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Commentary

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Re-envisioning contributory health schemes to achieve equity in the design of financial protection mechanisms in low- and middle-income countries

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Abstract

Universal health coverage has emerged as a global health priority, requiring that financing strategies that ensure low-income and medically and financially at-risk individuals can access health services without the threat of financial catastrophe. Contributory financing schemes and social health insurance (SHI) schemes, in particular, predominate in low- and middle-income countries (LMICs), despite evidence that suggests the most vulnerable remain excluded from such schemes. In this commentary, we discuss the need to re-envision schemes to prioritize equity, offering 3 concrete recommendations: adopt participatory designs for the co-design of schemes with beneficiaries, establish linkages between contributory financial protection schemes with economic empowerment initiatives, and prioritize the needs and preferences of beneficiaries over political expediency. Co-design alone does not necessarily translate into more equitable schemes, underscoring the need for greater monitoring and evaluation of these schemes that consider differential impacts across contexts and subgroups. In doing so, SHI schemes can be both attractive and accessible to populations that have long been excluded from financial protections in LMICs, acting as 1 channel in a broader financing strategy to achieve universal health coverage.

Key words: social health insurance; contributory health insurance; health financing; global health; universal health coverage.

Background

Universal health coverage (UHC) is a top priority in global health, with an increasing number of countries setting their own UHC agenda and targets following the ratification of the Sustainable Development Goals (SDGs) at the 2015 United Nations summit.[1,2] Universal health coverage has been defined in SDG3 as a 2-tiered commitment: equitable access to high-quality health services and protection from financial hardship that may arise from utilization of health services in the form of out-of-pocket payments.[3] Achieving UHC will require adequate health financing strategies that prioritize equity, ensuring that low-income and vulnerable individuals are protected from financial catastrophe.[1,4] Contributory prepayment mechanisms, particularly social health insurance (SHI) schemes, are the most common financial protection modality in low- and middle-income countries (LMICs).[5] The rise to prominence of the SHI model of financing health has been due, in large part, to pressures from the donor community, who have pushed the need to transition from aid and towards domestic resource mobilization for UHC.[5] Social health insurance was touted as an appropriate financing model based on findings from SHI experiences in Organization for Economic Co-operation and Development (OECD) countries, which show that roughly half of its member countries have contributory schemes (which encompass SHI) and half have noncontributory schemes.[6] This observation overlooks the fact, however, that (1) OECD member countries are not representative of LMICs and (2) over the past 70 years, several OECD countries have transitioned from contributory to noncontributory schemes, but no OECD country has transitioned from noncontributory to contributory schemes.[6] In other words, noncontributory schemes, which are funded by the government through tax revenue, have become increasingly common among OECD countries, compared with contributory schemes, which require employees to contribute funds.

Recent scholarship has called into question the appropriateness and effectiveness of the SHI model and, by extension, other contributory schemes as the optimal financial protection mechanism to finance UHC in LMICs.[5,6] The economic and structural fundamentals necessary for successful social insurance in LMICs are lacking, with high informal economies, limited tax bases, and underdeveloped public revenue collection infrastructures. Additionally, studies have highlighted that SHI has a tendency to crowd people out, magnifying inequities in health care access and failing to offer the anticipated financial protection.[1,7-10] Conversely, free universal access to health services funded through government revenues is not feasible in LMICs given the reality of struggling economies and constrained fiscal space for such massive social programs in these countries. Low- and middle-income countries have historically

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underspent on health, so looking to government revenues to fund country UHC goals will not happen overnight.[11]

Therefore, to provide effective financial protection from catastrophic health expenditures, we contend that a multifaceted approach, of which contributory schemes remain an important financing strategy among other financial strategies and mechanisms, offers a viable approach for achieving UHC in LMICs. It is critical to note that universal by design does not necessarily mean equitable access, with prior studies highlighting inequities between those employed in the informal and formal sectors with universal financial protection schemes.[12-14] Equity considerations should be at the core of the design of financial protection mechanisms to forestall crowding out vulnerable and at-risk populations, but such considerations must extend throughout the process—from design through implementation. To prioritize equity in insurance coverage and financial protection, there is a critical need to "re-envision" the design and implementation of contributory schemes with the goal of making enrollment both accessible and attractive to groups that should be the beneficiaries of these schemes but have long been left behind from full participation in SHI, including but not limited to individuals who are low-income, medically high-risk, and employed in the informal economy. In this commentary, we offer 3 recommendations to re-envision contributory schemes around equity and advance the commitment to UHC.

Recommendation 1: Adopt participatory approaches to generate insights about preferences and features that are important to anticipated beneficiaries, informing the design of contributory schemes

Enrollment in contributory health insurance schemes remains low in many LMICs, especially among vulnerable groups.[4] A recent systematic review found that affordability, inappropriate benefits packages, and stringent rules were prominent barriers,[7] which may explain limited enrollment in contributory schemes. In Western Kenya, for example, the vast majority of households surveyed reported a willingness to prepay for health care, even among those without insurance.[15] This suggests that community members recognize the importance of financial protections for health care, but there are persistent barriers to enrollment in existing schemes.[15]

With the growing commitment to UHC, many have looked to Rwanda, which has the highest enrollment in health insurance in sub-Saharan Africa, due in large part to its community-based health insurance (CBHI) program known as *Mutuelles de Santé*.[16] Despite their success in Rwanda, enrollment in CBHI schemes in other LMICs remains persistently low.[16] The success of CBHI schemes depends on its resonance with local values and trust in the community members,[17] but there is a need to understand how trust has been built in successful interventions, such as *mutuelles*. This will require a ground-up approach that emphasizes the importance of the end-users' perceptions, preferences, and needs.

