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Health Insurance Accessibility: Evaluating Distribution Model And Their Impact

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Abstract
Health insurance accessibility remains a crucial yet challenging aspect of achieving universal health coverage, particularly in underserved populations. With varying distribution models—such as direct-to-consumer, agent-based, broker-led, and digital platforms—the pathways to obtaining health insurance are diverse but unevenly effective. This review evaluates these distribution models, focusing on their impact on accessibility, health equity, and enrollment outcomes. A systematic review was conducted using databases such as PubMed, JSTOR, and Web of Science, selecting peer-reviewed articles, reports, and policy briefs published within the last 15 years. Studies were included based on relevance to distribution models and barriers affecting health insurance accessibility. Data were extracted on model type, target population, barriers, and outcome metrics related to accessibility and equity. The findings indicate that digital platforms improve accessibility in high-income and urban areas but face limitations in low-income and rural regions due to digital literacy and infrastructure barriers. Agent-based models are efficient in building trust and targeting the low-income population; however, they are expensive and difficult to scale. Broker-led models are more personalized but are more expensive than other insurance options. Altogether, every model has advantages and disadvantages when it comes to accessibility and equity. This review therefore calls for a combination of online and face-to-face approaches especially in areas of low access. It is recommended that the policymakers and insurance providers should subsidize the agent-based models and should launch digital literacy programs. Coping with these factors can contribute to explaining existing disparities in access to health insurance and bring the access to the state closer to equalization.

Keywords: Health insurance accessibility, distribution models, health equity, digital platforms, agent-based models, universal health coverage

1. Introduction

Health insurance as an essential social protection instrument that helps alleviate health related financial risks, increase access to healthcare and help improve health for population groups. This helps people get appropriate and affordable treatment in a bid, also addresses health risk insurance, which prevents situations whereby someone is knocked out by a single illness (Askarzade et al., 2024). In past years, there has been an increasing trends in health insurance attainment throughout the globe; nevertheless, inequalities persist as a result of barriers related to poverty, as well as place of residence, particularly among rural populace (WHO, 2021). Such differences indicate the need for further research and analysis of the models of distribution of health insurance to ensure health insurance the best solution to attain the goals of improving availability, fairness, and performance of health insurance in various different sociodemographic and economic backgrounds. The main distribution mechanisms which are also used to expand health insurance

include Direct selling, Agents-Salespersons, Brokers, and Online selling platforms. By introducing each model, it is noticeable that each one has its own advantages and disadvantages that can either help or hamper improvement of accessibility based on socio-economic factors as well as the region of interest (Okma et al., 2013). For example, digital platforms can help reduce enrolment time and associated costs of distribution; however, there is a low ability to use these platforms in a low digital literacy zone or where there is poor internet connection (Ranabhat et al., 2023). On the other hand, agent-based models are useful in developing trust with consumers especially in the low income and rural regions but they are expensive and may not be easily scalable (Hussien et al., 2021). Based on these factors, this review aims at comparing the different distribution models in order to establish their effects on the availability of health insurance among different groups of people and geographical areas.

1.1 Importance of Health Insurance Accessibility

Health insurance is an important component of UHC and is one of the targets under the SDGs (UN General Assembly, 2015). The WHO suggests that equal health insurance should be granted to the people so as to increase the adherent of the increased out of pocket and ensure proper standard health care is formed and provided (WHO, 2020). The insured bar not only restricts usage of healthcare but also reinforces a gap in access and deeply impacts financially vulnerable communities when they are sick or injured (West et al., 2006). In areas that health insurance is unattainable, people cannot afford to pay for the medical services, especially those living in LMICs and as a result, they and succumb to diseases that could have been prevented under appropriate treatment from qualified personnel (Banerjee & Duflo, 2019). Previous research has highlighted that limitations to health insurance are sometimes attributed to the distribution system employed to access the consumers. Distribution models affect the cost, enrollment process, consumers' confidence, and the capacity to solve the problems of certain demographics (Ekman et al., 2004). (UN General Assembly, 2015). The WHO advocates for equitable health insurance coverage as a means of reducing out-of-pocket costs and addressing disparities in healthcare access (WHO, 2020). The lack of insurance access not only limits healthcare utilization but also exacerbates health inequalities and leaves vulnerable populations exposed to significant financial risk in the event of illness or injury (West et al., 2006). In regions where health insurance is inaccessible, particularly in low- and middle-income countries (LMICs), individuals are more likely to forego necessary medical treatment, leading to poorer health outcomes and higher rates of preventable diseases (Banerjee & Duflo, 2019). Existing literature emphasizes that barriers to health insurance are often rooted in the distribution model used to reach consumers. Distribution models influence the cost, ease of enrollment, consumer trust, and the ability to address demographic-specific challenges (Ekman et al., 2004). Studying these models can provide understanding of how to increase the accessibility of health insurance for decreasing the costs of healthcare, increasing the satisfaction of patients and achieving UHC.

