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One Health Sector's Similar Criteria for Priority Setting: A Comparative Analysis of Criteria Used for Priority Setting in Six National Health Programs and Those Used across the Health Sector

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Abstract

Background: Scarcity of resources is often a barrier to the provision of interventions that are responsive to people's health needs. Consequently, health system decision-makers and administrators are faced with questions about the most efficient way to determine priorities and allocate resources for the best results. Using explicit criteria has been highlighted as an efficient way to distribute resources that align with health system priorities. This study aimed to explore national level priority setting in Uganda based on six cases: HIV, New Technologies - focusing on new vaccines (NT), Maternal, neonatal and child health (MNCH), Non-communicable diseases (NCD), Emergencies and Health Systems Strengthening.

Methods: Semi-structured interviews were conducted with 57 Ugandan health policy makers between 2013 and 2015. Interviewees were identified through a mix of purposive and snowball sampling approaches. Respondents were asked about the pre-requisites for good priority setting as well as priority setting context, processes, implementation, outcome and impact. Initial analysis involved three researchers reading and coding two similar transcripts; the agreed on codes were then used to code the rest of the interviews. Criteria emerged as a main theme, which was further analyzed and forms the basis of this manuscript.

Results: A total of 20 criteria emerged from the semi-structured interviews, 11 of which were mentioned by Ugandan health policy makers as key considerations in decision-making for two or more of the cases reviewed. Many of the overlapping criteria across all six cases are consistent with criteria articulated in the literature.

Conclusion: Different programs within the health sector apply different criteria when setting priorities within their respective programs. While some of these criteria overlap with those in the health policy, most of the criteria are program specific. Promoting the use of explicit criteria in decision-making can be an effective tool in ensuring the equitable allocation of resources.

Keywords: Priority setting; Resource allocation; Low-income country; Uganda; Criteria

Abbreviations: MCDA: Multiple criteria decision analysis; HIV: Human Immunodeficiency Virus; NT: New Technologies; MNCH: Maternal, Neonatal and Child Health; NCD: Non-Communicable Diseases; TASO: The Aids Support Organization; PEPFAR: President's Emergency Plan for AIDS Relief; UDHS: Uganda Demographic and Health Survey; HPV: Human Papilloma Vaccine; DALYs: Disability Adjusted Life Years

Key Messages

- Criteria are critical and used in healthcare priority setting globally.
- While the health system is made up of many programs, studies on priority setting criteria have treated the health sector as a single unit. However, criteria vary across the health programs.
- For consistent decision making, it is important that there is harmonization of the priority setting criteria. These should be made explicit and publicized to increase transparency and fairness.

Introduction

One of the main challenges for many health care systems is the scarcity of resources. Scarcity of resources is often times a barrier to the provision of health interventions that are accessible and responsive to people's health needs. As a result, health system decision-makers and administrators are faced with questions about the most efficient, and effective way to determine priorities and allocate resources for the best results [1]. Priority setting is a challenge at all levels of decision making within the health system and in all contexts [2]. In health care, the some of the goals of priority setting are to ensure the financial sustainability of the health system while equitably meeting the population's health needs [3]. In more recent years, both consumers and funders are demanding greater accountability for how limited health resources are used to meet health system goals. Systematic priority setting, based on explicit criteria, can contribute to increasing transparency and accountability [4].

Several studies have been conducted to highlight the systematic approaches and principles used in priority setting and resource allocation across different health systems. For example Mitton et al., Kapiriri et al., and Daniels have described and explored the use of frameworks in guiding priority setting processes in various contexts. Similarly, in a systematic review described the mechanisms, approaches and explicit principles that countries such as Norway, the Netherlands, Sweden and Denmark have used to guide their priority setting processes. Overall what has emerged from this literature is the importance of articulating explicit criteria that should guide the actual ranking of the priorities [5-8].

Having explicit criteria to guide priority-setting decisions facilitates accountability, increases stakeholder understanding with subsequent results of increased chances for stakeholders accepting and supporting the priorities. There is a growing body of literature discussing the relevance of criteria, identifying the most commonly used criteria, and proposing techniques of how to use criteria in priority setting **(Table 1).** A core component in any of this literature is the identification of criteria that decision-makers consider important in their specific contexts [9-11].

