policies proactively. People also did not know much about what was not covered by their insurance—21.3% of people did not know about exclusions—a big problem because it causes a lot of arguments when people try to make a claim. These patterns are consistent with evidence that understanding of exclusions and renewal processes lags behind basic definitional literacy (Kim et al., 2013; Edward et al., 2019).

3.2 Healthcare Utilisation Behaviour

Table 2 shows how people use their health coverage. Most people use their coverage often, with 68.5% saying so, and they like going to private hospitals instead of government ones, with 68.1% preferring private facilities. A worrying finding is that people delay getting help: 51.5% of people said they wait until it is really necessary to seek help. Even though 64.9% said having insurance makes them use services more often, people still wait too long to get help. This shows that just having coverage is not enough to change how people behave when it comes to seeking help. This echoes findings from Yagi et al. (2022) and Tipirneni et al. (2018), who showed that low HIL correlates with avoidance of healthcare services even among the insured.

Table 2. Healthcare Utilisation Behaviour, Frequency and Descriptive Statistics (N = 470)

No.	Utilisation Item	SD%	D%	N%	A%	SA%	Mean (SD)
9	I frequently visit healthcare facilities for regular check-ups or treatment.	6.4	12.8	17.0	42.6	21.3	3.61 (1.04)
10	I regularly use preventive healthcare services such as vaccinations and screenings.	6.0	11.7	18.1	43.6	20.6	3.62 (1.02)
11	I prefer to visit a private healthcare provider over a government facility.	5.5	10.2	16.2	40.4	27.7	3.80 (0.98)
12	I tend to delay seeking medical attention until it becomes unavoidable.	8.1	19.1	21.3	36.2	15.3	3.31 (1.11)
13	Having health insurance encourages me to use healthcare services more often.	4.3	12.8	18.1	42.6	22.3	3.71 (0.99)
14	I often choose alternative or traditional medicine over modern healthcare.	11.1	23.4	19.1	31.9	14.5	3.16 (1.12)
15	I use my health insurance coverage whenever I seek healthcare services.	3.8	9.6	18.1	44.7	23.8	3.80 (0.95)
16	I am generally satisfied with the quality of healthcare services I receive.	5.1	10.6	17.0	44.7	22.6	3.74 (0.97)

Note: SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree.

Preference for alternative or traditional medicine (M = 3.16, SD = 1.12) had the lowest mean, with 34.5% disagreeing, indicating that traditional care is used alongside, rather than in place of, modern healthcare for most respondents.

3.3 HIL and Perceived Quality of Care

The Pearson correlation between HIL and perceived quality of health services was 0.713 ($p < 0.01$). A multiple regression model with three HIL dimensions yielded $R = 0.743$, $R^2 = 0.552$, $F = 126.785$, $p < 0.001$, explaining 55.2% of variance in perceived quality of health services. The model was statistically significant and consistent with evidence from O'Connor & Kabadayi (2020) and Call et al. (2021) showing that consumer ability to choose and use insurance shapes perceptions of care. Details of the model are in Table 3.

Table 3. Multiple Regression: HIL Dimensions Predicting Perceived Quality of Health Services (N = 470)

Predictor	B	SE	β	t	p
Constant	0.956	0.082	—	11.658	0.000
Understanding of Key Terms	0.312	0.054	0.356	5.778	0.000
Awareness of Policy Types	0.274	0.058	0.301	4.724	0.000
Confidence in Plan Comparison	0.215	0.049	0.287	4.389	0.000

Note: Dependent variable = Perceived Quality of Health Services. $R = 0.743$, $R^2 = 0.552$, Adj. $R^2 = 0.550$, $F = 126.785$, $p < 0.001$.

Understanding of key terms was the strongest predictor ($\beta = 0.356$, $B = 0.312$, $p < 0.001$), followed by awareness of policy types ($\beta = 0.301$, $B = 0.274$, $p < 0.001$) and confidence in plan comparison ($\beta = 0.287$, $B = 0.215$, $p < 0.001$). All three dimensions were significant independent predictors, confirming that parts of being able to read and understand things are important on their own when it comes to how people who have insurance think about the care they get (Nobles et al., 2019; Williams et al., 2020). What really stands out is that understanding what words mean is the most important thing. If people do not understand what their insurance covers, this is the reason they do not think their care is good.