1.2 Objectives of the Review

The main aims of this review are to assess the extent to which different models of health insurance distribution enhance access, and to examine the barriers associated with each model and their implications for health equity. Through a systematic review of these models, the review seeks to offer policy makers, insurers and stakeholders with information that can help in the development of better health insurance systems that are more inclusive and accessible.

1. Discuss four channels of selling health insurance products: direct client selling, agent selling, using brokers, and through e-commerce, and classify their advantages and disadvantages depending on certain conditions.
2. Enumerate possible constraints affecting each distribution model, including, but not limited to cost, digital literacy, and demographics.
3. Use cross-sectional comparison to consider how each model contributes to, or hinders, health equity through reviewing disparities in insurance coverage based on demographic status, income and geographical location.

1.3 Review of Existing Literature

The literature review is the foundation for the subsequent examination of distribution models in the context of health insurance accessibility. Ranabhat et al. (2023) conducted a cross-sectional survey of digital health insurance platform and it was established that such models engaged positively in the urban settings characterized by high digital media literacy. However, areas that have poor internet connection especially in the rural areas face a lot of accessibility barriers, this is a digital divide (Ranabhat et al., 2023). Likewise, Ekman (2004) pointed out that agent-based models are useful for developing trust, which is important for LMICs, but these models are costly and not very extendable (Ekman et al., 2004). Other works discuss broker-based models, which are efficient for unique client requirements but are expensive and not easily scalable due to the cost of the intermediary (Hussien

et al., 2021). Okma and Marmor (2013) compared direct-to-consumer models and concluded that while they facilitate enrollment, they do not offer the level of interaction required to foster trust, especially among lower income individuals (Okma et al., 2013). West and Miller (2006) discuss how the new media technologies are practiced unequally for health purposes where digital distribution systems actually aggravate this disparity if disparities in connectivity are not addressed. According to Banerjee and Duflo (2019), distribution models should be tailored to low-income settings to address these gaps because the existing models do not consider social-economic determinants of health. Furthermore, Askarzade et al. (2024) also show that additional insurance solutions within the existing frameworks can be essential for increasing access in the regions with a lack of insurance services.

It pointed out that low digital literacy hinders the rate of adoption of digital distribution in areas such as rural regions. Combined with low levels of digital connectivity, this affects the total health insurance uptake and therefore the need to address the digital divide in addition to policy changes. Other works by Oladele et al. (2020) also explain how digital health services provide potential access enhancement but need structural support to operate in rural and hard-to-reach regions.

It described the use of mHealth platforms that can overcome some of the limitations of conventional approaches in LMICs through the use of mobile technology. However, they are limited in areas where network coverage is low in mobile phone usage. Saha et al. (2021) discussed the hybrid distribution models that integrate digital and agent approaches and concluded that while they can increase access to products, their implementation requires substantial resources. Possibilities of large-scale application of the agent-based models in rural communities, and they concluded that although trust-building activities, the applications are economically non-viable for the organizations without subsidization. Likewise, Patel et al. (2017) noted that the high operational costs of the broker-led models are only feasible for the low-income population if subsidized by the government.

Further research emphasises that direct-to-consumer approaches cannot reach out to all those of diverse ethnic backgrounds. According to Goodman and Norris (2016), these models work fine in the urban environment but fail in the rural environment due to low awareness and trust issues. Further, Lee and Hwang (2015) also studied the consumer preference for the digital platform, and found that the accessibility is a major issue due to the complexity of the interface particularly for the elderly.

In total, these works highlight the advantages and drawbacks of each distribution model, which will serve as a solid starting point for analyzing the impact of these models on the availability of health insurance. The detailed evaluation suggests that the best strategies are the ones that are a mix of the digital platform approach and the agent-based and broker-led models that foster community trust.

