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ORIGINAL RESEARCH

Implementing Health Financing Reforms in Africa: Perspectives of Health System Stewards

Tom Achoki, MD, MPH, Abaleng Lesego, BSc
Nairobi, Kenya; Utrecht, Netherlands; and Gaborone, Botswana

Abstract

BACKGROUND A majority of health systems in the sub-Saharan Africa region are faced with multiple competing priorities amid pressing resource constraints. Health financing reforms, characterized by expansion of health insurance coverage, have been proposed as promising in the quest to improve health sustainably. However, in many countries where these measures are being attempted, their broader implications have not been fully appreciated.

METHODS This study was based on perspectives of 37 health system stewards from Botswana who were interviewed in order to understand opportunities and challenges that would result in the quest to expand health insurance coverage in the country. Thematic synthesis of their perspectives, focusing on the key aspects of the health systems, was done in order to draw informative lessons that could be applicable to a broader set of low- and middle-income countries.

FINDINGS Health systems attempting to expand health insurance coverage would be faced with various opportunities and challenges that have implications on performance. By increasing the pool of resources available to spend on health, health insurance would afford health systems the opportunity to increase population access to and use of health services. However, if unchecked, this could also translate to uncontrolled demand for expensive medicines and other health technologies, leading to cost escalation and inefficiencies within the system. Therefore, the success of any health financing reform is dependent on embracing sound policies, regulations, and accountability measures.

CONCLUSIONS Health financing reforms have broader implications to health system performance that should be fully appreciated and anticipated before implementation. Therefore, health system leaders who are keen to improve health must view any health financing reforms through the broader framework of the health system framework in order to make progress.

KEY WORDS health systems, health financing reform, access to medicines, health insurance

INTRODUCTION

Over the past 2 decades, there has been progress in many countries in the sub-Saharan Africa region in addressing some of the priority population health needs. Health system stakeholders across the region have invested tremendous resources in health programs aimed at addressing some of the key areas, such as HIV/AIDS, malaria, and tuberculosis. Efforts to scale up health interventions for maternal

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From the African Institute for Health Policy Foundation, Nairobi, Kenya (TA); Centre for Pharmaceutical Policy and Regulation, Utrecht University, Utrecht, Netherlands (TA); I-TECH, Gaborone, Botswana (AL). Address correspondence to T.A. (n_achoki@yahoo.com).

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and child health conditions have also been reinforced. Recently, there has been clear evidence pointing to improvements in child survival that could be attributed to these efforts in many countries.[1-4]

With multiple competing priorities, many health systems in low- and middle- income countries are trying to secure their recent progress in improving population health. This is particularly urgent when considering that many of these countries are faced with a health transition characterized by emerging noncommunicable diseases, in the backdrop of the unfinished agenda of communicable diseases.[2,3] This situation has led to a vibrant debate on sustainable health financing options as means toward universal health coverage (UHC). It remains true that majority of low- and middle- income countries in Africa are heavily reliant on donor financing to deliver essential health services. This puts into the question the very sustainability of health programs that have led to the recent achievements in population health in many African countries.[2,3,5]

Therefore, many health systems decision makers are making efforts to secure their health financing position with proposals to tap into domestic resources and make progress toward UHC. By aligning their health financing strategies with the lofty policy aspirations of UHC, health system stewards would be able to mobilize across multiple stakeholders in the efforts toward sustainable financing.[4-6] Many are of the opinion that domestic resources would be more predictable, unlike donor funds, and therefore facilitate better planning and implementation of health services. In addition, investment of domestic resources would foster a stronger sense of ownership and accountability in health programming at different levels of the health system.[1,4,6]

The primary goal of any national health financing strategy is to raise adequate financial resources in ways that ensure the population in need can access health services without undue financial pressure.[4-6] Therefore, health systems should have functional structures to collect and pool resources that would enable strategic purchase of appropriate health goods and services for those in need.[4-6] In addition, in order to make progress toward UHC, the health financing function should also seek to promote access to and equitable distribution of health services and improve efficiency and cost effectiveness to ensure a sustainable use of resources.[4]

Therefore, any health financing reform needs to be investigated in totality before full-scale implementation. In particular, interrogation of the complex interactions across the different facets of the health system is an imperative for decision makers who need to appreciate both the intended and unintended consequences of such reform efforts. Failure to embrace this approach would risk putting any well-intended health financing reform into jeopardy, the consequences of which would be potentially calamitous to progress in population health.[4-9]

Our study was based in Botswana, a middle-income country in Africa that sought to institute ambitious health financing reforms, characterized by expansion of health insurance coverage in the population, starting with employees in the public sector. Based on the perspectives of health systems stewards, we seek to highlight the key challenges and opportunities that this reform agenda presents to the health system. In addition, our analysis attempts to generate a fuller understanding of the potential health system impacts of such reforms so that policymakers across low- and middle- income countries who are contemplating such action can anticipate and mitigate any unintended consequences.