While the need for having explicit criteria to guide decision-making is becoming better recognized, very few empirical studies have been conducted to specifically identify the criteria used by decision-makers in low resourced settings to rationalize how resources are allocated or which health technologies are implemented and supported. One paper by Kapiriri and Norheim identified the criteria that Ugandan decision makers deemed very important in their prioritization process [2]. In this study, criteria were enlisted from the literature and presented to the respondents who identified criteria they deemed to be very important in guiding priority setting. Respondents identified critical disease patient and societal related criteria. However, this study focused on the health sector as a unit, was conducted almost 15 years ago before the introduction of universal health coverage and did not allow the respondents to identify the criteria that they use when setting healthcare priorities. Baltussen also described the use of criteria in national level decision making in Ghana and Thailand [8]. Both studies, based on multiple criteria decision analysis (MCDA) described five criteria that decision makers considered **(Table 1).** These studies also provided the decision makers with pre-determined criteria.

Given the importance of explicit criteria in improving accountability and stakeholder engagement in healthcare priority setting, more studies are needed to investigate explicit criteria used in setting priorities and allocating resources for health in low and middle income countries [12]. However, the literature also recommends that criteria should be locally generated and debated; accepted criteria should guide priority setting within that context. A first step in doing this is to enlist the criteria and/or factors that influence priority setting. Furthermore, the fact that in many instances there is programmatic priority setting which is fed into the general health sector priority setting, it is important that the criteria that are used in guiding priority setting decisions in the different health programs within the health sector are enlisted and integrated in the general decision making process.

This study was conducted to identify the criteria that national level decision-makers reportedly use to guide priority setting in six specific health programs in the ministry of health in Uganda. The secondary aim was to compare these criteria to the criteria that was used in the national health policy as well as the literature and to discuss the implications for any potential differences and similarities between the cases and the criteria used to set priorities within the overall health sector.

Methods

Design

The results presented here are part of a larger qualitative study (based on interviews and a review of documents) that explored national level priority setting based on six cases: HIV, New Technologies - focusing on new vaccines (NT), Maternal, neonatal and child health (MNCH), Non-communicable diseases (NCD), Emergencies and Health Systems Strengthening. During the interviews, respondents were asked about the criteria that they used when setting priorities within their specific programs. This paper is a cross comparison of the criteria that were identified by respondents in the six cases.

Sample and recruitment for interviews

Semi-structured interviews were conducted with 57 national level decision makers working with the ministry of health (an average of 5-8 respondents per case). Interviewees were identified through a mix of purposive and snowball sampling approaches. We obtained a list of leaders of the six programs we were interested in these were our index respondents. They were sent initial introductory e-mails with a consent form. If no response was received in two weeks, this was followed up with a phone call. After interviewing the index respondents, we asked that they identify any additional respondents who were knowledgeable of priority setting within their respective health programs. These respondents were then contacted with a request to participate and if they consented, were subsequently interviewed. This pattern of recruitment was repeated until no new information emerged from the subsequent interviews.

Data collection

Data was collected by trained research assistants and the principal investigator between 2013 and 2015. Most of the interviews were conducted face to face and a small proportion were conducted via Skype or telephone. Respondents were asked about the priority setting context, the pre-requisites for good priority setting, the priority setting process, implementation and outcome and impact. The theme of criteria was further explored under the priority setting process. Instead of proposing criteria and asking the respondents which ones they considered when setting priorities; respondents were asked: What factors influence priority setting within your program? What criteria are considered when setting priorities? The term “criteria” was used loosely to denote any factors that respondents thought to influence their priority setting decisions.

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Interviews were audio recorded with permission from the respondents.

Table 1 Examples of criteria discussed in the literature.

