A Conceptual Framework for Costing and Financing Self-Care Interventions in Low- and Middle-Income Countries

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Abbreviations

DALY	Disability-adjusted life year
HEARD	Health Economics and AIDS Research Division
HIV	Human immunodeficiency virus
LMICs	Low- and middle-income countries
QALY	Quality-adjusted life year
UHC	Universal health coverage
UNU	United Nations University
VAT	Value-added tax
WHO	World Health Organization

Introduction

Self-care has been recognized as a mechanism for increasing health system performance by improving access to essential healthcare, expanding coverage to hard-to-reach populations, and reducing the burden of costs associated with providing or obtaining healthcare services. Self-care includes a range of medicines, diagnostic tools, and digital health interventions that can be used by individuals and communities to manage their health either with or without the support of a healthcare provider (1). Self-care has the potential to reduce barriers associated with accessing care at health facilities while also improving linkages to care through enhanced detection and improved case-finding for various health conditions.

There is recognition of the value and potential contribution of self-care interventions within health systems. The main economic arguments for self-care highlight its potential to reduce the costs of care for both individuals and the health system. For the individual, self-care may reduce costs associated with obtaining care, such as transportation costs, costs of information seeking, user fees, and productivity losses (2). On the health provider's side, self-care may reduce the burden on the health system by offering patients an alternative to facility-based care, freeing up resources and improving efficiencies (2). However, it is important to recognize that self-care should not be implemented as a means for reducing costs for the health system by shifting costs onto the user (3).

Economic evaluations for self-care interventions can be useful to understand the full range of costs associated with self-care, including the direct and indirect costs associated with obtaining care for both the individual and the health system. There has been limited research on how health systems in low- and middle-income countries (LMICs) have adopted and integrated self-care services into their broader package of health services, especially from a costs and financing perspective. While cost and financing considerations are specific and contextual, decisions should maximize accessibility, equity, and affordability of healthcare services, thereby advancing universal health coverage (UHC).

The framework presented in this document builds on evidence from key reports and guidelines. It aims to provide a guide for understanding and evaluating the costs and financing of self-care interventions within the broader self-care ecosystem, noting the structures of the health system that may influence the implementation of self-care interventions. Further, the work aims to articulate broad principles for costing and financing of self-care, accounting for the economic considerations involved in implementing self-care in LMICs and advancing the UHC agenda. In the sections that follow, a conceptual framework for thinking through the key costing and financing considerations is presented. This framework can be used as a tool to support decision-making in the costing and financing of self-care interventions. It is aimed at three groups: (1) decision makers, who will need to

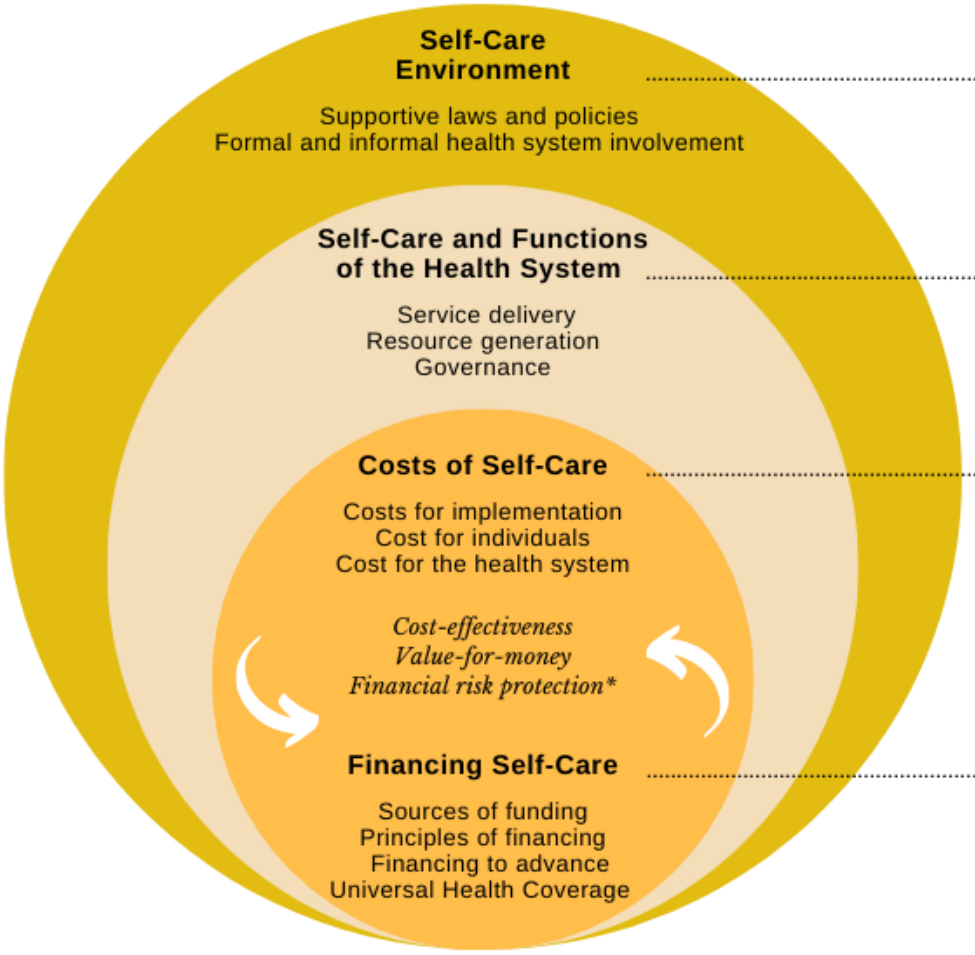
decide if and how self-care interventions are rolled out and how they are financed; (2) civil society involved in advocating for the expansion of the delivery of self-care interventions; and (3) researchers and implementers, so that they can consider how the economic and financing dimensions of specific self-care interventions can be evaluated to provide robust and comprehensive evidence to support decision-making for expanding the use of self-care interventions.