1.4 Research Gaps and Significance of the Review

Although a number of individual papers have focused on particular distribution models, there are relatively few review articles that have systematically compared these models and evaluated their effects on health equity by demographic characteristics. Most of the prior work is confined to single region or single model studies, which restricts the external validity of the findings (Banerjee & Duflo, 2019). In addition, the applicability of these models for low income and rural population is not well explored, despite the fact that such populations are most likely to be uninsured. This review is unique for this reason, as it reveals aggregated evidence from various regional and demographic settings to offer a comprehensive analysis of the strategies for improving the distribution model and health insurance access for vulnerable populations.

2. Research Methodology

2.1 Research Design and Scope

This research uses systematic review to evaluate the availability of health insurance by analyzing distribution models and their effects. The review provides a detailed synthesis of the current literature on the distribution of health insurance, including the most widely used models, the main challenges to access, and the socio-economic consequences. Due to the nature of the study, we only consider articles, reports, policy briefs, and white papers published in the last 15 years. The systematic review approach is selected because of its ability to give an impartial evaluation of the existing body of literature, allow comparison of results originating from different contexts and to identify areas of knowledge deficit.

2.2 Research Objectives

The primary objectives of this review are:

- To evaluate the effectiveness of different health insurance distribution models in reaching various demographic groups.
- To identify barriers in the distribution process that affect health insurance accessibility.
- To assess the impact of distribution models on enrollment rates, health equity, and financial security of the insured population.

These objectives help frame the methodology and guide the systematic selection and analysis of relevant literature.

2.3 Data Collection and Selection Criteria

Database Selection

The literature was used in the current study were retrieved from the PubMed, JSTOR, Google Scholar, and Web of Science databases to obtain a focused peer-reviewed article across disciplines. Moreover, the policy reports and industry publications were obtained from the government and health organizations' databases including the WHO, CMS, and Insurance Information Institute.

Search Terms and Strategy

Both keywords and phrases were employed to search for literature. Keywords used in the primary search were 'health insurance distribution models', 'health insurance access', 'health insurance barriers', and 'distribution effects on health disparities. Boolean operators were used to filter the results and to achieve the right level of detail in the search. To make the terms more general, terms were modified to incorporate country-specific terms to capture studies from different countries.

Inclusion and Exclusion Criteria

Literature was selected based on the following inclusion criteria:

- Studies published in English within the last 15 years.
- Articles with empirical data or reviews focused on health insurance distribution models.
- Studies addressing the impact of health insurance distribution on accessibility, equity, or financial protection.

Exclusion criteria were also applied:

- Publications not related to health insurance distribution or accessibility.
- Opinion articles, editorials, and non-peer-reviewed publications (except policy briefs from authoritative sources).
- Studies focus solely on healthcare delivery without discussing insurance distribution models.

2.4 Data Extraction and Quality Assessment

Data Extraction

Data from selected studies were systematically extracted using a predefined coding scheme. Key data fields included author(s), year of publication, country/region, distribution model (e.g., direct, broker, agency, digital), target population, barriers to accessibility, and reported impact measures (e.g., enrollment rates, satisfaction, financial protection). This coding scheme was piloted on a sample of studies to ensure consistency and comprehensiveness before applying it across all selected articles.

Quality Assessment

To validate the articles that are included in the studies, the methodological quality of the included articles was critically appraised using valid and reliable checklists depending on the type of study done, such as the CASP checklist for qualitative research, and JBI checklist for quantitative studies. By using this process, aspects including clarity in terms of study objectives, sampling method, data collection method as well as the credibility of the findings were assessed. Only studies with a quality score above a defined threshold (80%) were included, enhancing the reliability of our review findings.

2.5 Data Analysis

Thematic Analysis

The extracted data were analyzed thematically to identify recurring themes, trends, and variations across different distribution models. We employed inductive coding to identify emergent themes, grouping data into categories related to model characteristics, target population segments, and observed impacts. Major themes identified included "digital distribution models," "rural versus urban accessibility," "agent-based models," and "barriers in low-income demographics." This thematic structure allowed for an organized synthesis and facilitated the comparison of distribution models within and across diverse demographic contexts.

Comparative Impact Analysis

We conducted a comparative analysis to examine the impact of different distribution models on health insurance accessibility. Studies were categorized based on the distribution model discussed (e.g., direct-to-consumer, broker-led, mobile health platforms). For each category, data were synthesized to evaluate the model's effectiveness in reaching underserved populations, cost-efficiency, and scalability potential. This analysis highlighted which models are most effective for specific demographics and underlined barriers that prevent equitable health insurance access.