METHODS

This was a qualitative study that sought to highlight the challenges and opportunities for health systems in the face of a proposed health financing reform. It was part of a larger study that sought to understand the demand for and uptake of health insurance among the public sector employees in the country.

Setting. The health system in Botswana followed a decentralized structure with varying levels of autonomy at the district level. The national Ministry of Health was the central planning and policy-setting unit, with the overarching responsibilities of coordination and supervision toward the national policy objectives.

The district health system was composed of many stakeholders drawn from various sectors, such as the public, private, and civil society, all working together to deliver health services. The role of the district was primarily implementation, where provision of health services was based on the principles of the primary health care. Within the district, there were different levels of health facilities, ranging from clinics and health posts to primary and district hospitals. The latter formed the first referral point within the district health system, offering a range of specialist support to the

clinics and health posts (which mainly provided preventive health services). Private providers also operated within the district health system, some in partnership with the public sector. At the pinnacle of the referral system were 2 national referral hospitals and 2 large private hospitals that offered a range of specialist health care. Figure 1 shows the Ministry of Health organizational structure.

Private health providers mainly catered to the urban populations with the capacity to pay for services. Meanwhile, those in the rural areas were mainly served by the public sector providers. Some of the major health system challenges cited in the public sector included insufficient human resources, limited infrastructure, and limited access to essential health technologies, particularly in rural areas. Invariably, some of these constraints had far-reaching implications on the quality of health services provided through various health outlets.

Access to medicines was through both public and private outlets, with the latter playing a relatively significant role in the urban areas where clients had the ability to pay. Within the public sector facilities, access to essential medicines was guaranteed by the government, whereas in the private sector, clients paid for medicines using medical insurance or out of pocket. However, for a number of chronic medications, the government had formed partnership with the private outlets to dispense medicines to patients from the public sector.

In Botswana, financial resources for health were derived from government, donors, and private sector (including household) sources. In summary, government allocated a portion of tax revenues for health service delivery in line with the national health policy guidelines. This source formed the largest contribution of resources for health, with the private sector playing an increasingly important role by contributing approximately 25% of the total health expenditure. Meanwhile, donor funds were mainly directed to vertical health programs such as HIV/AIDS and tuberculosis.

Both the government and the private sector acted as pooling agents for financial resources for health. From the revenues raised from general taxes, the government earmarked a proportion to finance