Costs and Financing within the Self-Care Ecosystem

In a review of the evidence on the costs and financing of self-care services to date – which was conducted as a precursor to the development of this framework – we found limited high-quality evidence that reported on the economic considerations for implementing self-care interventions in LMICs. Although there is a growing body of work on self-care and its application in LMICs, economic considerations remain under-researched. While the provision of self-care services is not new, the evidence is disproportionately representative of high-income contexts with limited focus on the economic impact of self-care services in lower-resourced settings. The goal of the evidence review was to understand the contextual considerations for the evaluation of costs and financing for self-care, building on established guidelines and methodologies.

The World Health Organization database was used to obtain relevant reports and guidelines to inform the development of a self-care ecosystem. In addition to this search, a "snowball" method was adopted to track references and obtain relevant articles. Studies that were used to inform the framework included economic evaluations, systematic reviews of research, commentaries, and editorials. Key documents that were used to develop the self-care ecosystem included the WHO Consolidated Guideline on Self-Care Interventions for Health: Sexual and Reproductive Health and Rights (1) and the World Health Organization/United Nations University International Institute for Global Health meeting on economic and financing considerations of self-care interventions for sexual and reproductive health and rights (2). To quote from the UNU and WHO economics considerations and financing report on self-care: "There is a need for a better understanding of the elements in countries' healthcare ecosystems that could enable the delivery of self-care interventions; and be able to finance them to reduce, rather than exacerbate, inequities in healthcare access" (2).

Figure 1: Costs and Financing within the Self-Care Ecosystem



**Continuous considerations in regard to the costs and financing of self-care as interventions evolve, costs fluctuate and the target group changes*

1. Self-Care Environment
Contextual factors influence how self-care is accessed and used. An enabling environment is required to facilitate access and improve uptake of self-care interventions (1).

2. Self-Care and Functions of the Health System
Self-care interventions work together with and not in place of the health system. With appropriate governance, self-care can perform functions of the health system to improve delivery of services and generate resources (2).

3. Costs of Self-Care
Costs of implementing self-care are incurred at three phases: design, initiation and maintenance (3). Self-care may reduce some of the costs to individuals associated with obtaining facility-based care, including user fees, transport costs, information-seeking and productivity losses (4). The provision of self-care may reduce the burden on the health system by freeing up resources within the health system and improving efficiencies (5).

4. Financing Self-Care
Financing self-care includes methods for generating, allocating and using financial resources to be able to pay for products, tools and services that support self-care. Decisions made around costs and financing for self-care should maximise accessibility, equity and affordability of health services, thereby advancing Universal Health Coverage (6).

(1) WHO consolidated guideline on self-care interventions for health: sexual and reproductive health and rights. Geneva: World Health Organization; 2019. Licence: CC BY-NC-SA 3.0 IGO.
(2) Narasimhan M, Allotey P, Hardon A. Self care interventions to advance health and wellbeing: a conceptual framework to inform normative guidance. *BMJ.* 2019; 365 :l688 DOI:10.1136/bmj.l688
(3) Sohn H, Tucker A, Ferguson O et al. Costing the implementation of public health interventions in resource-limited settings: a conceptual framework. *Implementation Sci* **15**, 86 (2020). https://doi.org/10.1186/s13012-020-01047-2
(4) Remme M, Narasimhan M, Wilson D, Ali M, Vijayasingham L, Ghani F et al. Self care interventions for sexual and reproductive health and rights: costs, benefits, and financing. *BMJ.* 2019; 365 :l1228 DOI:10.1136/bmj.l1228
(5) World Health Organization/United Nations University International Institute for Global Health meeting on economic and financing considerations of self-care interventions for sexual and reproductive health and rights: United Nations University Centre for Policy Research, 2–3 April 2019, New York, United States of America: Summary Report. Geneva:World Health Organization; 2019. Licence: CC BY-NC-SA 3.0 IGO.
(6) Narasimhan M, Logie CH, Gauntley A, Gomez Ponce de Leon R, Gholbzouri K, Siegfried N, Abela H, Ouedraogo L. Self-care interventions for sexual and reproductive health and rights for advancing universal health coverage. Sex Reprod Health Matters. 2020 Dec;28(2):1778610. DOI: 10.1080/26410397.2020.1778610. PMID: 32530386; PMCID: PMC7887951.