Human-centered design (HCD) offers an approach to redesign schemes around the needs and preferences of end-users, or beneficiaries of the financial protection scheme, by using design thinking to develop solutions that are attentive to the needs, context, and experience of end-users of a service.[18] Human-centered design involves 3 phases, the first of which is inspiration, which relies on understanding the lived experiences of end-users to identify pain points.[19] During the subsequent phase, ideation, the team generates several potential solutions to the problem, which are then prototyped during the implementation phase.[19] During this final phase, prototypes are refined iteratively using feedback from end-users, which engages individuals and secures buy-in.[19]

Human-centered design should be used to co-design contributory schemes, considering benefit packages, payment mechanisms, financing sources, membership guidelines, pooling, and management structures,[20] to meet individuals' needs and preferences, thereby optimizing enrollment, or participation. Using HCD would be a marked departure from current design methods that often focus on willingness to pay (WTP), which can fail to capture the effects of insurance prices, risk aversion, expected losses from illness or injury, and probability of illness or injury.[21] Additionally, WTP designs rely on either observing past health service utilization or presenting hypothetical scenarios to individuals.[22] One limitation to modeling WTP from past health service utilization is that WTP for a service is affected by non-price factors, such as patient preferences for a particular provider or facility.[22] Similarly, hypothetical scenarios require individuals to make rational choices based on the brief information provided about the health service, which rarely contains information about disease severity or treatment effectiveness,[22] both of which affect WTP. With either approach, individuals' estimated WTP is affected by their perceived access to health care services and understanding of insurance.[21] Human-centered design, by contrast, captures the broader context and economic realities of the population for which the schemes are designed. PATH is deploying HCD to understand perceptions of financial protection schemes and preferences, finding that the predominant sentiment among respondents was willingness to contribute but constrained by availability of resources—immediate needs—feeding, and school fees over prepaying for health expenditures. Therefore, understanding prioritization of constrained finances within the informal sector is key to designing successful financial protection products/programs, including SHI schemes.

Recommendation 2: Explore linking economic empowerment programs with contributory health insurance schemes

Understanding affordability will be critical to the successful design of these schemes, as previous studies report that income is one of the most significant predictors of participation in contributory health insurance schemes.[7,10] Co-designed schemes using HCD should mitigate barriers to enrollment, but economic empowerment interventions addressing systems-level factors will play a critical role in increasing availability of disposable income, thereby enhancing the affordability for individuals and families to make contributions, and strengthening inclusion in such schemes.

Unfortunately, designing economic empowerment programs and health insurance schemes tends to occur in silos. Learnings from Orphan and Vulnerable Children programs funded by the President's Emergency Plan for AIDS Relief (PEPFAR), and the Determined, Resilient, Empowered, AIDS-free, Mentored and Safe partnership has utilized economic empowerment to reduce vulnerabilities to HIV infection,[23] may aid in integrating the co-design of health

insurance schemes with economic empowerment initiatives. In our work at PATH, we have seen the impact of economic empowerment programs funded through PEPFAR that have led to an increase in health care access, and in turn, improvements in health outcomes for people living with HIV.[24-26]

Recommendation 3: Health financing strategy decisions should be driven by insights and understanding of public preferences and needs, not political expediency

Substantial evidence shows that key groups, including the chronically ill, older adults, individuals with disabilities, female-headed households, displaced populations, and ethnic minorities, are left out of SHI programs.[1] This implies that the design of SHI programs often does not reflect the insights and preferences of potential beneficiaries, and rather are tailored towards political expediencies and mindsets of decision-makers and policymakers. Oversight and accountability are needed to ensure community preferences and input is built into policy design, building upon developments in health system responsiveness that seek to collect, respond to, and use end-users' feedback to improve access to services.[27] We recommend developing an approach that integrates public feedback into the design of schemes that require significant buy-in, rather than approaches oriented towards political expediency. Such an approach is likely to incur a number of obstacles, including limited stakeholder engagement, communication failures, and poor understanding of local knowledge.[28] Group model building offers 1 approach to overcome such challenges, bringing community members and decision-makers together to construct a shared language and understanding that can be translated into effective policy interventions.[28]

Conclusion

By co-designing schemes and building trust, establishing linkages with economic empowerment interventions, and prioritizing community insights and preferences in financing decision-making, we contend that contributory health insurance schemes can be re-envisioned around equity. Additionally, by engaging target populations and groups in co-design, technical designers and policymakers will identify alternative viable and trusted financial protection modalities that can be additive in providing a variety of financial protection tools for countries. These recommendations, however, rely on the premise that contributory schemes will serve as just 1 of the many channels, or mechanisms, in a broader financial protection strategy. Under this multi-pronged approach to financing UHC, we further contend that measures of financial protection must drive accountability of how funding is used.

Supplementary material

Supplementary material is available at *Health Affairs Scholar* online.

Conflicts of interest

Please see ICMJE form(s) for author conflicts of interest. These have been provided as supplementary materials.

Notes

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