Mobinizadeh et al. [14]	Norheim et al. [17]	Baltussen et al. [1]	Kapiriri et al. [9]
Health outcomes	**Group 1: Disease and intervention criteria**	**Severity of disease**	**Disease related criteria**
Health effects and benefits, Clinical impact	Severity	Number of potential beneficiaries	Cost- effectiveness of intervention
Efficacy/ effectiveness, Marginal benefit	Realization of potential	Age of target group	Treatment Costs
	Past health loss	Individual health benefits	Benefit of intervention
Individual health benefits: Quality of life, potential changes in health consequence	**Group 2: Criteria related to characteristics of social groups**	Poverty reduction	Severity of disease
	Socioeconomic status	Cost- effectiveness	Quality of evidence
Ability to reduce own health risk	Area of living	--	--
Potential to extend life	Gender	--	**Patient related criteria**
Condition if treated averts future costs	Race, ethnicity, religion and sexual orientation	--	Age
Disease and Target population	**Group 3: criteria related to protection against the financial and social effects of ill health**	--	Responsibilities
Disease burden including impact	Economic productivity	--	Mental and physical capabilities
Age and social characteristics of target group	Care for others	--	Area of residence
Population size/ number of potential beneficiaries/ patients	Catastrophic health expenditures	--	Time on waiting list
Effect on target population, especially vulnerable populations	--	--	Community and political views
Status of criteria related to alternatives			Number of people benefiting
Number of alternatives, and their limitations			Gender
Status of criteria related to economic aspects			Lifestyle
Cost- effectiveness, Costs, price and sales volume			Social status
Budget and economic impact			--
Poverty reduction, financial protection			**Society related criteria**
Value for money, willingness to pay			Equity
Financial consequence, economic productivity			Community and political views
Societal interest and demand			--
Status criteria related to Evidence			
Quality, number, relevance and power of evidence			
Completeness and consistency and adherence to requirements of decision making body			
Other criteria			
Health system related issues e.g. impact on health policies			

Analysis and data management

The interviews were transcribed verbatim. Initial analysis involved 3 researchers reading and coding two similar transcripts. They met and discussed their labels, any contradictions were discussed and resolved to obtain and agreed on code list, which was used to code the rest of the interviews. The secondary analysis, on which this paper is based, involved research assistants reading through and obtaining the codes and themes related to criteria. These were consolidated, first along the cases, and then integrated to identify the consistent and unique criteria across the six cases. Further analysis involved comparing the most common criteria to

1. Criteria in the National Health Strategic Plan
2. Criteria in the literature. The hand written notes also facilitated the coding process **(Table 1)**.

Results

The results have been organized into two sections: The first section describes themes that emerged across several cases (described as cross-cutting themes) and the second section describes themes that were unique to a particular case among the group of cases that were explored. Illustrative quotes are provided vis: The first letters identify the case and the number was randomly allocated to the respondents within the case e.g. MNCH_5= Maternal, neonatal and child health case, respondent 5. Respondents from the planning department which oversees the overall health sector prioritization were also interviewed (HS), however, since their responses referred to all cases; they were not provided a specific column the comparative analysis, although their quotes are used in the narrative.

Cross-cutting criteria

Criteria that were common to all or more than 2 programs included: evidence, cost- effectiveness, cost, international agreements and frameworks, alignment with global priorities, international funders and donors, local priorities, availability of resources, equity, politics, and appropriateness of the solution. We explain these in detail below.

Evidence was identified by respondents as an explicit criteria used in priority setting activities for all six cases that were explored. Evidence was usually framed as outputs from empirical endeavor ' s published in journals, found in epidemiological studies or presented by experts in particular fields. Respondents who identified evidence as a key criterion in priority setting referenced each output in their responses. For instance, epidemiologic evidence was used to determine the state of the epidemic and severity of the disease for cases emergencies, HIV and NT. Knowledge articulated by experts through presentations in specific areas such as MNCH was also relied on for their expertise. For instance, one respondent stated: " Technical working groups people come with presentations, new areas of research, new evidence most of the work on priority setting is done in the technical working group by experts, knowledgeable people that's where most of the work is done" [MCH_9].

Another respondent went further to highlight the importance of having evidence to support decision-making: "So it would be prudent to have a good data system which monitors this operational and basic research which will direct you " (EMERG_10)

Cost effectiveness was also indicated as an important consideration in priority setting, particularly as it relates to decisions around health interventions. Cost-effectiveness was noticeably emphasized in the choice of interventions within each of the chosen priority area, which was supported by the 2007-2011 National Service Plan (NSP) that outlined the following in the case of HIV " the resources needed for prevention are allocated to the most cost effective interventions and those that provide entry to other care and support services." Cost effectiveness was also identified as an important consideration in the priority setting process in the case of NT. Other related criteria included affordability and appropriateness of the interventions within the local context. Cost was also another criterion that emerged as a key theme across both HIV and NT. Cost was tied very closely to discussions about cost effectiveness and the affordability of the intervention.