Figure 1: Costs and Financing Within the Self-Care Ecosystem

Figure 1 illustrates how costs and financing for self-care fit within the self-care ecosystem, and how they are embedded contextually within the broader environment for health and within the health system. Self-care is embedded within existing structures of the health system, even when it is accessed and used outside the formal healthcare sector. Therefore, the purpose of developing a self-care ecosystem is to position costs and financing relative to the health system and to the environment in which self-care is accessed and utilised.

The ecosystem comprises three elements: the self-care environment; functions of the health system; and costs and financing for self-care. The outer layer describes the self-care environment as "all aspects of the health system, and the broader environment within which self-care interventions are delivered" (1). This includes factors that determine the access and use of self-care interventions, ranging from information, education, and supportive laws and policies to health financing, secure commodities, and trained health workforces. Before evaluating the costs and financing of specific self-care interventions, it is important to understand how they fit into the self-care environment. It is also crucial to establish to what extent they might be supported by the environment, or where there may be fracture lines, barriers, or bottlenecks that may limit their implementation.

Contained within the self-care environment is the health system, which includes the resources, actors, and institutions needed to improve or maintain the health of the population (4). Self-care has the ability to support the functions of the health system by expanding access to services and generating technical efficiency gains within the healthcare sector (5). Understanding the costing and financing of self-care interventions must take into consideration the structure of the health system, including how specific self-care interventions will interact with existing health services and the resource landscape, as well as how they fit into new or existing leadership or governance structures in the health system.

The centre circle reveals the cost and financing considerations for self-care, with arrows illustrating that economic considerations are not a "once off" process, but rather inform and influence each other. Considerations need to be made that are contextually relevant as interventions evolve, target groups change, and costs shift. At the centre of the ecosystem are three key considerations for self-care costs and financing: cost-effectiveness, value-for-money, and financial risk protection. These considerations, aligned with the primary objectives of UHC, may be considered the core economic values that should be considered when making decisions around costs and financing.

1. The Self-Care Environment

Successful implementation of self-care interventions requires supportive and enabling environments for self-care to take place (1), taking into account the role of different sectors and the overarching policies that influence how self-care is used and accessed. This involves the consideration of laws, policies, and regulations that support the implementation of self-care, both within the formal and informal health sectors.

1.1 Supportive Laws and Policies

The development and implementation of national and sub-national laws and policies on self-care will influence the scope and availability of self-care interventions across sectors. There needs to be sufficient political buy-in and motivation from actors within government to support self-care as a function within the health system. For example, in a country like Nigeria, the legalization of abortion may improve health outcomes for women seeking self-managed medical abortion services and therefore contribute to preventing maternal morbidity and mortality in a LMIC (6).

1.2 Formal and Informal Health Sector Involvement

In many LMICs, the informal sector provides a large share of health services. This presents an opportunity for collaboration and cooperation between sectors. Collaboration requires engagement by actors within the health system to move the self-care agenda forward. These include policy makers, healthcare providers, and community leaders. For example, informal providers account for 77 percent of all providers in Uganda, with 35 percent of people using drug vendors to test and treat sexually transmitted infections (7). However, while these informal providers are heavily utilised, there is a question of quality of care. There is therefore potential for self-care to expand if there is appropriate regulation between providers at different levels (i.e. public, private, and informal), ensuring formal training and support is offered to providers to reduce harm and adequately support users.

2. Self-Care and Functions of the Health System

Health systems include the resources, actors, and institutions whose primary intent is to improve or maintain health. Primary functions of the health system include service delivery, resource generation for health, and governance (8).

2.1 Service Delivery

Self-care interventions are intended to work together with – and not exist in place of – other health services (2). Considerations need to be made for how the introduction of self-care interventions could impact other services in the health system. Provided that self-care services are delivered in safe and appropriate ways, they can be included as part of healthcare packages that are designed to support individuals and allow them to access the services they require. For example, self-testing for HIV has been included in many African

countries' care strategies and has played a significant role in expanding HIV testing services (9).

2.2 Resource Optimization

Resource generation refers to non-financial resources in the health system, for example human resources, medical technologies, drugs, and diagnostics. Introduction of self-care must consider the effect on resources in the system, for instance whether the introduction of self-care affects the availability of human resources for health, or the availability of drugs in other parts of the system. Studies on countries in southern Africa estimate that health workers spend between 20 and 44 percent of their time on HIV self-testing activities (10). Self-care has the potential to increase technical efficiency, requiring fewer resources to maximize an output (e.g., number of persons tested, or number of doses administered).