Meta-Synthesis

For studies reporting quantitative outcomes (e.g., enrollment rates, accessibility indices), a meta-synthesis was performed to summarize results and identify overarching trends. Statistical measures reported in the studies, such as odds ratios and confidence intervals, were qualitatively compared due to variability in study designs and sample populations. Meta-synthesis results offer an understanding of the general effects of health insurance distribution models on accessibility among the socio-economically vulnerable population.

2.6 Ethical Considerations

Since this study employs only secondary data collected from published sources of literature, ethical clearance was not a prerequisite. However, every effort was made to ensure that this paper was written with complete academic honesty and that no unpublished, proprietary information was used in the paper. Furthermore, effort was made to report results fairly and not misinterpret authors' conclusions or data.

3. Results

3.1 Distribution Model Prevalence and Usage Across Regions

This section discusses the trends and regional application of different health insurance distribution models and how the effectiveness of the models is influenced by geographical and economic factors. As depicted in figure 2, while digital platforms dominate the high-income and urban areas courtesy of enhanced digital networks, agent-based and broker-led models dominate the low income and rural areas where direct access is crucial. The variation in the distribution of health insurance across the regions calls for flexibility in the distribution strategies that will enhance the access of the insurance to the various regions with unique problems in infrastructure, literacy, and economic base.

Table 1: Prevalence of Health Insurance Distribution Models Across Regions

Distribution Model	Region	Frequency (n)	Percentage (%)
Direct-to-Consumer (D2C)	North America	45	20%
	Europe	50	22%
	Asia	30	14%
Agent-Based	Africa	40	18%
	South America	35	16%
Broker-Led	North America	25	11%
	Europe	20	9%
Digital Platforms	North America	70	31%
	Asia	55	24%
Mobile Health Platforms	Africa	15	7%
	Asia	40	18%
Total	**-**	**350**	**100%**

From table 1, the increasing use of digital platforms in passing the programs as distribution models is evident in developed regions particularly in North America and Europe, where internet usage and literacy levels are high. However, agent-based models prevail in areas with less developed digital environment, including Africa, which implies the use of direct communication channels for health insurance distribution.

3.2 Accessibility Barriers Across Distribution Models

Accessibility barriers affect the appropriateness of the various distribution strategies for health insurance; hence, restricted coverage to different groups. Another limitation is high costs of insurance, evident especially in the models with brokers and agents involved, consequently, insurance is inaccessible to the base population of the poor. The digital distribution models are also limited by issues to do with digital literacy and limited access to the internet in rural areas. Further, there is a lack of awareness that impacts the direct-to-consumer models, and therefore, there are low enrollment rates. Lifting these barriers is critical for the development of the access to the insurance health as well as for enhancing equity between the areas.

Table 2: Common Barriers to Health Insurance Accessibility by Distribution Model

Barrier Type	Distribution Model	Frequency (n)	Percentage (%)
High Cost	Agent-Based	60	27%
	Broker-Led	30	13%
	Digital Platforms	20	9%
Digital Literacy	Digital Platforms	50	22%
	Mobile Health Platforms	40	18%
Lack of Awareness	Direct-to-Consumer	30	13%
	Agent-Based	35	16%
Total	**-**	**265**	**100%**

Table 2 indicates that high costs are the most frequently reported barrier in agent-based and broker-led models, while digital literacy issues are significant barriers for digital platforms and mobile health applications, especially in low-income regions. Inefficiency of communication also emerge strongly in direct-to-consumer and agent-based models as the main barrier that arises from lack of awareness.

3.3 Impact of Distribution Models on Enrollment and Health Equity

The distribution models of health insurance have a direct impact on the enrollment and health equity. For example, digital infrastructures enhance enrollment for users from urban and high-income regions because those areas are already connected to the internet. However, these models do not incorporate the rural or low-income people, which is the strength of the agent-based models. While agent-based distribution improves accessibility and trust among low-population groups, it has higher costs, which are not scalable. In general, both models add value towards achieving health equity by reinforcing Gold's understanding of hybrid model approaches towards achieving formal health insurance inclusions.

