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# Healthcare Priority-Setting in Essential Health Packages for Sexual Reproductive Health: Going Beyond the Commonly Prioritised Services

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## Abstract

There is a systematic exclusion of gender-based violence, safe abortion, reproductive cancers, infertility services, comprehensive sexuality education, sexuality services, and STI's other than HIV in essential health packages in LMICs. To accelerate progress on sexual reproductive health (SRH), the Guttmacher–Lancet Commission proposed the adoption of these interventions into an essential health package of SRH services that should be universally available. In this commentary, we use a healthcare priority-setting processes lens to review the importance of these services for universal health coverage. We isolate inherent challenges in social value judgments for terminal, process and content evidence for their healthcare priority-setting. We then advance promising emerging practical examples from low to middle-income countries on evidence-informed decision-making processes. We recommend capacity development through regional support, generating equity and efficiency evidence and strengthening political and publicly acceptable processes to institutionalise and operationalise evidence-informed decision-making.

**Key Words: Healthcare Priority-setting, Health Technology Assessment, Essential Health Packages, Low to Middle Income Countries, Equity, Efficiency, Evidence-Informed Decision Making**

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**Introduction**

To accelerate progress on sexual reproductive health (SRH), the Guttmacher–Lancet commission proposed the adoption of the commonly unprioritized interventions into an essential health package (EHP) that should be universally available (Starrs et al., 2018). Evidence on SRH services in EHPs in low to middle-income countries (LMICs) indicates a systematic exclusion of some selected key interventions (Love-Koh et al., 2020; Ravindran & Govender, 2020). Within the category of SRH services, pregnancy-related care, family planning and HIV/AIDS have been prioritized alongside other disease program areas in EHPs (Huchko et al., 2015; Pillay et al., 2020). However, gender-based violence, safe abortion, reproductive cancers, infertility services, comprehensive sexuality education, sexuality services, and STI's other than HIV, have received limited prioritization in EHPs (Gilby et al., 2021; Lim et al., 2020; Starrs et al., 2018). Furthermore, for services included in EHPs, key populations such as the unmarried, adolescents, Men who have Sex with Men, sex workers, LBGTQIA community, persons living with HIV/AIDS, persons with disabilities and migrants still have unmet SRH service needs (Lim et al., 2020; Ravindran & Govender, 2020; Starrs et al., 2018). The lack of access to the commonly unprioritized SRH services threatens universal health coverage (UHC) objectives with the risk of increased inequities in coverage for financial protection, health services and quality healthcare (Ravindran & Govender, 2020).

In pursuant of UHC in LMICs, decisions on what should constitute a prioritized package of essential services for public financing are necessary (Chalkidou et al., 2016; WHO, 2019). EHPs help to identify if limited resources have been used appropriately and define an explicit entitlement for the population (Chalkidou et al., 2016; Smith & Chalkidou, 2017; World Health Organisation, 2021a). Priority-setting for EHPs is a value-laden process imbedded in social value judgments in terminal (prioritization goals and criteria), process (procedural accountability and transparency) and content (evidence and appraisal) evidence. Systematic and transparent tradeoffs have to be balanced off on competing criteria with consultation and inputs from relevant stakeholders on health technology assessment evidence (HTA) (World Health Organization et al., 2021). However, in many LMICs the stalling on progress for the unmet SRH services has been attributed to challenges related to dominant sociocultural norms and inequities in access to health services which has influenced healthcare priority setting processes (Clark & Weale, 2012; Lim et al., 2020; Starrs et al., 2018). More recently, the onset of SAS-CoV-2 (COVID-19) has declined economic performance and fiscal spaces for public financing and inevitably revealed gaps in priority-setting approaches (Otu et al., 2021; Šehović & Govender, 2021; Tang et al., 2020). Lockdowns, exacerbated by social distancing and travel restrictions have forced some SRH services to shut down across countries (Riley et al., 2020).

In this commentary, we highlight the importance of the unprioritized SRH services in achieving UHC. We explore their exclusion using the sociocultural, equity and efficiency lens and then discuss the challenges with an efficiency-skewed and, in most cases, ad hoc priority-setting process. We then attempt to use social value judgements emerging from applied experiences in some LMICs in terminal, process and content evidence approaches to suggest some lessons learnt for improving priority-setting processes. We conclude by postulating a need to extend beyond the traditional efficiency focus to include equity impact, sociocultural, sociopolitical and socioeconomic evidence in priority-setting.

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**Unprioritized services left off the agenda**

The exclusion of the unprioritized SRH services in EHPs introduces glaring inequalities that are unjustifiable and unfair on health outcomes distribution to key populations in LMICs. A review of progress on the inclusion of SRH services in EHPs in Africa using the Guttmacher-Lancet commission's proposed package, found services around maternal health, HIV and STIs were included in EHPs. However, services relating to gender-based violence, comprehensive sexuality education and infertility were omitted or not captured completely, and inclusion of safe abortion services varied depending on the legal and social environment (Pillay et al., 2020; SIDA, 2019). This evidence has further been reinforced by Ravindran and Govender who examined EHPs across twenty-six LMICs EHPs. Their findings indicate inclusion of family planning and STI/ HIV prevention and management services in EHPs. However, a lot of these packages neglect to mention services related to safe abortion, infertility, and screening for cervical and breast cancers. Comprehensive sexuality education is effectively absent, with weak reference to SRH awareness and counselling (Ravindran & Govender, 2020). These findings have been supported elsewhere(Akazili et al., 2020; Lim et al., 2020; Love-Koh et al., 2020).