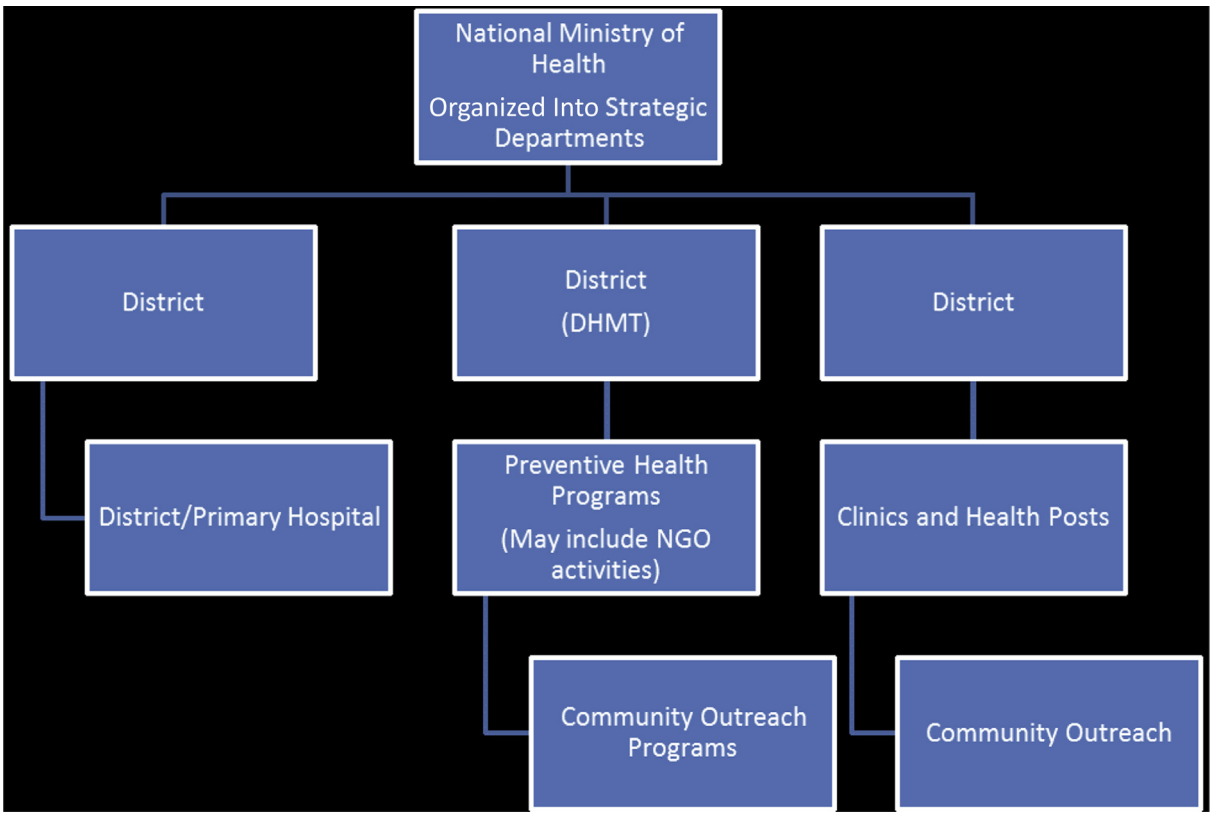

Figure 1. Ministry of Health organizational structure.

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health service delivery. In addition, government as an employer had a medical scheme for its employees that covered approximately 55% of the public sector employees, which translated to about 70,000 members. This medical scheme was voluntary with the government contributing 50% of the premiums.

In addition to the public sector pool, there were more than 10 private medical insurance pools of various sizes covering approximately the same number of beneficiaries as the public employees' health insurance scheme. This means that in total there were approximately 140,000 principal beneficiaries with medical insurance coverage for a population of about 2.2 million people. Overall, this translated to approximately 560,000 people with health insurance coverage. Figure 2 is a schematic presentation of the proposed pathway (shown as the brown arrow) to expand insurance coverage among the public sector employees and their beneficiaries, eventually expanding to the rest of the population.

Considering this landscape, we hypothesized that expansion of the public sector employees' medical scheme would present challenges and opportunities, as well as have significant impacts on the health system with both intended and unintended consequences. In the present study, we elected to focus on access to medicines and other health technologies as well as priority considerations in health service delivery.[9,10]

Sampling. The study duration was from June 2015 to September 2015. As a first step, we undertook an exhaustive desk review to identify the key actors involved in the Botswana health system. To be comprehensive, we sought participation from the public and private sectors; nongovernmental and civil society organizations (NGOs), including the faith-based actors; and bilateral and multilateral development organizations, among others. From this mapping exercise, a representative list of 31 organizations was drawn. This was to ensure that views of all key stakeholders were represented in our study.

Of the 31 organizations, 8 were identified as public sector, 11 were from the private sector, 6 were classified as NGOs, and 6 were bilateral and multilateral development organizations. The public sector consisted of employers, health service providers such as hospitals and clinics, and academic and research institutions. Meanwhile, the private sector comprised providers (mainly private hospitals and private practitioners), health financiers, and small to large industry employers. From the 31 organizations, 1-2 key informants were identified based on their specific functions and knowledge of health systems in the country. In total, we had a purposely selected sample of 42 participants, of which 5 were not able to participate because of various commitments.