2.3 Governance

Introduction of self-care interventions must consider implications for leadership and governance of the health system. Local and national governments should be encouraged to participate in the development and implementation of self-care approaches. This requires involvement of key actors across all sectors of the health system, including policymakers, healthcare providers, and patients themselves. The approach of southern African governments to establish and develop domestic guidelines for HIV self-testing, for example, is considered to be a factor in the success of self-testing programs in that region (11, 12).

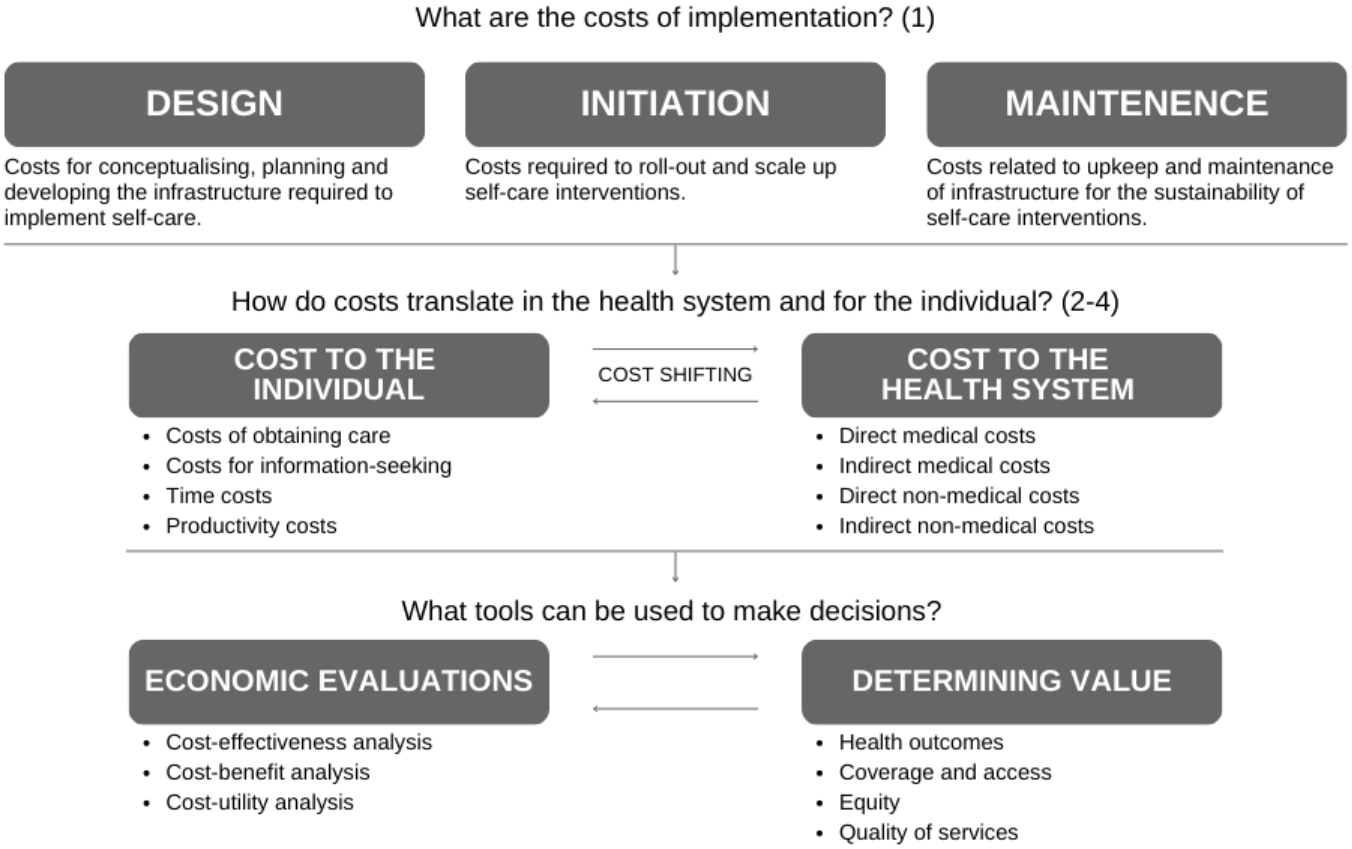
3. Cost and Financing Considerations for Self-Care

Cost and financing considerations for specific self-care interventions are important and must be fully captured and understood within the context of the broader self-care ecosystem. Ultimately, a comprehensive and robust understanding of the costs and financing of self-care interventions should aim to support decision makers to understand their cost-effectiveness and value for money within the health system, and how these interventions can be scaled up and financed in ways that support progress towards UHC.