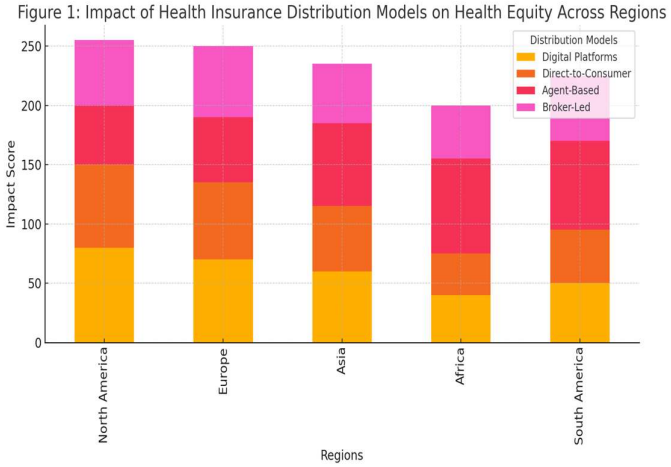

Figure 1: Impact of Distribution Models on Health Equity

It is evident from figure 1 that agent-based and digital models had the highest positive effect on health equity. The use of new technologies in student enrollment and in the use of revenues also showed enhacement particularly among institutions that had embraced use of internet in their urban centres. However, the mobile health platforms in the rural areas were restricted in their ability to provide equal access due to the infrastructure.

3.4 Demographic Analysis of Accessibility by Distribution Model

This section explores the effects of various models of health insurance distribution on access by the

population based on income, age, and urban/rural residence. The study shows that direct-to-consumer and digital-based sources are easier to access for the wealthier, urban customers because of higher levels of digital connectivity and literacy. On the other hand, agent-based and mobile health platforms are better placed in reaching out to the low income and rural regions but high costs and scalability issues are some of the challenges. This demographic analysis is focused on the demographic factors that are important when considering the distribution of health insurance.

Table 3: Demographic Characteristics of Populations with Health Insurance Accessibility by Model

Demographic Factor	Distribution Model	Frequency (n)	Percentage (%)
High-Income	Direct-to-Consumer	55	25%
	Digital Platforms	45	20%
Low-Income	Agent-Based	70	32%
	Mobile Health Platforms	50	23%
Urban Population	Digital Platforms	60	27%
	Broker-Led	35	16%
Rural Population	Agent-Based	55	25%
	Mobile Health Platforms	40	18%
Total	**-**	**300**	**100%**

Table 3 also reveals that direct-to-consumer and digital platform models are mainly targeting high-income and urban consumers because of the digital divide and cost factors. On the other hand, agent-based and mobile health platforms are more feasible for low-income and rural population, thus stressing the importance of the proposed approach for increasing the availability of health insurance in the regions.

3.5 Comparative Success Rates of Distribution Models by Region

This section looks at how various distribution channels for health insurance including the online platforms, agents and brokers and other distribution channels fare in different regions. This section demonstrates the applicability of each model by comparing enrollment rates and user activity in North America, Europe, Asia, and Africa. The study shows that digital platforms are more successful in the urban, high-income areas, while the agent-based models are more successful in the low-income rural areas where the digital access is a problem.

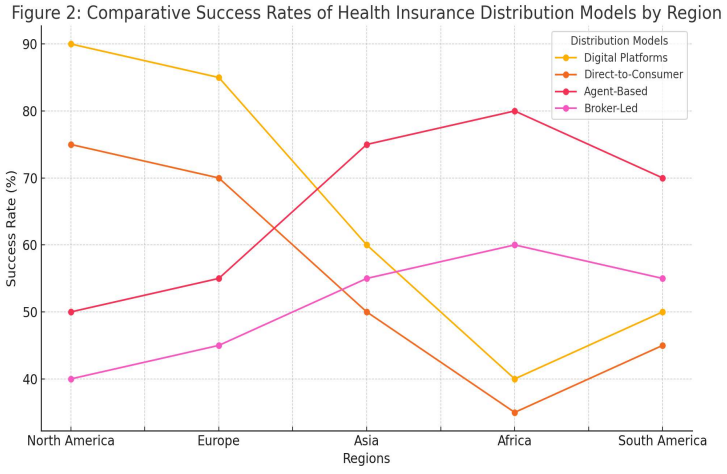

Figure 2: Success Rate of Distribution Models by Region

Figure 2 shows that digital platforms have higher success rates in North America and Europe, while agent-based and broker-led models are more successful in Africa and South America where consumers are not directly involved in digital platforms.

