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TOPIC OF FOCUS

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Abstract:

An increasing number of countries now aspire to Universal Health Coverage (UHC) – a set of quality health services to which all citizens in a country are entitled with the aim of improving health and reducing impoverishing out of pocket spending. For the aims of UHC to be realized, public monies for health must be progressively allocated towards the highest-value interventions, products and devices, and aligned with the funding available, avoiding reversion into inertial resource allocation based on historical patterns and implicit rationing of care with adverse impact on the poor and marginalized populations. Explicit priority-setting requires a system that will use the tools of cost-effectiveness analysis, budget impact analysis and deliberative proves to improve UHC outcomes.

Introduction

The most cost-effective interventions in healthcare produce as much as 15,000 times the value in health as the least cost-effective [1]. Nonetheless, governments do not consistently use cost-effectiveness to inform spending decisions. Less than a third of the $16 per capita spent on health by governments in sub-Saharan Africa goes to the most cost-effective services [2]. Similarly, estimated rates of inappropriate care remain high in developed and developing countries alike [3].

Investing in low-value health interventions presents an even greater challenge in the face of universal health coverage (UHC) and the growing number of countries introducing UHC reforms. UHC "[ensures] that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring the use of these services does not expose the user to financial hardship" [4]. To achieve this goal, UHC policies guarantee that the entire population can access certain health services or products for free or at a subsidized fee. When delivered well, UHC can have remarkable impacts: increasing access to health services for many who would otherwise be unable to get the care they need; improving preventative care services; reducing incidence of serious impoverishment caused by health shocks; and improving fairness and financial security in countries.

Since no government can afford to offer every medical service or treatment on the market, policymakers must make tough choices about what to fund. Those decisions have life-and-death implications for individuals and their families, yet rationing decisions often occur in an *ad hoc* and donor dependent

manner, with little to no transparency.[1] Even attempts to account for cost-effectiveness may not always be well executed.[2]

Using limited funds in the best way requires clear answers to fundamental questions: what services should be available, to whom, and what user charges or arrangements should be attached to those services not considered priorities? Furthermore, do institutional or informational barriers exist that may impede the use of evidence to set and act on priorities? In some sub-Saharan African countries, 10 to 30 percent of health budgets have gone unspent, suggesting that spending inefficiencies stem from more than a lack of clear priorities [5].

Inefficiently allocating resources squanders funds that could save lives and reduce health inequities. Governments and global health partners can take practical and evidence-based steps to ensure that high-value treatments are covered while also curbing medical overuse and underuse. The clearer and more transparent the decision-making process and criteria for public reimbursement for medical services and products, the easier it is to incentivize product development and services that meet the needs and cost-effectiveness criteria of a country's health system.

The Importance of Setting Priorities for UHC

UHC decisions are typically rife with controversy since they must prioritize certain population segments and services over others. Low- and middle-income countries (LMICs) often struggle to balance the finite resources and unlimited, yet varied demand for services despite more available data, methods, and evidence on costs, effectiveness, and the quality of health interventions and technologies. The persistent gaps between evidence and budget allocation prevent cost-effective interventions from reaching their full potential. As countries push towards UHC, there are accountability, financial, and moral imperatives to prioritize funds towards the very best, highest-impact treatments in an explicit, transparent, and deliberative process.

Accountability

Private health insurers in high-income countries have long understood that defining benefits is essential for business sustainability, as well as had the freedom to do so. Public insurers and payers should likewise make the best use of public funds. In contrast to private insurers who are only responsible to shareholders' and clients' needs, public insurers and payers are accountable to all citizens.

UHC requires the establishment of a pool of public monies, collected via taxation or pseudo-taxation (i.e., social health insurance), to fund health services and treatments. To maintain UHC principles of fairness and equity, all citizens' financial contributions to the system should be mandatory, explicit, and unrelated

[1] Good Ventures gave $6.4 million to an organization they acknowledged as having "a limited track record on past projects directly relevant to this project" to purchase amoxicillin (a highly effective and low-cost treatment for childhood pneumonia) and "donate the product to the government of Tanzania for use in public health facilities." See https://www.r4d.org/news/good-ventures-awards-6-4-million-results-development-scale-access-childhood-pneumonia-treatment-tanzania/ and https://www.givewell.org/charities/results-for-development/may-2016-grant#The_intervention for more details.