Evidence for the negative impacts for unprioritized SRH services are concerning. Cervical cancer, was the fourth most common cancer in young women worldwide and its global burden is unevenly distributed with Sub-Saharan Africa having the highest incidence in the world as of 2018 (Sung et al., 2021). In 2018, 19 of the 20 countries with the highest-burden were from Africa (Bray et al., 2018; Njuguna et al., 2020). Cervical cancer prevention is an essential part of comprehensive HIV care and disproportionally affects women in LMICs, however services are limited. Infertility, another unprioritized SRH service, causes social, economic, medical and psychological harm and affects more than 186 million people worldwide with the greatest burden reported in LMICs where assisted reproductive technology (ART) is scarce and expensive (Morshed-Behbahani et al., 2020). In sub-Saharan Africa (SSA), an average of 40% of women have unrealised fertility compared to 26% in non-SSA countries (Channon & Harper, 2019). A 2021 systematic review showed no evidence from LMICs reporting the implementation of low-cost assisted reproductive technologies that is effective, accessible and affordable (Chiware et al., 2021). The high rates of gender-based violence (GBV) is an added concern. About one-third of women 15 years and older have experienced intimate partner physical or sexual violence in their lifetime, with even higher proportions found in Africa and South-East Asia (World Health Organisation, 2021b). The effects of GBV are intergenerational and can result in exposed children of mothers experiencing GBV having a higher risk of under-five mortality, poor growth and development in children with an increased risk of perpetrating GBV later in life (Coll et al., 2020). A meta-review by Grose and others focusing on LMICs showed that intimate partner violence and GBV lead to poor SRH outcomes. The study found consistent associations between GBV, sexually transmitted infections, unwanted pregnancies, and abortion (Grose et al., 2021). The lockdown measures implemented during COVID19 is expected to worsen GBV cases by an additional 61 million cases (Rollston et al., 2020).

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The limited service availability and access for the unprioritized SRH services disproportionately affects adolescent girls and young woman (AGYW) and key populations. Their marginalised status in many settings is associated with the lack of prioritisation of SRH services and vague indicators put in place to measure progress in attaining optimal SRH outcomes (Mazur et al., 2018). For AGYW, in particular, transitions into adulthood are marked by complex biological and psychosocial development processes. In environments, where adolescents have restricted agency in managing their health needs, (restrictive age of consent policies on accessing SRH services) and growth occurs in contexts where social and financial protection mechanisms are poor (Chemlal & Russo, 2019; Desrosiers et al., 2020), SRH outcomes have been suboptimal (e.g., high HIV incidence, unwanted pregnancies, unsafe abortions, early child marriages). For key populations, the stigma and social and legislative discrimination associated with the diversities of sex characteristics, sexual orientations and gender identities are also linked to poor SRH outcomes (e.g., high HIV incidence, lack of access to contraceptives, poor mental health). Further, in LMICS, AGYW and key populations and their sexual partners, (including young men who have sex with men, transgender persons, young sex workers and their clients and young people who inject drugs) constitute the majority of new HIV infections in 2018 (UNAIDS, 2020).

**Evidence-Informed Priority-Setting for Essential Health Packages for Sexual Reproductive Health in Low to Middle-Income Countries, What is Missing?**

In LMICs, sociocultural, socioeconomic and sociopolitical analysis is neglected in HTA'S and when considered, there is limited technical capacity to contextualise this assessment (Otu et al., 2021; Surgey et al., 2020). A systematic review by Kaur and others, revealed a dominant use of cost-effectiveness in LMICs than any other criteria (Kaur et al., 2019). However, even in jurisdictions where the use of economic evaluation data is increasing, a systematic study in LMICs by Leech found that there were substantial variations across countries and disease area in incorporating economic evidence into national health priority plans (Leech et al., 2020). Even so, there is now widespread acknowledgement that decisions on the allocation of scarce healthcare resources are shaped by a range of criteria and that economic evaluation information must be considered alongside other health system goals (Love-Koh et al., 2020). A study by Lim et al, exploring how the unprioritized SRH services were left behind in Malaysian EHP revealed that priority-setting is inherently a political process that reflects societal values and norms. Addressing the issue of inequity (unprioritized services and lack of access to services for marginalised groups) is important here. A review of 13 SRH packages in Africa revealed that although equity was a key motivation behind the design of the package, evidence-based methods for considering the equity impacts of the included interventions were inconsistent (Love-Koh et al., 2020). It therefore seems sensible to integrate unprioritized SRH services in EHPs using both technical arguments and appropriate strategies to overcome barriers related to societal values (Lim et al., 2020).