3.1 Costs for Self-Care

Cost considerations for self-care should take into account all costs associated with implementing self-care, from design to scale up. At implementation, costs for self-care are primarily incurred as costs for individuals and for the health system. Conceptualising and evaluating the costs for self-care requires identifying cost originators –which consider where costs are incurred – and thereafter understanding how costs are translated in the health system (see figure 2).

Figure 2: Costs of Self-Care Interventions



(1) Sohn H, Tucker A, Ferguson O et al. Costing the implementation of public health interventions in resource-limited settings: a conceptual framework. *Implementation Sci* **15**, 86 (2020). https://doi.org/10.1186/s13012-020-01047-2
(2) Remme M, Narasimhan M, Wilson D, Ali M, Vijayasingham L,Ghani F et al. Self care interventions for sexual and reproductive health and rights: costs, benefits, and financing. *BMJ*. 2019; 365:l1228. DOI: 10.1136/bmj.l1228
(3) Narasimhan M, Kapila M. Implications of self-care for health service provision. *Bull World Health Organ*. 2019 Feb 1;97(2):76-76A. DOI: 10.2471/BLT.18.228890. PMID: 30728611; PMCID: PMC6357575.
(4) Kibira D, Boydell V, Mworeko L, Kiarie J. Considerations for social accountability in the expansion of self-care for sexual and reproductive health and rights. *Sex Reprod Health Matters*. 2021;29(3):2083812. DOI: 10.1080/26410397.2022.2083812. PMID: 35975672; PMCID: PMC9387307.

Figure 2: Costs of Self-Care Interventions

3.1.1 Costs for Implementation

The costs of self-care interventions are incurred at three different phases of implementation: design, initiation, and maintenance (13). Costs at the design phase include costs for conceptualizing, planning, and developing the infrastructure required to implement self-care. Costs at initiation include those that are required to roll out and scale up the intervention, for example, training staff and providing relevant materials. At maintenance, the costs are primarily related to maintaining infrastructure for the sustainability of the intervention.

3.1.2 Cost for Individuals

Self-care may reduce some of the patient costs associated with obtaining facility-based care, including user fees, transport costs, information-seeking costs, and productivity losses (2). An advantage of self-care is that it enables choice and provides opportunities for individuals and communities to manage their health on their own terms. This is particularly valuable in the context of time saved and productivity gained, where individuals adapt health behaviours according to the associated costs. However, in some cases, self-care can increase the direct cost for the client. For example if a "free" HIV-test at a healthcare facility is replaced with a self-test purchased at a pharmacy, the direct cost will shift onto the individual, but it will still provide value in terms of convenience and accessibility.

3.1.3 Cost for the Health System

Self-care may reduce costs to the health system by offering individuals an alternative approach to facility-based care, freeing up resources within the health system and improving efficiencies. Self-care is known to reduce the direct costs of care associated with rendering healthcare services, including staff salaries and commodity costs (14). Cost savings within health systems primarily occur downstream, by improving linkages to care and promoting self-management, reducing the need for patient hospitalization down the line (15, 16). The return on investment for self-care is promising if an enabling environment is created and sustained and demand for self-care is continually generated.