Data Collection and Analysis. Thirty-seven key informants, ranging from policymakers to frontline health workers, were interviewed using a semistructured interview guide touching on all aspects of the health system. For each key informant interview, arrangements were made to secure a 45-minute appointment and a suitable venue to conduct the

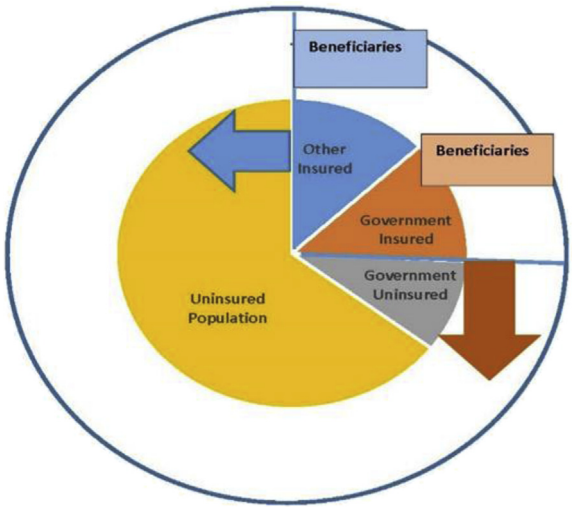

Figure 2. Expansion pathway for insurance coverage.

interview. This ensured that participants were attentive during the interview. Before the key informant interview started, researchers introduced themselves, explaining the objectives of the study, and secured verbal informed consent to proceed with the interview. Participants were made aware that they could cease participating in the interview at any stage without prejudice.

The interview proceeded with the participant introducing himself or herself and giving an overview of his or her work experience as it related to the objectives of the study. Leading questions, prepared by the authors, ensured that the participants responded to the key topical issues of interest. The specific focus was on access to medicines, efficiency, and cost-effectiveness of health service delivery. The interviews were conducted in English and transcribed verbatim. Subsequently, the data gathered were manually organized into thematic areas of the health system by 2 researchers.

Ethical Approval, Permissions, and Consent. Ethical approval to conduct the study was provided by the Department of Research at the Ministry of Health, Botswana. The data collection process ensured that all participants fully understood the objectives of the study and consented to the providing the information requested.

Analytical Framework. As shown in Figure 3, we based our analysis and interpretation on the understanding that effective health systems are expected to increase population access to safe and quality medicines and other health interventions in order to improve health. Apart from improving health, effective health systems are also supposed to select cost-effective interventions and deliver health services efficiently. In addition, responsiveness to the legitimate nonhealth expectations of the population is a primary desirable of a well-functioning health system, just as ensuring fairness in financial contribution.[7-9,11]

Being responsive captures the health seeker's interactions with the health system, with the expectations of dignity, respect, and freedom of choice. Financial and risk protection, on the other hand, covers the fact that contributions to the health system should be based on household ability to pay and therefore that poor households should not be impoverished in their quest for quality health care. Finally, service provision should be done efficiently and cost effectively while adhering to the principle of equity.[8,11]

RESULTS

Given the interconnectedness of the health system, the proposed health financing reform would have a number of impacts that would present opportunities and challenges to the overall functioning of the health system. Potential implications to access to medicines and efficiency and cost effectiveness of health service delivery are summarized as follows.

Access to Medicines and Other Health Technologies. It was clear that the proposed health financing reform had the potential to increase the resources available to spend on health service provision as a result of increased employee contributions and the government subsidy offered for each employee that joins the scheme. Therefore, as more financial resources become available, demand for medicines and other health technologies would potentially increase. Those with health insurance coverage would be able to access and use health services, particularly through the private sector, where such health technologies are readily available. On the other hand, the public sector, through which most of the population without health insurance gets health services, access to highly specialized and costly health products is tightly regulated through the referral system.

Figure 3. The health system framework. (Adapted from World Health Organization. Everybody's Business: Strengthening Health Systems to Improve Health Outcomes: WHO's Framework for Action. Geneva, Switzerland: World Health Organization; 2007).

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In addition, having health insurance often comes with an entitlement where beneficiaries are more prone to demanding specific health goods and services from their providers. Therefore, unless there are tight controls, demand for medicines and other health technologies is likely to increase as health insurance coverage expands. Inasmuch as this is likely to improve access to priority health services, it also runs the risk of cost escalations, rendering the entire health system inefficiency and unsustainable in the long run.

Expansion of health insurance coverage would further attract more private sector participation in the medicine access value chain with the view of making a profit. This presents opportunities for both increased collaboration and a level of competition across the sectors, as well as challenges and risks that have to be anticipated and managed. For instance, collaboration could take various forms of public-private partnership, such as contracting or outsourcing various services linked to medicine and health technology access. Private sector could also set up medicine outlets or diagnostic facilities in areas where the public sector has limited reach, and these could be contracted out to serve clients from the public sector at preferential rates. In fact, it was revealed that this model was already being implemented to some extent in an attempt to increase access to chronic medications. Invariably, the significance of such partnerships would increase as health systems reorient themselves to address the emerging epidemic of NCDs.