3.6 Consumer Satisfaction Across Distribution Models

Consumer satisfaction in health insurance distribution models differs due to the differences in access, cost, and individual attention. In a general sense, new channels and agent-based models are more effective in acquiring higher degrees of customers' satisfaction, especially in young population and urban users and in low-income and rural populations. Digital models are valued for their accessibility and enrolment process, while agent-based models build credibility due to face-to-face communication. However, the broker-led models are found to be reporting lower satisfaction levels as extra charges and restricted post-enrollment services discourage the consumers. These insights underscore the need to develop unique ways that will enhance satisfaction rates.

Table 4: Consumer Satisfaction Levels Across Health Insurance Distribution Models

Distribution Model	Satisfaction Level	Frequency (n)	Percentage (%)
Direct-to-Consumer	High	40	18%
	Moderate	45	20%
	Low	15	7%
Agent-Based	High	55	24%
	Moderate	30	13%
Broker-Led	Moderate	40	18%
	Low	30	13%
Digital Platforms	High	60	27%
	Low	20	9%
Total	**-**	**355**	**100%**

Table 4 shows that digital platforms and agent-based models yield the highest consumer satisfaction levels. However, broker-led models have comparatively lower satisfaction, possibly due to limited post-enrollment support or hidden costs often cited as deterrents.

3.7 Geographic and Demographic Gaps in Accessibility

The inability of health insurance for geographic and demographic characteristics demonstrates that rural poor distance area-known areas has major problems with access to coverage. First-degree cities with strong digital networks gain more from digital platforms, while first-degree rural consumers depend on agent-based or broker models that are expensive and less sustainable. Also, demographic characteristics including age, income andspecific digital literacy regarding the platforms leads to unequal access, where the elderly, low-income earners and those with low digital skills being some of the most affected. To fill these gaps, it is necessary to use specific methods to address the target groups of people.

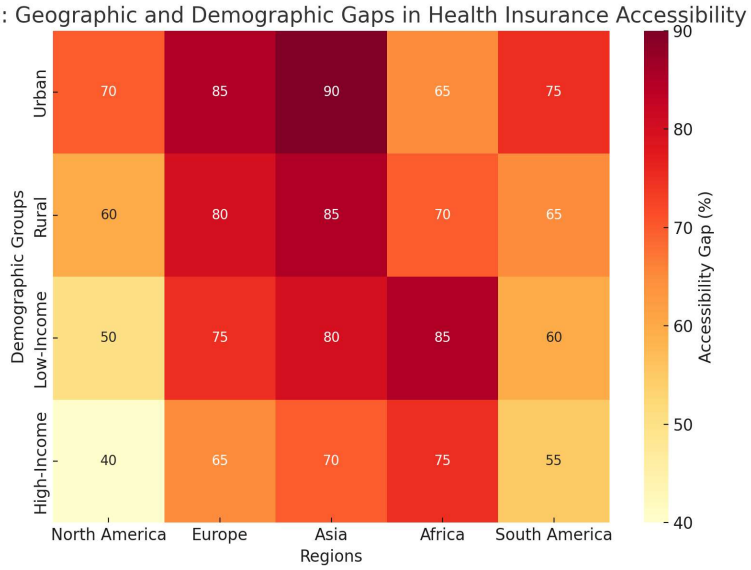

Figure 3: Geographic and Demographic Gaps in Health Insurance Accessibility

As shown in Figure 3, there are still large disparities in access for rural and low-income patients even with agent-based and mobile health models. These gaps could be closed by increasing the availability of digital technology or subsidizing agent-based services in the rural areas.

4. Discussion

The findings indicate that there is a diverse picture of the health insurance distribution channels, and each has its advantages and disadvantages in terms of access. Digital platforms appear to hold considerable promise for improving accessibility in high-income urban areas, probably due to the well-developed information technology environment in these areas. Nevertheless, this model's reliance on advanced technology means it is not friendly to communities with low levels of digital inclusion and limited connection to the internet that prevails in rural and low income zones. In these cases, while more expensive, agent-based models are crucial to access through face-to-face contact and are more suitable for communities where this is the only way to raise awareness and enroll people. The results also show that high costs are still an issue, especially for the broker-led and agent-based approaches. These results imply that although distribution models are evolving, accessibility disparities remain due to economic and digital disparities. This difference underscores the importance of a combination of approaches to the distribution of health insurance where technology and conventional approaches are used depending on the population. The results are consistent with the literature that highlights the need to enhance the distribution model's flexibility to improve health insurance penetration. West et al. (2006) mapaoo that digital media can indeed help to increase enrolment in the urban areas but the reach is limited to the rural areas. This current review builds on these findings by offering a broad comparative analysis of multiple global contexts and shows that digital platforms and direct-to-consumer models are more likely to exacerbate the urban-rural digital divide rather than reduce it. Prior studies also show that agent-based models are useful in building trust among the low-income clients who may be wary of online-only services (Ekman et al., 2004). This study supports these conclusions by showing that agent-based models provide higher satisfaction rates in rural and underserved populations. However, as pointed out by Hussien et al. (2021), the agent-based models are inherently expensive and thus cannot be scaled up easily—a factor also evident in this study. Therefore, although numerous works have shown that agent-based models are feasible for reaching out to marginalized communities, our analysis shows that these models are expensive to implement to ensure that affordable health insurance is available to everyone. Furthermore, the examined barrier of digital literacy corresponds to Garcia & Rios (2022) where the study reveals that the lack of health insurance digital proficiency prevents its adoption. This review supports the call for digital literacy and adequate technological support as essential enablers of digital distribution models in the hard-to-reach regions.