3.1.4 Economic Evaluations and Determining Value

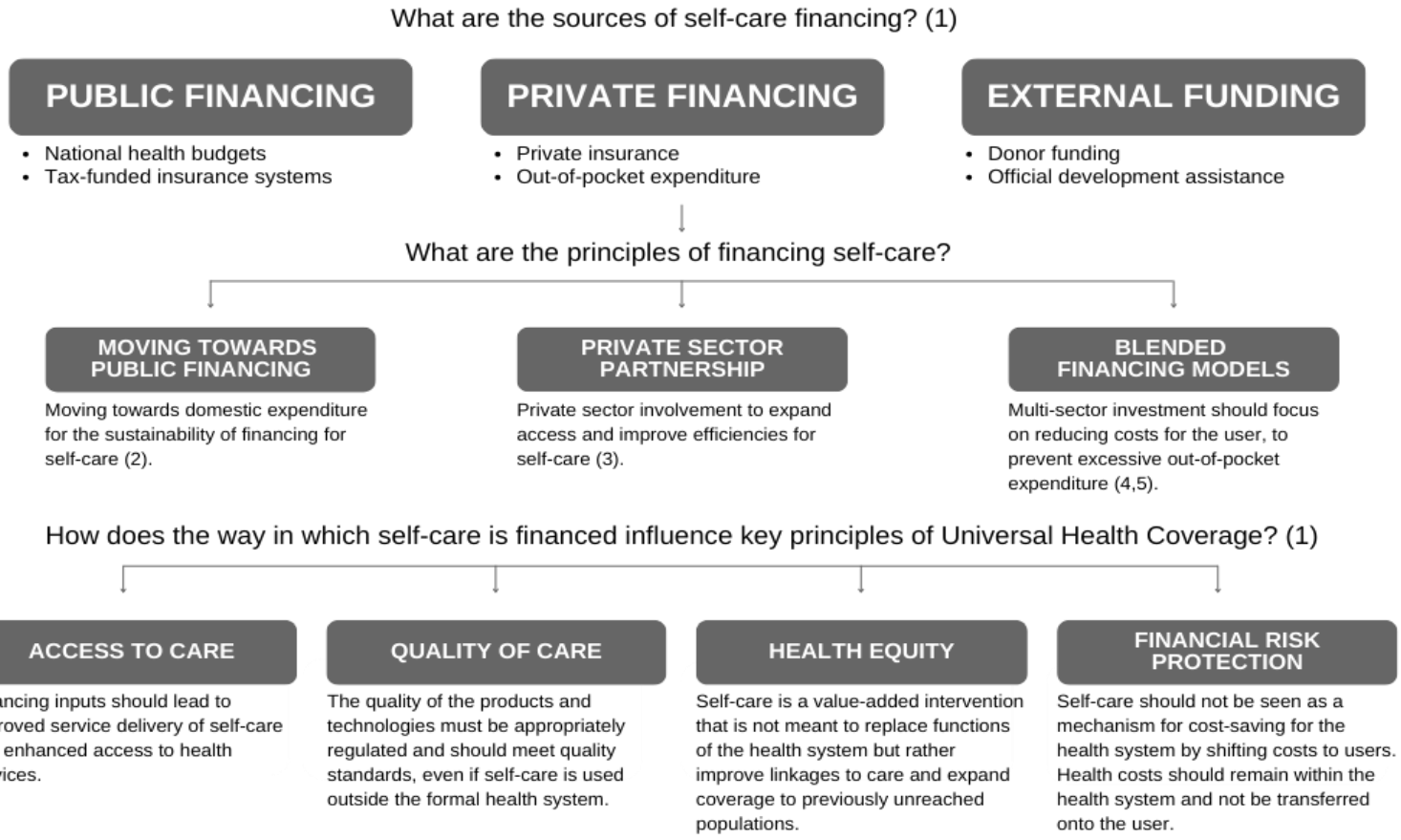
Economic evaluations are frequently used to compare the relative costs of obtaining care through differentiated service delivery models, as well as to be able to inform prioritization of health services, and to estimate the value for money for different health interventions. Economic evaluations focus on value for money in order to maximize the benefits of investments for health, in terms of both coverage and quality. The economic perspective taken to determine economic value should reflect the full

range of costs associated with self-care from the perspective of the health system, individuals, and broader society. Economic evaluations assign a monetary value to measure the effects, typically using either natural units of outcome measures (e.g., cost per person tested; cost per HIV infection averted) or aggregated health outcome (e.g., disability-adjusted life years (DALYs) or quality-adjusted life years (QALYS)). Costing analyses estimate the economic cost of an intervention, including not only monetary costs but also the value of all resources used.

3.2 Financing Self-Care

Financing self-care interventions includes methods for generating, allocating, and using financial resources to be able to pay for products, tools, and services for self-care. Self-care interventions are primarily financed from three sources: public funds, private-sector financing, and external funding (17). Mechanisms for financing are specific and contextual, however, principles for financing should be developed to enhance the primary objectives of UHC, considering access, quality, equity, and the need to protect individuals from financial risk (see figure 3). Different financing mechanisms for self-care need to be evaluated against these principles to understand how they influence the ability of the health system to achieve its overall objectives, and how they affect not only the health system, but also clients, patients, and society more broadly.

Figure 3: Financing Self-Care Interventions



(1) World Health Organization. *World health report: health systems financing: The path to universal coverage*. WHO, 2010.
(2) World Health Organization/United Nations University International Institute for Global Health meeting on economic and financing considerations of self-care interventions for sexual and reproductive health and rights: United Nations University Centre for Policy Research, 2–3 April 2019, New York, United States of America: Summary Report. Geneva:World Health Organization; 2019. Licence: CC BY-NC-SA 3.0 IGO.
(3) Kumah E. The informal healthcare providers and universal health coverage in low and middle-income countries. *Global Health* 18, 45 (2022). https://doi.org/10.1186/s12992-022-00839-z.
(4) Chapman S, Jafa K, Longfield K et al. Condom social marketing in sub-Saharan Africa and the Total market approach. *Sex Health* 2012;9:44-50. DOI: 10.1071/SH10165 PMID: 22348632.
(5) Grossman M. On the concept of health capital and the demand for health. *J Polit Econ*. 1972;80:223-55. DOI: 10.1086/259880.