[2] Preventing and treating hypertension, a risk factor for non-communicable diseases (NCDs), represents a cost-effective approach given that the cost of treating NCDs is significant, but anti-hypertensive medicines at one point accounted for 60 percent of Ghana's National Health insurance Scheme (NHIS) drugs budget. See https://www.idsihealth.org/our-impact/ghana/ for additional details.

to an individual's medical circumstances and risks [6]. When that is not the case, the health insurance system breaks down or progress towards UHC stagnates.

Box 1: The Case of Uganda: Too Much with Too Little

Health systems often set out to provide more services than practically possible given funding and budget constraints. When the government of Uganda established the Uganda National Minimum Health Care Package (UNMHCP), annual per capita government health expenditure amounted to $12.50. In contrast, the estimated annual per capita cost of the UNMHCP came to $41.00, significantly exceeding existing resources [7].

Like many countries, Uganda also struggles with a parallel process of prioritization. Development assistance partners do not participate in Uganda's sector-wide approach funding mechanism so non-UNMHCP interventions can potentially receive both donor and government funding. This leads to a lack of funding for cost-effective interventions and over-funds interventions that may not have the highest value-add for the health system.

The Uganda case illustrates the complexities and challenges many low- and middle-income countries face when trying to implement UHC. In order to provide a set of feasible and equitable services, countries must have coordinated and practical priority-setting tools and systems in place.

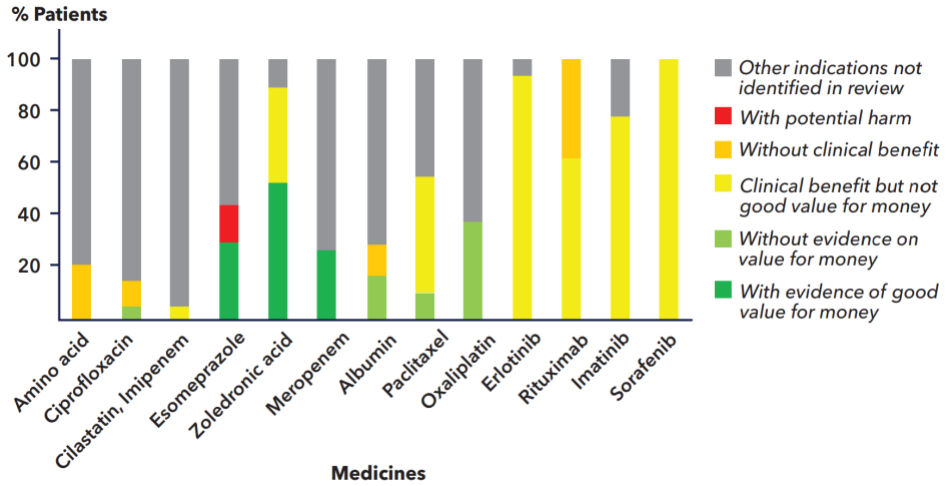
Fiscal

In many countries that have introduced UHC reforms, financial contributions hinge on ability to pay. Consequently, they ensure that healthy and wealthy people cross-subsidize (to some extent) health care and treatment services for the poor and ill. While the size of the funding pool can be enlarged to some extent by expanding the scope of the taxation base and improving the efficiency of health services, it remains true that no country can provide all medical treatments and services. Current squeezes on budgets in high-income countries, shifts in donor financing, and skepticism in emerging economies about the return on investing in healthcare compared with other priorities makes it even more essential to use public monies for high-value, high-quality healthcare as opposed to low-value treatments.