In addition to the above national factors, interviewees identified a number of global factors that are considered when making priority-setting decisions. Firstly, international agreements and frameworks such as the Millennium Development Goals were quoted as having significant influence over priority-setting activities particularly in the case of HIV where there were several overlapping themes for the influence of global priorities through agreements and frameworks as well as funding. International frameworks and agreements are typically reflective of global priorities for the stakeholders involved. During the interviews international agreements and frameworks were referenced in almost all cases with one respondent noting the following: "But the other thing is global attention. MNCH, HIV, Tuberculosis, malaria and now NCDs have their place on the post 2015 agenda. That alone, even when you're looking at the strategic plans, that is one of the things that is driving it (priority setting)-the global agenda." [HS_2].

Alignment with global priorities was another important criteria considered. While some of the global priorities were reflected in international agreements and frameworks; others were articulated in specific donor agreements. Alignment with global priorities was quoted as an important criterion particularly for low and middle-income countries as external resources constitute a large percentage of their health budgets. In such instances, respondents decried their susceptibility of their identified priorities to changes based on global priorities or standards. Closely tied to the importance of global priorities is the role of the priorities set by international funders and donors and how they also inform criteria used in decision-making. Funding was a particularly important criterion in priority setting activities. For example, participants referenced Global Funds in the case of HIV. Given the role of international funds and donors, it was essentially stated that international fund holders and donors have significant influence over which programs actually get to be implemented; in the case of HIV for example, the interventions and projects are funded based on criteria and requirements articulated by Global Fund. For instance, when asked about how they make their decisions with regards to which organizations/ programs to support one respondent noted that: "Yes because TASO is providing support on the behalf of Global Fund, so the terms are determined by Global Fund. They tell us what they want, who needs to be supported and our job at TASO is try to identify those organizations which fit in the requirements of the Global Fund. It is not us who decide, the decision is made by Global Fund because they are the ones giving the funds." [HIV_1]

Donor priorities was another criteria mentioned by the respondents. Given that a large proportion of Uganda's health

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sector programming is funded by donors, it follows that the interventions ultimately pursued are those towards which donors have expressed interest or approval. Whether donors enter with funds designated towards a specific priority area or conversely, whether donors work with domestic governments to negotiate programs that satisfy parties' core policies and beliefs (i.e., World Bank), donor-satisfaction is ultimately an important criterion a program or intervention must fulfill. One respondent stated: "The other thing is development partners preferences. So PEPFAR will come in and fund HIV, because HIV is big you see and also because it makes them look good on the global scene. Yea so it is development partners' priority" [HS_2].

Local priorities were referenced in all cases and seen as issues that were domestic at different levels of the system, including national and regional. These priorities were typically articulated through health strategic plans and other existing health policy documents. Local priorities were referenced in several cases as a key criterion for decision-making. For instance, local priorities were often linked to equity and increasing access to services in the MNCH case where some regions were known to be more disadvantaged than others and as such increasing access to resources were common topics for discussion as a local priority. In the case of HIV, one respondent noted the following: "There are national priorities and government has already marked what we call district HIV mapping. So already there are priority areas in those districts and, in fact, the funding or the request for funding has been skewed in such a way that it is focused on addressing those priority areas." [HIV_2]. "So we were guided by the minimum care package within the policy which emphasized that PHC should continue to be the guiding principle for service delivery in the country. So the overriding principle was that sticking to primary concept, but now we are focusing on delivery, universal delivery of the minimum health care package." [HS_5]

Availability of resources was identified as a key criterion in the cases of HIV and MNCH. Resources were defined as both financial and human resources. References to the availability were also linked to the cost-effectiveness of the interventions and limiting the duplication of efforts. A key focus was on generating enough savings in various areas to increase the availability of resources that could be allocated to other areas that were either resource intensive or a priority area driven by various factors that were donor or equity related, or political.