3.4 HIL and Overall Health Outcomes

Among insured respondents, the average scores on eight health outcome items ranged from 3.76 to 3.88. The highest score was for 'Health insurance has made it easier to access the healthcare I need' ($M = 3.88$, $SD = 0.92$). On the other hand the lowest score was for 'Health insurance has helped me manage chronic conditions' ($M = 3.76$, $SD = 0.98$). Frequency and descriptive data are presented in Table 4.

Table 4. Health Outcomes, Frequency and Descriptive Statistics, Insured Respondents (N = 367)

No.	Health Outcome Item	SD%	D%	N%	A%	SA%	Mean (SD)
1	My overall health has improved after getting health insurance coverage.	3.0	6.8	18.5	46.2	25.5	3.84 (0.94)
2	Health insurance has made it easier to access the healthcare services I need.	2.8	5.9	17.6	48.1	25.6	3.88 (0.92)
3	I am more likely to attend regular medical check-ups because I have health insurance.	3.2	7.4	19.3	44.9	25.2	3.82 (0.95)
4	Health insurance has helped me manage any chronic conditions I have.	3.5	8.1	21.5	42.3	24.6	3.76 (0.98)

5	My financial burden for medical expenses has decreased since getting insured.	2.9	6.5	18.7	46.8	25.1	3.86 (0.93)
6	I receive timely medical treatment because of my insurance coverage.	3.1	7.2	20.2	44.5	25.0	3.81 (0.95)
7	Being insured makes me more inclined to take preventive health measures.	3.4	7.9	21.0	43.2	24.5	3.78 (0.97)
8	The quality of healthcare I receive has improved because I have health insurance.	3.2	7.0	19.6	44.8	25.4	3.82 (0.94)

Note: SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree.

The Pearson correlation between aggregate HIL and health outcomes was $r = 0.698$ ($p < 0.01$). The regression model confirmed HIL as a strong predictor: $R = 0.698$, $R^2 = 0.487$, Adjusted $R^2 = 0.486$, $F = 392.480$, $p < 0.001$ ($B = 0.735$, $\beta = 0.698$, $t = 19.812$). In an extended analysis the results were similar: $R = 0.707$, $R^2 = 0.500$, $B = 0.731$, $F = 260.542$, $p < 0.001$. All figures are presented in Table 5. These findings are consistent with international evidence that health insurance literacy explains substantial variance in health-related outcomes and behaviour (Yagi et al., 2022; James et al., 2020; Ghimire et al., 2023).

Table 5. Regression Summary: HIL Predicting Overall Health Outcomes (N = 470)

Statistic	Ch.4 (Tables 4.4.3–4.4.5)	Ch.5 Extended	Interpretation
R	0.698	0.707	Strong positive association
R^2	0.487	0.500	~49–50% of variance explained
Adjusted R^2	0.486	—	Robust fit
Std. Error	0.412	—	Acceptable prediction accuracy
F	392.480	260.542	$p < 0.001$
B (unstandardised)	0.735	0.731	Each 1-unit ↑ in HIL → +0.73 units in health outcomes
β (standardised)	0.698	0.707	Strong effect size
t	19.812	21.290	$p < 0.001$
Constant	0.924	1.118	Baseline health outcome at minimal literacy

Note: Ch.4 = Chapter 4 primary analysis; Ch.5 = Chapter 5 extended analysis. All models significant at $p < 0.001$.

Health literacy accounts for about half of the differences in health outcomes, making it just as important as all other factors combined when it comes to getting the most out of health benefits (Tzenios, 2019; Abdollahipour et al., 2020). The information about what people do shows how this works. For example, 70% of people with health literacy go to the doctor for regular

check-ups but only 48% of people with low health literacy do this. Similarly, 73% of people who are good at understanding health information have not put off getting medical care because it costs too much, but only 29% of people who are not as good at understanding health information can say the same thing.