Moral

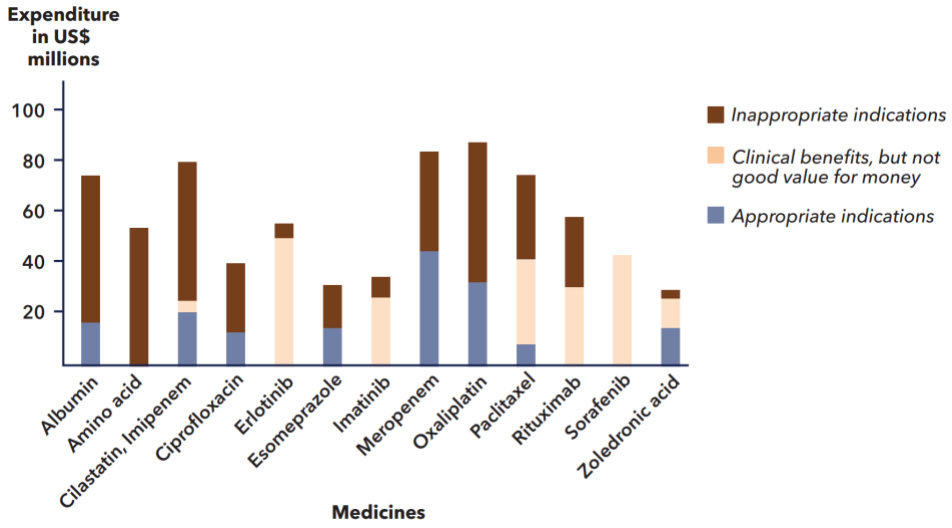
There is also a moral imperative to prioritizing high-value care. An anonymized country case study described in *What's In, What's Out: Designing Benefits for Universal Health Coverage* found that only 22 percent of expenditures on 14 medicines considered priorities based on their burden to the UHC budget were for appropriate indications (see Figure 1 and Figure 2) [8]. Thus, 78 percent of expenditures for these medicines were being used inappropriately. Redirecting funds to medicines that are clinically beneficial and/or good value-for-money could free up a significant portion of the budget for high-value treatments that could save more lives.

Figure 1: Hospital data shows that most prescriptions were for medical indications not identified by a review of guidelines and systematic reviews or were for indications that they offered clinical benefit for, but not good value-for-money.



Source: Teerawattanon Y et al., "More than a List; Reforming a Country's Health Benefits Package—A Rigorous Approach to Tackling Costly Overutilization" in What's In, What's Out: Designing Benefits for Universal Health Coverage, Ed. Glassman A, Giedion U, Smith PC, Center for Global Development, 2017: 247-252.

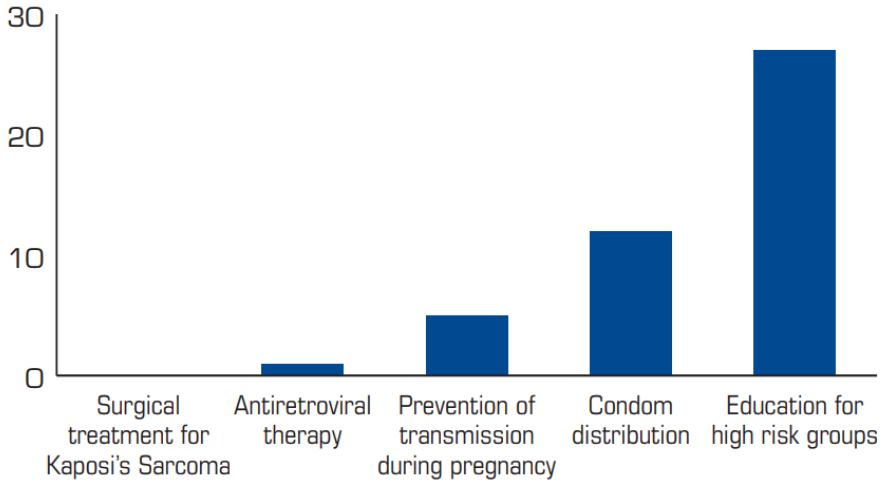
Figure 2: Expenditure data show that a substantial amount of money goes toward medicines for inappropriate indicators



Source: Teerawattanon Y et al., "More than a List; Reforming a Country's Health Benefits Package—A Rigorous Approach to Tackling Costly Overutilization" in What's In, What's Out: Designing Benefits for Universal Health Coverage, Ed. Glassman A, Giedion U, Smith PC, Center for Global Development, 2017: 247-252.