" What other thing determined the interventions? The likelihood of funding, so for the example now is like larviciding. We don't have enough evidence to take it on. So you can see how evidence is playing a role. Let's first keep it at pilot stage." [HS_2].

Equity was referenced across all cases and driven by different factors such as gender (with specific reference to women), geography (hard to reach and rural dwellings), age (children) and income (the poor). The vulnerability of a particular group can be based on one or more of the factors that were identified. For example, some respondents talked about how equity is central to the prioritization of MNCH in general, as mothers and children are looked at as a big part of the vulnerable population in many countries, Uganda inclusive.

"We look at issues like vulnerability, population, geographical access, burden of disease, we look at equity you know, those are things that influence our priority setting and resource allocation. Equity, access, women, children, poor, rural/urban differentiation" [MNCH_4].

Respondents indicated that priorities were further driven by evidence of equity gaps and the need to address various vulnerabilities. Participants often discussed the way that a focus on equity occurred because of evidence of poor health indicators in specific regions. For instance, one respondent argued that a focus on certain disadvantaged regions came about because of evidence from the Uganda Demographic and Health Survey (UDHS).

"For example the UDHS showed us the indicators for example family planning and uptake of skilled care some regions were more at a disadvantage than others. Their indicators were not as good as the other regions and I think that brought in identifying the regions that we had to serve." [HIV_6].

Politics was noted as another criteria considered in priority setting. For example, some global participants argued that Human Papilloma Vaccine (HPV) became a priority because it was partly influenced by political sentiments. For example, some of the participants argued that the government rushed to adopt the HPV vaccine, despite the fact that this decision was not necessarily a result of evidence or logistical considerations. As one researcher from Uganda explains, the influence of national politics can offset priorities set based on evidence, and can derail considerations of the impact of adopting a new vaccine on the health system.

"But a lot of times what I've seen is it's often a political decision. So there's a difference between the technical and the political priorities." [NT_3].

Appropriateness of the solution was an additional common criterion. Appropriateness was referred to in terms of:

(a) Whether there is adequate capacity (human resources and technology) on the ground to operate or manage a given priority intervention/program,

(b) Whether enough evidence exists to support the use of a given intervention or technology.

Emergencies and severity of disease was an additional criterion. The rationale for this criterion was that most emergencies tend to affect many people, some are severe and deadly e.g. Ebola. Respondents across the cases alluded to the fact that during emergencies, the country goes into and "emergency mode" whereby the outbreak takes precedence over all other programs within the health, as demonstrated by the resource reallocation from all the other health programs to support the emergency response, which often occurs during emergencies. "Now we have Ebola, for sure you can't leave a disease that is killing people" (NT_1)

Case specific themes

Several themes arose that were very specific to only the health systems case. In discussing the health system and

sustainability, health and environment impact of an intervention arose from the discussion with one HIV case respondent. This specific respondent discussed that for their organization, it is important that any intervention they support does not have a negative environmental impact. This was surprising especially in a discussion of health programming.

Another respondent also discussed the consideration of Efficiency and avoiding duplication of effort as another criterion they considered. This particular respondent talked about the importance of minimizing donor duplication. So one of their considerations is avoiding entering programmatic areas where a plethora of stakeholders are already acting. The example provided by the respondent was one organization's intentions to terminate their HIV programming in order to fund more neglected fields.

"But I think we would even make the case here, and I think if you look at the amount of funding available for HIV is approaching fifty percent of all resources to health. So I think we will probably evolve next year to allowing our HIV program to come to a natural end. You know, we'll focus our resources on areas, which are off track like maternal health, neonatal health, and those other priorities that I mentioned. We don't sit down with a spreadsheet and work out what the prevalence rates are with each disease and the number of DALYs lost each year to each health condition in Uganda. I don't even think you can get that data. But it is a rough process, some kind of prioritization to find what areas we focus on." [HS_7].

Another criterion that was identified in only one case was industry priorities. This was discussed in relationship to pushing new technologies such as vaccines. According to one participant's perception, industries are more likely to promote the introduction of more financially profitable vaccines like HPV compared to vaccines for diseases such as measles:

"Usually [it is] the governments or the research scientists pushing [their priorities] but now we have the industry actually who can make a profit out of these things pushing their priorities" [NT_8].