Figure 3: Financing Self-Care Interventions

3.2.1 Sources of Financing

Self-care interventions are financed from three sources: public sources, private-sector financing, and external funding (including development assistance). Public sector financing is primarily generated through general tax revenue such as VAT or income tax. Some countries already have – or are in the process of establishing – national health insurance funds, which are also funded through public sources and could be used as a financing mechanism for self-care. Other countries provide free services at health facilities financed through government budgets. If these sources are to be used for self-care, new mechanisms for financing may be necessary. Private sector financing includes revenue generated through private health insurance, community-based insurance systems, and out-of-pocket expenditures by healthcare users. External funding and foreign aid from donors and organizations help promote economic development and implementation of self-care in LMICs. However, external funding for health in LMICs is increasingly limited and highly contested and is unlikely to be a sustainable source of financing for self-care in the medium- to long-term.

3.2.2 Principles for Financing

In reviewing evidence on financing for self-care in LMICs, a number of key principles emerged that may improve the sustainability of self-care interventions. These include: a move towards domestic sources for health spending; involving private and informal sectors in the provision of self-care; and the exploration of differentiated financing models to finance self-care. Increasing domestic expenditure may improve the sustainability of financing for self-care (18). In many LMICs, self-care interventions are funded externally. However, from a long-term perspective, increasing domestic resources for health allows countries to better generate, distribute, and strategically purchase self-care services for the population. Moreover, there is the potential to expand self-care through improved partnerships with the private and informal sectors. This may provide opportunities for improved access to services. As previously mentioned, the informal sector in many LMICs provides a large proportion of health services for the population. Finally, there may be scope for blended financing models that include a mix of tax-based funding, private financing, insurance, and partial out-of-pocket expenditure (2). Investments in self-care from multi-sector sources should focus on reducing costs for the user to prevent excessive out-of-pocket expenditure (19).

3.2.3 Financing to Advance UHC

While financing considerations cannot be made broadly and are context-specific, decisions made around financing for self-care should take into account mechanisms that: 1) make self-care increasingly accessible; 2) ensure self-care produces a high

quality of care; 3) are equitable; and 4) are affordable for the population. Self-care interventions may improve healthcare access and support individuals who have the most difficulty obtaining care. Self-care improves choice and provides opportunities for enhanced self-management and decision-making for health. It works optimally in tandem with health providers who are able to provide the necessary support. However, depending on how it is financed, this may have a negative effect on equity. For example, if self-care is financed out-of-pocket, it may disadvantage the poor. In terms of quality, in contexts where self-care is able to be used freely and safely without the presence of a healthcare provider, there is the potential for increased cost-saving for the health system while not compromising on the quality of healthcare. Self-care has the potential to improve the linkage and adherence to care through the initiation of treatment and for the continuation of care.

Financing decisions with equity in mind should consider how self-care impacts access and affordability. It is important to note that financing self-care should not be promoted as "cost-saving" for the health system when it shifts costs onto the user. If users have to obtain test kits or other devices or supplies to access an intervention that would be paid for by the health system if accessed within health services, then wherever possible, these costs should remain within health system and not be transferred to the user. A key consideration under UHC is ensuring financial risk protection for individuals and communities. In contexts where self-care is seen as a value-for-money alternative, costs of care should be kept low to prevent catastrophic spending for health services and ensure financial risk protection for users.

Cost-Effectiveness, Value for Money, and Financial Risk Protection

Decisions around the financing of self-care interventions should consider: (1) the cost-effectiveness of self-care interventions; (2) self-care as a value-for-money alternative for users; and (3) self-care as a means of promoting financial risk protection for individuals accessing health services. Cost-effectiveness for self-care is frequently used to compare the relative costs of obtaining care, primarily in comparison to facility-based and community-led models. Economic evaluations are useful for providing evidence for the costs of self-care relative to relevant health outcomes. Further, these evaluations are used to estimate the value for money of different health interventions. Determining the value of self-care is important to maximize the benefits of investments for health. Economic evaluations, as described above, may be used to estimate the costs associated with self-care interventions, including both monetary costs and the value of all resources used. These can include direct and indirect costs, medical and non-medical costs, and opportunity costs. Other measures used to determine value could include coverage and access, increased demand for services, equity, and quality of services. These may not necessarily be captured in conventional economic evaluations or cost-effectiveness analyses but may be a consideration for decision-makers in prioritizing

interventions. Aligned with the UHC agenda, financing mechanisms should support the objectives of increasing access, uptake, and equity, while reducing exposure to financial risk for users (individuals and patients) in the health system.

Summary

The WHO recognizes the value and potential contribution of self-care interventions within health systems (1). Self-care can add value by enabling choice and giving people autonomy over their health, linking them to care when needed and supporting those who experience barriers to obtaining care. Understanding the costs and conceptualizing suitable ways of financing self-care are critical for moving self-care forward, contributing to sustainable, acceptable, and affordable care for individuals and communities. There is also an opportunity to explore differentiated models for self-care financing. Cost and financing considerations for specific self-care interventions are important and must be fully captured to support decision makers in understanding their cost-effectiveness and value for money within the health system, and how these interventions can be scaled up and financed in ways that support progress towards UHC.

References

(1) World Health Organization consolidated guideline on self-care interventions for health: sexual and reproductive health and rights. Geneva: World Health Organization; 2019. Licence: CC BY-NC-SA 3.0 IGO.