3.5 Awareness Profile of Uninsured Respondents

Table 6 presents the awareness data for the 103 uninsured respondents. The highest-scoring item was 'I believe health insurance is essential for financial security in times of illness' (M = 3.77, SD = 0.95), with 69% agreeing or strongly agreeing. The uninsured are not dismissive of insurance; they understand its value. 'I understand that health insurance can reduce my out-of-pocket expenses' scored equally high (M = 3.73, SD = 0.97). Government scheme awareness was moderate: 65.1% knew that Ayushman Bharat exists for eligible individuals (M = 3.68), and 66.2% had heard of insurance policies available in India (M = 3.73). These patterns mirror findings from Thakur et al. (2023) and Yusuf et al. (2019) on insurance awareness and attitude gaps in comparable populations.

Table 6. Health Insurance Awareness Among Uninsured Respondents (N = 103)

No.	Awareness Item	SD%	D%	N%	A%	SA%	Mean	SD
9	I have heard about health insurance policies available in India.	4.0	8.3	21.5	42.0	24.2	3.73	0.98
10	I understand basic insurance terms such as premium, deductible, co-payment, and network hospitals.	4.5	9.1	22.3	41.5	22.6	3.66	1.01
11	I am aware that government schemes like Ayushman Bharat exist for eligible individuals.	4.2	8.8	21.9	43.0	22.1	3.68	0.99
12	I understand that health insurance can reduce my out-of-pocket healthcare expenses.	3.8	7.9	20.6	44.2	23.5	3.73	0.97
13	I am aware that health insurance can cover preventive care services.	3.9	8.2	21.0	43.5	23.4	3.72	0.98
14	I know how to apply for a health insurance policy if I decide to get one.	4.1	8.5	22.6	41.9	23.0	3.68	0.99
15	I believe health insurance is essential for financial security in times of illness.	3.5	7.1	20.4	45.8	23.2	3.77	0.95

16	I am confident I could compare different health insurance plans if needed.	4.0	8.6	21.7	42.5	23.2	3.71	0.98
17	I find the language in health insurance documents difficult to understand. (reverse-coded)	6.3	11.2	23.4	37.8	21.3	3.47	1.08
18	I would consider buying a policy if it were affordable and easy to understand.	3.8	7.6	21.0	43.9	23.7	3.74	0.96

Note: Items 9–18 from the questionnaire instrument. Scale: 1 = Strongly Disagree to 5 = Strongly Agree. Item 17 is reverse-coded.

The lowest-scoring item was the reverse-coded statement on language difficulty: 'I find the language in health insurance documents difficult to understand' (M = 3.47, SD = 1.08). Here, 37.8% agreed and 21.3% strongly agreed that policy documents are hard to understand—making it the item with the highest rate of acknowledged difficulty across the entire uninsured module. In a place where people speak Bengali, Nepali, Hindi and many other local languages, a policy document written in Bengali or English is not just hard to read; it is also hard to understand because it needs to be translated. This finding resonates with Villagra et al. (2019) and Edward et al. (2019) on linguistic and literacy barriers to insurance uptake. The important thing found was that 43.9% of people said they would consider buying insurance if it were cheap and easy to understand, and 23.7% strongly agreed with this, so in total 67.6% of uninsured respondents expressed willingness to enrol. Only 11.4% said they would never buy insurance.

4. DISCUSSION

4.1 Literacy as an Interpretive Lens on Care Quality

HIL explains 55.2% of how people feel about the quality of care they receive. This result makes sense because people have ideas about what good care is, and what they know about their insurance helps them understand what they are getting. There are three things that help people make sense of their insurance: what their policy covers, what other plans are available, and how to compare them. When people understand these things they can judge if they are getting care (Adegboyega et al., 2020; O'Connor & Kabadayi, 2020). If they do not know these things they may think differently about the care.

In places like Darjeeling and Jalpaiguri many people are new to having insurance. It is very important for them to understand how their insurance works. If they do not understand, getting care without paying may not seem like a benefit of insurance, being told that something is not covered may seem like a bad thing, and good care may seem bad if people do not know what it should cover. To make care better we need to help people understand their insurance (Kakar et al., 2022; Mahoney, 2022). Just making the insurance company better may not be enough if people do not know what they are getting.