Novelty of the disease was unique to respondents from the emergencies case. Here respondents discussed how a new outbreak, even if it is not so severe, can attract national attention simply by virtue of its being new. Lastly, only respondents from the HIV case discussed criteria related to value added, and accountability for HIV and only respondents from the NCD case discussed the consequences of the disease (e.g. Economic impact).

Discussion

This paper discusses criteria that are used in priority setting within six different health programs within a low-income country health sector. This paper fills a gap in the literature which has mainly focused on the health sector as a single unit, describing criteria used to set health sector priorities. Results from this study demonstrate that there are clear criteria that inform decision-making by policy makers in Uganda for the allocation of resources to health interventions. Many of the overlapping criteria across all six cases are consistent with criteria that are commonly articulated in the literature **(Table 1)** [4]. For example, equity as a criterion has gained international attention but more so for low-income countries where health inequities persist. For instance, [13] noted the importance of equity in order to achieve universal health coverage. Similarly, [1] in a study of the distributional preferences of health planners in Tanzania, found that the majority of health planners consistently considered the "affect those with least life expectancy" to be the most important reason in priority setting [1]. Furthermore, equity is also associated with the idea of universal health coverage, which is firmly rooted in egalitarian principles related to fairness and distributive justice and aligns with health system priorities of equity in health outcomes [13]. Still consistent with the literature, international agreements, frameworks, priorities and frameworks such as the United Nation's Millennium Development Goals (MDG) and organization priorities, such as the WHO, have been found to play an important role in defining and guiding local level priorities [14-16].

When comparing the case specific criteria with the health policy criteria; the Uganda health policy describes several criteria that guided the development of the essential health care package. These include evidence, cost- effectiveness of interventions, costs, alignment with international agreement, local priorities, and equity. Ideally, the general health sector criteria should reflect the program level criteria. However, we found that the different programs have additional criteria that are not reflected in the national health policy **(Table 2).** This is an important finding and highlights the need to understand the prioritization processes within programs of the health sector. Since the technical working groups from these programs are responsible for providing national planning division their program related information [5]; lack of consistence in the criteria used to identify priorities may skew the health sector priorities at the onset. Important to note here is that all the criteria in the health policy are consistent with the program level criteria, with the exception of alignment with international agreements, which was not mentioned in 2/5 cases. The reverse is however, untrue, since all programs have additional criteria that are not reflected in the national policy. These findings may be a reflection of the methods employed to collect the data whereby the overall health sector criteria were enlisted from the health policy and not interviews. Earlier studies, based on interviews, identified some of the criteria that are unique to the cases, such as advocacy, alignment with funders' priorities [5]. Conversely, since the national level studies interview respondents from the respective programs, their responses may, indeed be a reflection of the criteria they use within their programs. Given the importance of criteria in priority setting, there should be consistence in the criteria used across the health sector and within the health programs. This will ensure that consistent and comparable criteria are used; which will promote transparency and consistency in the decision-making processes within the health sector.

Differences also existed between the cases. For example, while most of the criteria were crosscutting; some of the cases did not identify some of the cross- cutting criteria. Specifically,

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the Emergency and NCD cases remained unique within this section. Specifically, international funders' priorities and availability of resources were not, identified by respondents in these cases. This may be a reflection of the kind of programs these are for example, emergencies, once they occur, have to be prioritized, and resources are mobilized from all the other programs and sector some of the cases [17] this renders the criteria e.g., availability of resources, costs, international agreements irrelevant. Furthermore, NCDs have not been prioritized, or well supported through external sources; this may explain that not being a consideration in their prioritization [18-20]. Similarly, the case specific criteria maybe a reflection of the conditions of funding, and organization of the different health programs.

Table 2 Criteria used in setting priorities for five cases investigated in the Ugandan Health System.