(2) World Health Organization/United Nations University International Institute for Global Health meeting on economic and financing considerations of self-care interventions for sexual and reproductive health and rights: United Nations University Centre for Policy Research, 2–3 April 2019, New York, United States of America: summary report. Geneva: World Health Organization; 2019. Licence: CC BY-NC-SA 3.0 IGO.

(3) Remme M, Narasimhan M, Wilson D, Ali M, Vijayasingham L, Ghani F et al. Self care interventions for sexual and reproductive health and rights: costs, benefits, and financing. *BMJ* 2019; 365 :l1228 doi:10.1136/bmj.l1228

(4) Stenmark J. Population Services International. 2023. Available from: https://www.psi.org/project/self-care/self-care-a-foundational-component-of-health-system-sustainability/.

(5) Gheorghe A, Ngwaru T, Lievens T, Kumar V, Murray-Zmijewski A, and Witter S. Improving technical efficiency in health spending in Africa. CABRI; 2015.

(6) Abortion care guideline. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO.

(7) Kumah, E. The informal healthcare providers and universal health coverage in low and middle-income countries. *Global Health* 18, 45 (2022). https://doi.org/10.1186/s12992-022-00839-z

(8) WHO (2010a) *World health report. Health systems financing: The path to universal coverage.* Geneva: WHO.

(9) Njau B, Damian DJ, Abdullahi L, Boulle A, Mathews C. The effects of HIV self-testing on the uptake of HIV testing, linkage to antiretroviral treatment and social harms among adults in Africa: A systematic review and meta-analysis. PLoS One. 2021 Jan 27;16(1):e0245498. doi: 10.1371/journal.pone.0245498. PMID: 33503050; PMCID: PMC7840047.

(10) Sande LA, Matsimela K, Mwenge L, Mangenah C, Choko AT, d'Elbée M, Majam M, Mostert C, Matamwandi I, Sibanda EL, Johnson C, Hatzold K, Ayles H, Cowan FM, Corbett EL, Neuman M, Maheswaran H, Meyer-Rath G, Terris-Prestholt F. Costs of integrating HIV self-testing in public health facilities in Malawi, South Africa, Zambia and Zimbabwe. BMJ Glob Health. 2021 Jul;6(Suppl 4):e005191. doi: 10.1136/bmjgh-2021-005191. PMID: 34275874; PMCID: PMC8287606.

(11) Jakovljevic M, Çalışkan Z, Fernandes PO, Mouselli S, Otim ME. Editorial: Health Financing and Spending in Low- and Middle-Income Countries. Front Public Health. 2021 Dec 21;9:800333. doi: 10.3389/fpubh.2021.800333. PMID: 34993173; PMCID: PMC8724126.

(12) Kibira D, Boydell V, Mworeko L, Kiarie J. Considerations for social accountability in the expansion of self-care for sexual and reproductive health and rights. Sex Reprod Health Matters. 2021;29(3):2083812. doi: 10.1080/26410397.2022.2083812. PMID: 35975672; PMCID: PMC9387307.

(13) Sohn, H., Tucker, A., Ferguson, O. *et al.* Costing the implementation of public health interventions in resource-limited settings: a conceptual framework. Implementation Sci 15, 86 (2020). https://doi.org/10.1186/s13012-020-01047-2

(14) Remme M, Narasimhan M, Wilson D, Ali M, Vijayasingham L, Ghani F et al. Self care interventions for sexual and reproductive health and rights: costs, benefits, and financing. *BMJ* 2019; 365 :l1228 doi:10.1136/bmj.l1228

(15) Narasimhan M, Kapila M. Implications of self-care for health service provision. Bull World Health Organ. 2019 Feb 1;97(2):76-76A. doi: 10.2471/BLT.18.228890. PMID: 30728611; PMCID: PMC6357575.

(16) Christofield M, Moon P, Allotey P. Navigating paradox in self-care. BMJ Glob Health. 2021 Jun;6(6):e005994. doi: 10.1136/bmjgh-2021-005994. PMID: 34140304; PMCID: PMC8212175.

(17) Liaropoulos, L., Goranitis, I. Health care financing and the sustainability of health systems. *Int J Equity Health* 14, 80 (2015). https://doi.org/10.1186/s12939-015-0208-5

(18) World Health Organization. Self-Care in the Context of Primary Health Care. India: World Health Organization: Regional Office for South-East Asia; 2009.

(19) Narasimhan M, Logie CH, Gauntley A, Gomez Ponce de Leon R, Gholbzouri K, Siegfried N, Abela H, Ouedraogo L. Self-care interventions for sexual and reproductive health and rights for advancing universal health coverage. Sex Reprod Health Matters. 2020 Dec;28(2):1778610. doi: 10.1080/26410397.2020.1778610. PMID: 32530386; PMCID: PMC7887951.