Similarly, when considering five types of HIV/AIDS prevention or treatment interventions (surgical treatment for Kaposi's sarcoma [an AIDS defining illness], antiretroviral therapy to fight the virus in people, prevention of HIV transmission from mother to child during pregnancy, condom distribution to prevent transmission of HIV, and education for high-risk groups), it might seem hard to determine which of these interventions is best to fund [1]. However, the estimated cost-effectiveness of each intervention varies significantly [9]. Treating Kaposi's sarcoma (often considered cost-effective in high-income countries) is not even visible in a cost-effectiveness comparison for the five interventions (see Figure 3) [10]. The best of these interventions, education for high-risk groups, is estimated to be 1,400 times as cost-effective as the least beneficial intervention assessed. Thus, when funds are directed towards the most cost-effective interventions, more lives can be saved by preventing disease in the first place, and more value-for-money is achieved with government spending.[3]

Figure 3: Comparison of the cost-effectiveness in disability-adjusted life years per $1,000 for five HIV/AIDS interventions



Source: Ord T, "Considering Cost-Effectiveness: The Moral Perspective" in Priority-Setting in Health: Building Institutions for Smarter Public Spending, Glassman A and Chalkidou K, Center for Global Development, 2012: 15-19. Available at: https://www.cgdev.org/publication/priority-setting-health-building-institutions-smarter-public-spending.

Additional Reasons

Considering cost-effectiveness is a necessary condition for making health spending decisions, but of course, there are other moral values such as fairness, impact on unjust inequalities and systematic disadvantage, self-determination, financial protection, etc. should also be considered and factored when making priority-setting decisions for UHC budgets.

[3] See http://www.idsihealth.org/resources/policy-briefs/ for additional examples of the savings possible via the use of Health Technology Assessments.

How to Set Priorities for UHC

In many countries, health impacts and equity could be enhanced, and many lives could be saved by prioritizing cost-effective and equity-enhancing commodities and services in public and donor spending. But oftentimes countries lack the fair processes, regulations, and institutions to not only link budgets with evidence and spell out the opportunity costs of one decision versus another, but also to manage the different interest groups and ethical implications that revolve around new technologies and limited funding.

Several policy tools already exist to assess the cost-effectiveness of health care technologies and interventions. Existing tools include essential medicines lists (EMLs), health benefits packages (HBPs), national immunization technical advisory groups (NITAGs), and health technology assessment (HTA) agencies. When these policy tools are used in coordination with decision-making processes and institutions, policymakers can successfully set priorities and allocate spending towards the most effective and highest impact health care treatments to better care for their populations in a transparent, equitable, and effective way.