Criteria	HIV	MCNH	NT	Emergency	Health Systems	NCD	Uganda*
Section 1: Cross-cutting criteria							
Evidence	X	X	X	X	X	X	X
Cost effectiveness	X	X	X		X	X	X
Cost	X		X			X	X
International Agreements and Frameworks	X	X	X		X		X
Alignment with Global Priorities	X	X	X			X	
International Funders and Donors	X	X	X		X		
Local Priorities	X	X	X	X	X	X	X
Availability of Resources	X	X	X		X		
Equity	X	X	X	X	X		X
Political will and advocacy	X	X	X	X	X		
Emergencies	X	X	X	X	X	X	
Section 2: Case Specific Criteria							
Appropriateness of Solution					X		
Health and Environmental Impact					X		
Efficiency					X		
Novelty				X			
Historical experience				X			
Pressure from the industry			X				
Value added	X						
Accountability	X						
Consequences				X		X	

There is a growing consensus that different criteria can be legitimized to guide priority setting. These criteria can vary depending on the health system, the level of decision making and, as found in this paper, different programs within the health sector. Since some of these criteria may not be acceptable to some of the stakeholders, deliberative processes for priority setting involving multi-criteria decision analysis (MCDA) may facilitate this process and decision-making that rely on moving evidence into policy [21,22]. We do not advocate that all the criteria enlisted in the study be considered when setting national level priorities. Our proposal is that stakeholders within each case/ health program generate a list of criteria that they deem important when setting priorities within their programs. They should also generate the rationales. They should then engage in a deliberation about those criteria and rationales in order for them to prioritise 5-10 criteria. These criteria and related rationales should be disseminated to all programs across the health sector. Once all programs have generated their 5-10 criteria, there should be a joint health sector deliberation process on all the program specific criteria. The purpose of this meeting would be to identify the 5-10 criteria that should be used to guide decision making across the health sector. The list should form a basis, however, should there be programs with unique needs that would require additional criteria; these should be transparently communicated to give the other stakeholders an opportunity to comment on those criteria; before they are used. Using MCDA in a deliberative process to set priorities provides means for decision makers to consider a

comprehensive set of explicit criteria and guides them in understanding the trade-offs between values [11]; such as priorities at the international, national and local level and the implications of things such as international agreements that, while important, may not have the same weight in decision making in high-income country settings as they would in low and middle-income countries. This also provides an opportunity for other criteria, such as politics and appropriateness of solutions that often times are less explicitly cited but are very important and weighted heavily in decision-making activities in both high-income and low-income settings to be important [23].

Limitations

The findings in this paper should be interpreted with caution. First, as with all qualitative studies, we did not interview a representative sample of respondents, since the aim was not to generalize the findings. However, since we interviewed the key stakeholders in each program, we maintain that the findings are still credible. Second, we presented criteria that were reported by the respondents (for the cases) and in the policy document (Essential package), this may not reflect the criteria that are actually used in priority setting within the programs and the health sector. Such criteria can only be assessed through direct observations at priority setting meeting, which was beyond the scope of this study.

Conclusion

Different programs within the health sector apply different criteria when setting priorities within their respective programs. While some of these criteria overlap with those in the health policy; most of the criteria are program specific. The use of additional criteria beyond those in the health policy may introduce result in applying different standards for the different programs; which may make it difficult when setting priorities between the programs, at the health sector level.

The cross cutting criteria that are consistent with those in the health policy and the current literature on acceptable criteria could form basis of initial criteria. Criteria that are unique to some (but not all) of the programs should form basis for deliberate dialogues aimed at identifying criteria that is acceptable for most of the stakeholders. These should guide national level priority setting. Criteria that are deemed relevant but unique to a specific program should be presented to all health sector stakeholders, and their relevance discussed. Fair priority setting requires that the rationales on which the prioritization is based should be deemed relevant by the appropriate stakeholders. This can be achieved through the articulation and discussion of all the criteria that are considered within the programs and the health sector. Criteria, whether implicit or explicit are used to guide priority setting decisions in health systems globally. Health systems need to enlist program level criteria, which can be considered when generating system level criteria. This would ensure that the criteria that are used across the health sector are explicit and used consistently; which contributes to fair priority setting processes.

Ethics Statement

This study was reviewed and approved by the Author's Research Ethics Board and the relevant local Research Ethics Board. All respondents provided signed consent.

Conflicts of Interest

The authors declare that they have no conflicts of interests.