> *"Already we are piloting various ways to work with the private sector, starting with big cities. We plan to increase access to medicines for various chronic diseases, such as diabetes and hypertension…. We think this approach will become even more important as more people register for health insurance throughout the country." (Public sector participant)*

Well-designed partnerships would also present an opportunity to improve procurement and logistics management systems, which is a perennial challenge in many public health systems. By employing the private sector technical competencies where applicable, performance in critical areas such as procurement, warehousing, and distribution of drugs would be enhanced. In addition, by shifting a significant portion of patients (those with medical cover) to the private sector, the pressure on the public sector procurement and distribution channels could be relieved translating to fewer delays and stock-outs at service delivery points.

> *"The public sector alone cannot cope with the demands of health service delivery. They simply do not have the capacity considering the demand." (Multilateral organization participant)*

On the other hand, competition between the public and private sector providers could nudge the health system toward cost effective selection and efficient delivery. The beneficial effects to health system could include improved access, reductions in the cost of medicines, and overall improvement in the quality of health products available in the market, particularly if appropriate regulatory guidelines are diligently enforced. Furthermore, within the health insurance framework, appropriate incentives and accountabilities encouraging health system decision makers at all levels to reduce wastage and ensure quality and value for money would be essential to sustain the progress in the efforts to improve access to medicines.

However, if an appropriate regulatory framework is not in place, competition between the public and private sectors might be counterproductive, leading to spurious acts such as pilferage or leakage of health products as well as introduction of substandard health products, among other issues. Therefore, it is profoundly important to have policies and regulations that proactively promote access to medicines while ensuring that only cost-effective, safe, and high-quality health products are readily available in the market.

Furthermore, with the expansion of health insurance coverage, reimbursement strategies should focus on ensuring that quality- and value-based patient outcomes are prioritized instead of quantity of interventions and services. Therefore, adaptive reimbursement measures such as capitation at the primary health care level or some form of case based payment system would reduce the incentive for overservicing in many settings. In addition, a larger medical pool has the ability to effectively negotiate better prices for medicines from providers and probably encourage the use of cheaper generic medicines where appropriate, and this would have a net-positive impact on improving both physical and financial access to medicines at the population level.

Health Service Delivery. A large health insurance pool has many advantages linked to the economies of scale in the efforts to improve the performance of health services. For example, when supported with sound policies and regulation, a large health

insurance pool is better able to advocate and incentivize for cost-effective selection and efficient delivery of health services. Large pools are also able to better spread risk across its broader membership as well as negotiate better deals from various providers in the efforts to improve population health. In addition, the management of a large pool of funds would normally attract relatively lower administrative fees compared with smaller pools.

Therefore, if proper regulations are in place, the proposed measure to expand health insurance coverage in Botswana would translate to lower administrative costs, better bargaining and purchasing options from providers, and effective risk sharing, all factors that enhance efficiencies in health service delivery. In addition, the proposed reform would provide the health system with a more efficient option of pooling resources compared with the prevailing fragmented insurance market, which has multiple drawbacks. A highly fragmented market comprising many smaller pools is inefficient and difficult to sustain. It is often fraught by many challenges such as inadequate risk pooling, high administrative costs, and low reserves to effectively deal with financial shocks from large claims, all factors that hinder effective health service delivery. Therefore, through legislation or market dynamics or a combination of both, efforts toward consolidation in the health insurance market could enhance the effectiveness and efficiency of health service delivery. However, regulators ought to guard against monopolistic tendencies that could emerge if only one player were allowed to dominate a certain key market.

Still, in the context of health insurance, it is necessary to carefully balance access to health services with appropriate accountability and cost-curbing measures such as copayments to discourage the potential moral hazard leading to misuse of health services. Reimbursement options should also be carefully planned to reduce the temptation toward overservicing by health providers and should prioritize quality- and value-based patient outcomes instead. Invariably, this approach would lead to improvements in access and quality of health services without unnecessary cost escalations.

A large health insurance pool would also have a set of tools that could be easily applied to ensure that their beneficiaries receive effective health interventions at the lowest possible cost—for example, using cheaper, effective generic medicines instead of branded ones with similar outcomes. In addition, through appropriate incentives such as premium rebates, large insurance schemes could play a crucial role in promoting cost-effective public health interventions such as smoking cessation and adoption of other healthy lifestyles in order to avoid expensive medical treatments. On the contrary, small insurance schemes do not often have adequate fiscal space to offer such incentives to their members.