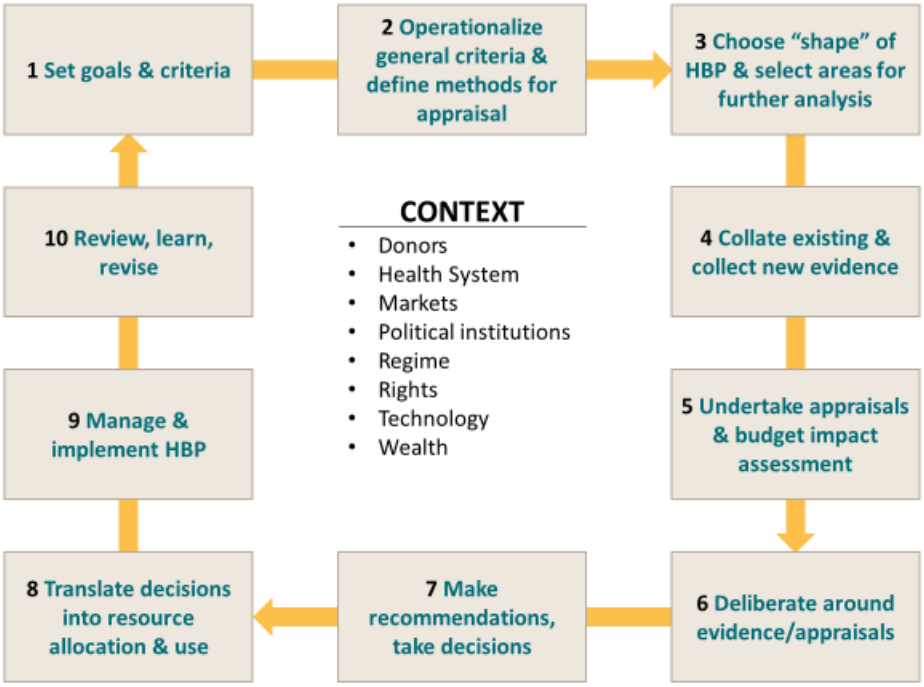
Essential Medicines Lists

In 1977, the WHO launched an initiative to make a list of medicines deemed essential in order to inform purchasing decisions in national health agendas. A model list is published online and updated every two years based on applications. Many developing country governments adopt these lists, although not necessarily with any funding mechanisms in place. While essential medicine lists may be a good first step in the priority-setting process, there are serious flaws and gaps associated with this tool; for example, there is often a disconnect between lists and availability of medicines. A study published in the Lancet in 2009 reported on 45 surveys from 36 countries and found that the average availability of the 15 most frequently surveyed medicines was only 38.4 percent in public sector facilities and 64.2 percent in private facilities [11]. While the WHO Essential Medicines List may provide some helpful information and advice for governments seeking to implement UHC, the list is not connected to a specific country's public spending envelope and budgetary process, and thus there are often cost-effective medications included that may not be affordable or sensible for a certain country health system to purchase.

Health Benefits Packages

After policymakers make the commitment to UHC, they must decide what health technologies and services should be made available, and under what conditions. The health benefits package (HBP) is the set of interventions that are publicly financed and provided to all citizens either free of charge, or at a subsidized rate, so that they can access essential health services without incurring huge financial burdens. A sustainable HBP should be explicit so that citizens are aware of what services are (and are not) available and can continuously assess and adjust the package as needed. Figure 4 outlines the ten core elements of HBP design. There is no single "correct" way of organizing these functions, and the precise locus may vary depending on a country's political framework, policy choices, and the nature of the health system. In practice, these functions are rarely so neatly sequential, but the ordering is intended to emphasize the interdependent nature of these functions.

Figure 4: The core elements of HBP design



Source: Glassman A, Giedion U, and Smith PC, What's In, What's Out: Designing Benefits for Universal Health Coverage, Center for Global Development, Washington, DC, 2016. Available at: https://www.cgdev.org/publication/whats-in-whats-out-designing-benefits-universal-health-coverage.

National Immunization Technical Advisory Committees

The Supporting Independent Immunization and Vaccine Advisory Committees Initiative (SIVAC) builds the capacity of National Immunization Technical Advisory Groups (NITAGs) and provides support to carry out cost-effectiveness studies of vaccine introduction and new vaccine technology [12]. Many find that NITAGs are most successful when conducted independently, but still remain closely aligned with the policy-making process [13]. NITAGs should also be linked to outcome indicators in order to further policy relevance. SIVAC activities could and should be more closely linked to vaccine introductions financed by GAVI, the Vaccine Alliance in order to better inform country decision-making in the context of GAVI vaccine financing.

Health Technology Assessment Agencies

Health technology assessment (HTA) agencies can be established to assess new and current medical technologies. Defined broadly by the International Network of Agencies for Health Technology Assessment, "HTA is the systematic evaluation of the properties and effects of a health technology, addressing the direct and intended effects of this technology, as well as its indirect and unintended consequences, and aimed mainly at informing decision making regarding health technologies…A health technology is defined as an intervention that may be used to promote health, to prevent, diagnose or treat

acute or chronic disease, or for rehabilitation" [14]. While HTA considers the safety, efficacy, effectiveness, financial costs, and social, institutional, legal, and ethical implications of technologies, its main consideration is the value for money derived from cost effectiveness analysis.

Almost all countries have national health technology assessment agencies that prepare evidence dossiers as part of applications for including new medicines for public reimbursement, but in the past, little attention has been paid to identifying obsolete technology for disinvestment. HTA agencies generally assess drugs as a first-order priority, however several countries also assess procedures, interventions, and/or medical devices.