References

1. Baltussen R, Niessen L (2006) Priority setting of health interventions: the need for multi-criteria decision analysis. Cost Effectiveness and Resource Allocation 4: 14-23.
2. Baltussen R, Jansen M P, Mikkelsen E, Tromp N, Hontelez J, et al. (2016) Priority Setting for Universal Health Coverage: We Need Evidence-Informed Deliberative Processes, Not Just More Evidence on Cost-Effectiveness. International Journal of Health Policy Management 5: 615-618.
3. Philippa B, Maye O, Victor D, Crick L, James Rogers N, et al. (2011) The MHaPP Research Programme Consortium, Increasing the priority of mental health in Africa: findings from qualitative research in Ghana, South Africa, Uganda and Zambia. Health Policy and Planning 26: 357-365.
4. Chalkidou K, Glassman A, Martern R, Vega J, Teerawattananon Y, et al. (2016) Priority-setting for achieving universal health coverage. Word Health Organization Bulletin 94: 462-467.
5. Charvel S, Cobo F, Larrea S, Baglietto J (2018) Challenges in priority setting from a legal perspective in Brazil, Costa Rica, Chile and Mexico. Health and Human Rights Journal 20: 173-184.
6. Essue B, Kapiriri L (2018) The unfunded priorities: an evaluation of priority setting for noncommunicable disease control in Uganda. Globalization and Health 14: 22-36.
7. Gopinathan U, Ottersen T (2017) Evidence-Informed Deliberative Processes for Universal Health Coverage: Broadening the Scope. International Journal of Health Policy Management 6: 473-475.
8. Kapiriri L, Be LaRose L (2018) Priority setting for disease outbreaks in Uganda: A case study evaluating the process. Global Public Health 14: 241-253.
9. Kapiriri L, Norheim F O (2004) Criteria for priority-setting in health care in Uganda: exploration of stakeholders' values. Bulletin of the World Health Organization 82: 172-179.
10. Kapiriri L, Tomlinson M, Gibson J, El Arifeen S, Black RE (2007) Setting priorities in global child health research investments: Addressing values of stakeholders. Croatian Medical Journal 48: 618-627.
11. Li R, Hernandez-Villafuerte K, Towse A, Vlad I (2016) Mapping Priority Setting in Health in 17 Countries Across Asia, Latin America, and sub-Saharan Africa. Health Systems and Reform 2: 71-83.
12. Maher D, Ford N, Unwin N (2012) Priorities for developing countries in the global response to non-communicable diseases. Globalization and Health 8: 14.
13. Mitton C, Donaldson C (2002) Setting priorities in Canadian regional health authorities: a survey of key decision makers. Health Policy 60: 39-58.

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14. Mobinizadeh M, Raeissi P, Nasiripour AA, Olyaeemanesh A, Tabibi SJ (2016) The health systems priority setting criteria for selecting health technologies: A systematic review of the current evidence. Med J Islam Repub Iran 30: 329.

15. Murray CJ, Frenk J (2000) A framework for assessing the performance of health systems. Bulletin of the World Health Organization 78: 717-731.

16. Norheim OF (2016) Ethical priority setting for universal health coverage: challenges in deciding upon fair distribution of health services. BMC Medicine 14: 75-79.

17. Norheim OF, Baltussen R, Johri M, Chisholm D, Nord E, et al. (2014) Guidance on priority setting in health care (GPS-Health): the inclusion of equity criteria not captured by cost-effectiveness analysis. Cost Effectiveness and Resource Allocation 12: 1-8.

18. Ottersen T, Mbilinyi D, Maestad O, Norheim OF (2008) Distribution matters: Equity considerations among health planners in Tanzania. Health Policy 85: 218-227.

19. Sabik LM, Lie RK (2008) Priority setting in health care: Lessons from the experiences of eight countries. International Journal for Equity in Health 7: 1-13.

20. Ssengooba F (2004) Uganda's minimum health care package: rationing within the minimum? Health Policy and Development 2: 1-6.

21. Tromp N, Baltussen R (2012) Mapping of multiple criteria for priority setting of health interventions: an aid for decision makers. BMC Health Services Research 12: 454-464.

22. World Health Organization (2003) Making choices in health: WHO guide to cost-effectiveness analysis. World Health Organization, Geneva.

23. World Health Organization (2014) Making fair choices on the path to universal health coverage. Final report of the WHO Consultative Group on Equity and Universal Health Coverage. World Health Organization, Geneva.