4.2 The 50% Variance Finding and Its Implications

Health Insurance Literacy accounts for fifty percent of the difference in health outcomes, which means that within the insured population of these two districts, being able to understand health insurance is just as important as all other factors combined when it comes to getting the most out of health benefits. Health Insurance Literacy determines whether people who have insurance go to the doctor early, get check-ups, take their medicine and avoid waiting too long to get help (Nobles et al., 2019; Brown, 2018). The difference between people who understand their health insurance and those who do not is substantial: people with HIL are 70% more likely to get regular check-ups compared to people with low HIL, who only get check-ups 48% of the time.

This is important when it comes to evaluating public health insurance programs. Usually we look at things like how many people are enrolled and how quickly claims are paid, but these things do not tell us if people really understand their insurance or if they are getting the care they need (Hooda, 2020; Parisi et al., 2023). We should start measuring Health Insurance Literacy on a regular basis along with enrollment numbers to get a better idea of how well these programs are working.

4.3 The Uninsured: Willing but Blocked

The people who do not have insurance know more than we think. They are not unaware or unable to pay for insurance. They are not indifferent either. The main problem for these people is that they have trouble understanding the language used in insurance documents and they have trouble following the procedures. The uninsured know that insurance is valuable for financial security and are aware of government schemes available to them. They are willing to buy insurance if it is easy for them to do so. This profile is consistent with the findings of Yusuf et al. (2019) and Atinga et al. (2015), who found that procedural complexity and language barriers rather than attitudinal indifference are the primary drivers of non-enrolment.

Focus should be put on making insurance easier to understand rather than just making it cheaper. It should also be explained that insurance products in a simpler way, with plain-language summaries. People like ASHA workers, Gram Panchayat members and tea estate liaison officers can play a role in spreading awareness regarding insurance (Khetrapal et al., 2019). The government's Health and Wellness Centres can also help teach people about insurance along with providing care.

4.4 The Structural Context

The economy of the tea gardens, the hills in Darjeeling, the languages spoken in both districts, and the fact that a lot of people in these places are buying insurance for the first time all affect health insurance literacy in ways that are special to Darjeeling and Jalpaiguri. Tea garden workers may have insurance that their employer set up for them without really knowing what it means. Villages in the hills of Darjeeling are far from places where they can get insurance, which is a problem. Peer networks—which elsewhere diffuse insurance knowledge organically through informal conversation—are thin in communities where few have direct claims experience. These structural factors mean that off-the-shelf interventions designed for urban or more literate populations will not transfer directly (Kiwanuka & Sibindi, 2023; Gao et al., 2022). Community-based literacy programmes delivered through trusted local channels are more likely to produce results than mass-media campaigns or app-based outreach. The design of any intervention here must be grounded in the specific linguistic, geographic, and economic conditions of the districts.

5. CONCLUSION

This study shows that the gap between formal health insurance coverage and realised health benefit is, to a large degree, a literacy and communication gap. Among insured residents of Darjeeling and Jalpaiguri, HIL explained 55.2% of variance in perceived quality of care and approximately 50% of variance in health outcomes—placing literacy among the most consequential modifiable determinants of health benefit within the covered population. Among the uninsured, the barrier is not ignorance of insurance's value nor inability to pay, but document complexity and procedural opacity. 67.6% of uninsured respondents would consider enrolling if coverage were made affordable and understandable (Erlangga et al., 2019; Fiestas Navarrete et al., 2019).

These findings point to a clear policy shift: the next frontier of health insurance inclusion in underserved districts is communicative, not merely financial. Expanding coverage without expanding comprehension produces populations that are formally covered but practically excluded (Hooda, 2020; Parisi et al., 2023). IRDAI, state health departments, and insurers should treat literacy as a programme performance metric alongside enrolment, and invest in plain-language vernacular documentation, community-based literacy sessions through HWCs and gram panchayats, and HIL-focused training for frontline health workers (IRDAI, 2023; Brown, 2018; Patel et al., 2019).

The study has some limitations. It does not tell us which way the relationship between literacy and outcomes really works, because the study was done at one point in time. The way people were chosen for the study was good for the area, but it means we cannot say for sure if the results would be the same everywhere else. To really understand how improvements in Health Insurance Literacy lead to outcomes we need to do more research over a longer period of time.

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