Furthermore, large pools could have the capacity to effectively play a gatekeeping role by ensuring that patients move up the referral chain based on need and not demand, such that only those needing advanced specialist care have access to such services. This could be achieved by contracting providers and standardizing practice across board, in terms of utilization of expensive diagnostic technologies, prescription practices, and procedures with the aim of ensuring quality, efficient, and cost-effective delivery. In addition, the larger the pool, the more leverage there is to negotiate better prices for different health services, medicines, and other health products. Invariably, this would translate to more efficient and cost-effective health service delivery, in contrast to smaller pools or individual purchasers that would not necessarily have such leverage.

DISCUSSION AND CONCLUSIONS

Any health system aspiring toward UHC must ensure a steady flow of resources to finance health service delivery.[1,4,6,9] For many decision makers, expansion of health insurance coverage has become an attractive option.[4,12-14] However, taking a broader health system view, it is increasingly clear that the process of expanding health insurance coverage can be fraught with many challenges and unintended consequences that health system stewards must anticipate and mitigate accordingly. If not properly handled, many of these consequences could risk eroding the many positive attributes that are the primary intention of such a policy action.[8,12-15]

Our study contributes substantially to this debate, taking a health system view to distill relevant information that could be useful to decision makers implementing health financing reform. Cognizant of the potential limitation of basing our findings on observations of a small sample of participants, we made efforts to have a diverse group drawn from different stakeholders of the health system such that the discussion was rich and informative. In addition, qualitative studies offer the benefit of a deeper investigation into important policy matters

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and perceptions that could be concealed through aggregation methods.

Invariably, expanding health insurance offers a practical way to increase the financial resources available for health service delivery.[4,15] However, health insurance coverage comes with an entitlement by which beneficiaries are proactive in demanding health goods and services.[8,12,14-16] Therefore, as the proportion of those insured increases, health system should be prepared to cope with the increased demand.

However, it is clear that in as much as the public sector plays an important role in service delivery, it often lacks the sufficient reach to address all the health needs such that the private sector and other actors, including NGOs, could contribute substantively in service provision. This is particularly true when it comes to areas such as access to medicines and service delivery, where such partnerships could play an important role in expanding access to services.[12,17,18] In fact, medicine stock outs, congestion, and delays in service delivery experienced in the public sector facilities have been identified as some of the factors that drive clients to seek services elsewhere.

With proper regulation, public-private partnerships could offer a practical way through which decision makers could improve the performance of their respective health systems in improving access and bridging the existing inequalities. In addition, when financial access barriers have been minimized by the expansion of health insurance coverage, physical access to services could be a challenge that could be effectively addressed by such collaborative partnerships.

With health financing reforms, the role for effective regulation and enforcement cannot be overstated. There should be measures in place aimed at strengthening governance and accountability structures within both public and private sectors to ensure that all stakeholders adhere to the ideals of quality, efficiency, and cost effectiveness. A focus on equity is also essential to ensure that there is population risk sharing and cross-subsidization. Failure to recognize and address such market dynamics could result in cost escalations and inefficiencies.[4,13,15,16]

It is possible to worsen the prevailing inequalities and inefficiencies if sufficient precautionary measures are not in place.[12,13] Therefore, health system stewards must judiciously apply the tools of regulation and accountability to ensure that they steer the health system toward achieving its intended objectives of maximizing population health in an efficient and cost-effective manner.[8,9] Large health insurance pools have many advantages, such as the capacity to spread risks across a large membership base, to incur lower administrative costs, and to bargain for lower tariffs from health providers. In addition, large pools have the leverage to incentivize health providers to focus on value-based outcomes instead of quantity of services, as well as promote the use of cheaper and effective medicines and technologies rather than expensive ones.[4,10,15] All these, if properly harnessed, could be vital to enhancing efficiency and cost effectiveness in health service delivery.

Overall, the features that characterize the pathway toward UHC are not necessarily linear but require an adaptive outlook that balances various health systems' objectives and demands in order to maximize population health at the lowest possible cost.[4,6,11] Therefore, it is vital that the policy objectives of any proposed health financing reform be clearly defined and with a pragmatic intent on how various developments fit to the overall health policy objectives. It is only through this approach that decision makers would be able to optimize the gains and mitigate risks accordingly. Failure to do this could result in negative unintended consequences that would put the overall reform in jeopardy.[7,10,11,17]

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