Potential Obstacles to Setting Priorities for UHC

As noted before, political difficulties may arise when setting priorities for UHC because these decisions have direct impacts on people's lives (and survival) and financial circumstances. This is often particularly challenging in LMICs, since these countries have very limited health budgets alongside a wide array of possible technologies and services that they cannot possibly fund with the existing (or planned) resources they have. To successfully balance different stakeholders' objectives and desires within a limited budget, it is important for policymakers' allocation decisions to be transparent and based on scientific evidence on costs and benefits. External and internal factors can complicate this process, however.

Donor funding in LMICs can complicate the decision processes for determining what's included and what's not included in an HBP since there may be fluctuations in available funding from year to year or aid may have conditions attached that place restrictions on the diseases and services that can be covered. Additionally, recommendations made by international agencies might place pressure on LMICs to prioritize health technologies or services that are not cost-effective for that country or setting. Table 1 highlights a few challenges countries face when implementing HBPs.

Table 1: Challenges to implementing HBPs

Poor data	Countries may have to rely on a lack of data, no local data, or little to no cost information when developing HBPs. For example, the HBP in Ghana was legislated before being costed [15].
Lack of connection to available budgets	HBPs often are unaffordable due to failure to link package to available resources as highlighted with the Uganda case in Box 1.
Calculation method techniques	Since data availability on the costs and effectiveness of existing health system activities is generally poor, HBP costs are often based on the ground zero assumption, on a per capita basis rather than incrementally.
Poorly defined benefits	In some cases, HBPs may be grouped in general categories with little specificity, or they could be grouped by diagnosis. When this happens, many interventions could be provided under the broadly defined package in theory, but these poorly defined benefits don't actually align with budgets and lead to implicit and opaque decision-making.

Unclear criteria for benefit selection	There may be uncertainties in defining the content of benefit plans due to lack of criteria, or in the case of decentralized countries, HBPs and associated financing may vary by subnational entity.
Lack of continued assessment	HBPs are often conducted as one-off exercises without arrangements in place to update analyses based on new information and technologies.
Disconnect between evaluation and funding decisions	It is often the case that cost-effectiveness analyses are financed and carried out separately from policymaking processes, which can result in limited connection between coverage and reimbursement decisions.
Lack of institutional buy-in	HBPs are often designed in isolation as part of development bank programs, and conflicts of interest among those participating in evaluation of health technologies and HBP design are usually undeclared. Because of this, policy decisions about the package may not actually be based on evidence, even when evidence-generation has been conducted. Relatedly, ministries of finance and other central budgeting authorities may not prioritize the health sector or engage health ministers before making budget cuts [5].
Short time frame	HBPs must often be developed under limited time frames or as one-off exercises that do not allow for comprehensive analysis or changes in cost estimations due to various contextual factors.
Lack of records	Lack of documentation of methods, processes, and decisions persists as a problem for many countries in the design and adjustment of HBPs.
Lack of stakeholder process	Failure to define a transparent and consultative multistakeholder process in HBP design, adjustment, and evaluation is a prominent feature of efforts in LMICs.

Similar challenges to those in HBP implementation exist in the implementation of HTAs in LMICs, including: lack of local research capacity for HTA; absence of standard methodological guidelines, which can result in vulnerability to bias; misaligned disease prioritization since funding for most of these HTA studies comes from international organizations and pharmaceutical companies; and lack of a clear understanding of HTA among health professionals and policymakers.

Uptake of cost-effectiveness information may be further complicated by the design of the country's health system and the costs of implementing program/budget changes. For example, health systems that use capitation payments or global budgets to reimburse providers may not provide adequate incentives for the delivery of specific interventions. In addition, introducing a highly cost-effective intervention may require significant investments, such as new clinics, trainings, or additional personnel.

What's In, What's Out: Designing Benefits for Universal Health Coverage delves into a broader list of solutions for these and other challenges. Using pay-for-performance, for instance, may encourage greater adherence among providers to HBPs and the costs of transitioning between interventions can be incorporated into cost-effectiveness analyses. New interventions can also be introduced incrementally according to their health gain, ease of change, equity considerations, or other factors. Separately, medium-term expenditure frameworks (MTEFs) have been proposed as a way to help LMICs with long-term planning and revenue predictions [5].