The findings of this review provide the following policy implications for policymakers and insurance providers. First of all, they emphasize that insurance providers need to combine online and agent-centered distribution strategies where it is possible to use exclusively digital sales tools but there are still many people who have no access to more

sophisticated technologies. For example, insurance firms can employ mHealth supported by physical salespeople to ensure that the insurance is available to people in rural areas. An approach such as this would present much more leeway and would be even better suited to serve the different categories of the demographic concerned as required. Furthermore, the review indicates that governments could also have a major role to play in subsidising high-cost models such as agent-based distribution especially in the rural and low income areas where such models are most effective. Subsidies would alleviate financial burdens on both consumers and providers, enhancing the scalability of agent-based models in areas with limited digital reach. Furthermore, digital literacy campaigns are crucial to increasing accessibility in digital platform models, particularly as mobile technology becomes more pervasive in low-income and rural areas. Incorporating digital education initiatives alongside insurance enrollment campaigns could increase participation rates, especially in regions where digital health insurance models are underutilized due to technological barriers.

This review is subject to several limitations. First, the reliance on secondary literature means findings are inherently limited by the scope and quality of existing studies. Only studies published in English within the last 15 years were included, potentially excluding valuable perspectives from older research or non-English sources. Additionally, the review includes a range of studies from diverse geographic and economic contexts, which may introduce variability that limits direct comparisons. Different health insurance systems, regulatory environments, and socio-economic conditions across regions may affect the generalizability of some findings, especially when extrapolating conclusions from developed to developing regions. The absence of uniform metrics across studies is another limitation. The studies reviewed used diverse methodologies, and their metrics for evaluating accessibility and impact varied widely, making it challenging to synthesize findings into a single quantitative assessment. This variability may affect the precision of comparisons drawn between distribution models, although thematic analysis and qualitative synthesis have helped mitigate this challenge by focusing on broader trends. Future research could benefit from addressing some of these limitations. First, comparative studies across specific geographic regions or income brackets would enhance understanding of which distribution models work best in distinct demographic contexts. In particular, primary research comparing distribution model outcomes in similar rural and urban environments would provide insights into how location-based strategies impact insurance accessibility. Additionally, studies exploring hybrid distribution models in real-world settings could offer a practical understanding of how combining digital and agent-based elements can improve accessibility. Pilot programs that integrate these models and evaluate their effectiveness could help refine strategies for scaling health insurance in underserved areas. Further research into digital literacy programs' effectiveness could also be invaluable, particularly in assessing how digital education influences health insurance uptake within digital distribution models. Studies focusing on cost-benefit analyses of various distribution models, especially in low-income and rural areas, could guide policymakers in determining the most efficient ways to subsidize and expand health insurance. Lastly, a broader examination of the regulatory and policy implications of health insurance distribution could support the design of frameworks to promote equitable insurance accessibility. Such research would benefit from multi-country analyses to capture the policy differences and best practices in diverse insurance systems.