Framework for Priority-Setting

The CGD Working Group on Priority-Setting Institutions for Global Health adopted a "7 + 7 framework" for priority-setting which consists of seven principles and seven core processes intended to improve health while managing political, commercial, advocacy, and donor interests in a fair and equitable manner. The seven principles (listed in Box 2) lead to a set of seven processes that comprise an HTA system (here, the "HTA system" refers to the entire decision-making process and context for HTA). The 7 processes of the HTA system include: (1) registration, or marketing authorization in a given country; (2) scoping to identify and select technologies for evaluation; (3) cost-effectiveness analysis using accepted methods, tools, and systematic evidence reviews; (4) budget impact analysis of a preliminary recommendation emerging from CEA; (5) a deliberative process to examine the results of the CEA and budget impact analysis, hear from stakeholders, and consider subjective decision criteria such as severity of the conditions or relative rarity of the disease; (6) decisions that are guided by the results of the CEA, budget impact analysis, and deliberative processes; and (7) an appeals, tracking, and evaluation process to constantly re-evaluate and adjust decisions based on new evidence.

Box 2: 7+7 Framework

The 7 principles for priority-setting are:

1. It should be ethically sound;
2. It should be scientifically rigorous;
3. It should be transparent;
4. It should be consistent;
5. It should be independent from vested interests;
6. It should be contestable;
7. It should be timely and enforceable

The 7 processes for HTA are:

1. Registration;
2. Scoping;
3. Cost-effectiveness analysis;
4. Budget impact analysis;
5. Deliberative process;
6. Decisions;
7. Appeals, tracking, and evaluation

The HTA system is an essential component to UHC in that it helps to increase rigor and relevance of evidence considered, provide a transparent and equitable mechanism to balance politics surrounding health resource allocation, connect evidence to budget decisions, and create permanent channels to consider priority-setting decisions over time. The HTA system can produce different types of outputs including coverage decisions, guidelines, protocols, or other evidence-based recommendations that can help a country on its path to UHC. A specific HTA system depends on a country's priority-setting starting

point, whether that be designing or adjusting a HBP, establishing a positive or negative list, or trying to accelerate the roll-out of cost-effective medical innovations to patients.

Priority-setting decisions must be made in the context of a country's institutional arrangements and in some cases, successful implementation of an HTA system will require reconsideration of statutes and regulations. Evaluation processes must also be linked to systems for evidence development to address critical uncertainties in high-priority demands.

Agenda for the Future

In July 2017, Director of the World Health Organization, Dr. Tedros Adhanom Ghebreyesus, stated that "All roads lead to universal health coverage" and emphasized that UHC was the top priority of the WHO [16]. Half a year later, in February 2018, Prime Minister of India, Narendra Modi, announced the Ayushman Bharat National Health Protection Mission (NHPM), more commonly known as "Modicare"—a national insurance scheme for 2018/19 that would provide 100 million families with health coverage of 500,000 rupees per year for free treatment of health ailments [17]. This would "cover a population ten times that covered under Obamacare in the US, but with less than a hundredth of the budget" [18]. So, while India may be talking the talk, it is yet to be seen whether they will walk the walk. As the world sets out to meet the difficult target set by Sustainable Development Goal (SDG) 3.8 of achieving UHC by 2030, countries must develop and strengthen priority-setting systems in order to maximize value to ensure the most health is bought with every dollar, rupee, or yen spent [19]. Effective UHC implementation requires robust governance and institutional arrangements, priority-setting tools and processes, and ethical frameworks.

Conclusion

Priority-setting decisions and processes are essential for those health systems that are seeking to make the transition towards UHC since the health services and commodities funded by the system must be consistent with the budgets available. Effective implementation of UHC requires institutional arrangements, robust governance, priority-setting tools and processes, and ethical frameworks and guidelines. While countries may need to initially invest in these arrangements, it will not only save them money in the future, it will also save lives and lead to healthier more prosperous populations.

Acknowledgements

This note is based in large part on the Center for Global Development (CGD) Working Group Report on Priority-Setting Institutions for Health and the CGD book, What's In, What's Out: Designing Benefits for Universal Health Coverage.

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