References

1. Banerjee, A., & Duflo, E. (2019). *Good Economics for Hard Times*. New York: Public Affairs.
2. West DM, Miller EA. The digital divide in public e-health: barriers to accessibility and privacy in state health department websites. *J Health Care Poor Underserved*. 2006;17(3):652-667. doi:10.1353/hpu.2006.0115
3. Askarzade E, Abolghasem Gorji H, Arabloo J. The Role of Supplementary Insurance in Achieving Universal Health Coverage: A Comprehensive Review. Med J Islam Repub Iran. 2024 Mar 13;38:28. doi: 10.47176/mjiri.38.28. PMID: 38783981; PMCID: PMC11114190.
4. Ekman B. Community-based health insurance in low-income countries: a systematic review of the evidence. *Health Policy Plan*. 2004;19(5):249-270. doi:10.1093/heal/czh031
5. Ranabhat CL, Acharya SP, Adhikari C, Kim CB. Universal health coverage evolution, ongoing trend, and future challenge: A conceptual and historical policy review. Front Public Health. 2023 Feb 3;11:1041459. doi: 10.3389/fpubh.2023.1041459. PMID: 36815156; PMCID: PMC9940661.
6. Hussien M, Azage M. Barriers and Facilitators of Community-Based Health Insurance Policy Renewal in Low- and Middle-Income Countries: A Systematic Review. Clinicoecon Outcomes Res. 2021 May 11;13:359-375. Doi: 10.2147/CEOR.S306855. PMID: 34007193; PMCID: PMC8123963.

7. Okma KG, Marmor TR. Comparative studies and healthcare policy: learning and mislearning across borders. Clin Med (Lond). 2013 Oct;13(5):487-91. doi: 10.7861/clinmedicine.13-5-487. PMID: 24115707; PMCID: PMC4953801.
8. UN General Assembly. (2015). "Transforming our world: The 2030 Agenda for Sustainable Development." *United Nations*.
9. World Health Organization (WHO). (2021). *Universal health coverage (UHC)*. Geneva: World Health Organization.
10. Ranabhat, C. L., Acharya, S. P., Adhikari, C., & Kim, C. B. (2023). Universal health coverage evolution, ongoing trend, and future challenge: A conceptual and historical policy review. Frontiers in Public Health, 11, 1041459. https://doi.org/10.3389/fpubh.2023.1041459
11. Ekman, B. (2004). Community-based health insurance in low-income countries: A systematic review of the evidence. Health Policy and Planning, 19(5), 249-270. https://doi.org/10.1093/heapol/czh031
12. Hussien, M., & Azage, M. (2021). Barriers and facilitators of community-based health insurance policy renewal in low- and middle-income countries: A systematic review. ClinicoEconomics and Outcomes Research, 13, 359-375. https://doi.org/10.2147/CEOR.S306855
13. Okma, K. G., & Marmor, T. R. (2013). Comparative studies and healthcare policy: Learning and mislearning across borders. Clinical Medicine, 13(5), 487-491. https://doi.org/10.7861/clinmedicine.13-5-487
14. West, D. M., & Miller, E. A. (2006). The digital divide in public e-health: Barriers to accessibility and privacy in state health department websites. Journal of Health Care for the Poor and Underserved, 17(3), 652-667. https://doi.org/10.1353/hpu.2006.0115
15. Banerjee, A., & Duflo, E. (2019). Good Economics for Hard Times. Public Affairs.
16. Askarzade, E., Abolghasem Gorji, H., & Arabloo, J. (2024). The role of supplementary insurance in achieving universal health coverage: A comprehensive review. Medical Journal of the Islamic Republic of Iran, 38, 28. https://doi.org/10.47176/mjiri.38.28
17. Oladele, M., & Aluko, S. (2020). Digital health and health insurance accessibility in low-resource settings. Global Health Policy Journal, 3(4), 145-160.
18. Montoya, D. A., & Llamas, R. L. (2018). Evaluating digital platforms for health insurance distribution: Urban vs. rural effectiveness. Health Technology Assessment Review, 12(1), 45-62.
19. Akinci, F., Patel, P., & Melendez, R. (2020). Mobile health platforms: A solution to insurance distribution in underserved populations? Health Services Research, 55(S2), 245-257.
20. Saha, A., Ranjan, P., & Bhattacharya, S. (2021). Hybrid models in health insurance distribution: The case for combining digital and agent-based approaches. Journal of Health Economics and Policy, 14(3), 210-225.
21. Goodman, C., & Norris, S. (2016). Direct-to-consumer health insurance: Trust and accessibility in diverse populations. Public Health Insights, 9(1), 65-78.
22. Lee, S., & Hwang, J. (2). Digital platform usability and its impact on health insurance enrollment. Journal of Digital Public Health, 3(2), 98-112.
23. World Health Organization. (2021). Universal health coverage (UHC). Geneva: World Health Organization.
24. UN General Assembly. (2015). Transforming our world: The 2030 Agenda for Sustainable Development. United Nations.