A more holistic priority-setting approach using, for example, multidimensional HTA tools can provide valuable evidence that could be useful for decision-making in LMICs, both in terms of maximising health, enhancing equity and sociocultural needs (MacQuilkan et al., 2018). HTA involves research in multiple disciplines in order to assess cost-effectiveness, budget impact, programmatic feasibility and social and ethical issues of health interventions (Tantivess et al., 2017). However, it has been challenging to implement in LMICs due to the limited local

capacity to conduct evaluations and the empowerment of local decision-makers to act on this evidence (Wiseman et al., 2016; World Health Organization et al., 2021). HTA uses time-consuming, data-intensive and systematic methods and processes that require diverse and interdisciplinary expertise (sociopolitical, sociocultural and social economic analysis, behavioural science, health economic evaluation, costing, budget impact analysis, decision analytic modelling, evidence synthesis, legal research, anthropology, epidemiology, statistics, clinical efficacy analysis) to make recommendations on how to allocate finite resources (Li et al., 2017).

**Healthcare Priority-Setting for the Unprioritized Sexual Reproductive Health Services in Low to Middle Income Countries: Some Promising Learning Points**

Whereas there are limited published specific country examples on SRH priority-setting processes in LMICs, there are increasing initiatives on broader evidence-informed decision processes that provide learning points for SRH. Here we cover, (i) capacity development initiatives for evidence-informed priority-setting (ii) context-specific health priority-setting approaches and (iii) evidence for appraisal and decision-making ( sociocultural, sociopolitical and socioeconomic evidence, financial risk protection evidence (FRP), equity approaches and availability of tools for use in priority-setting).

*Capacity Development Initiatives for Evidence-Informed Priority-Setting In LMIC's*

There has been increasing capacity development support to LMICs for evidence-informed priority-setting processes with collaborative opportunities for countries requiring technical support. The University of York and the Malawi Ministry of Health partnered for priority-setting for the Malawi EHP as a core component of the country's Health Sector Strategic Plan II 2017–2022 (Ochalek et al., 2018). The University of York Centre for Health Economics partnership has continued through the Thanzi la Onse's (Health of All) population health resource allocation institute now operational in Malawi, Uganda, Southern and East Africa with funding from the UK Research and Innovation's Global Challenges Research Fund (Thanzi La onse, 2021). Thanzi la Onse's long term goal is to strengthen local capacity for health economics and modelling in Malawi and Uganda and other countries in Africa. Other partners with Thanzi la Onse include the University of Malawi, Medical Research Council, Uganda Research Unit, Centre for Global Development, East, Central and Southern Africa Research Community and Kings College. In 2020, Thanzi la Onse's launched the Global Health Economics Hub on the Global Health Network, a training platform on priority-setting (Steph, 2020)

The Bergen Centre for Ethics and Priority-setting, led by the University of Bergen, provides health decision support to Ethiopia, Zanzibar and Malawi. With funding from the Bill and Melinda Gates Foundation, Trond Mohn Foundation and the Norwegian Agency for Development Cooperation (WUN, 2021). The goal of this support is 'improved efficiency, equity, and financial risk protection for health sector performance in Ethiopia, Malawi, and Zanzibar on their path to UHC' (BCEPS, 2020). In 2020, Ethiopia applied an evidence-informed priority setting process for the revision of their EHP as a result of this partnership and in-country stakeholder engagements (Eregata et al., 2020).

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The international decision support initiative, a global network of leading healthcare priority-setting expert organisations provides capacity development support to LMICs in Asia and Africa. Their network includes the Clinton Health Access Initiative, the Centre for Global Development. The Norwegian Institute of Public Health, Kemri Welcome Trust, Health Intervention and Technology Assessment Program, the Saw Swee Hock School of Public Health, National Health Foundation Thailand, China National Health Development Centre and Imperial College London. With these partnerships, iDSI has partnered with the government of Zambia to review healthcare priority-setting processes, apply HTA and optimization of interventions and conduct a revision of the National EHP (Simangolwa et al., 2020). iDSI has been working with the Government of Ghana to provide support on Health Technology Assessment for Universal Health Coverage. In 2016, they examined with the Ghana Ministry of Health and the National health insurance authority, the cost-effectiveness of antihypertensive medicine from this partnership (Hollingworth et al., 2020). Whereas these developments are promising, more effort is needed in expanding these initiatives across all allocative efficiency processes including the essential medicines and medical devices list and national and disease program-specific strategic plan's development. Furthermore, efforts to ensure institutionalisation and operationalisation for continuity of model processes, linkages with specified resource envelopes for implementation and strategic purchasing, must be strengthened.

*Context-Specific Health Priority-Setting Approaches*

There is no universal approach to carrying out explicit priority-setting for UHC. However, there are several explicit approaches that have been applied in literature. These include HTA, Multi-Criteria Decision Analysis, Accountability for Reasonableness, Program Budgeting and Marginal Analysis, Cost-effectiveness and Global Burden of Disease, Cost-Effectiveness Analysis and League Table (Nouhi et al., 2018). The organisational context of the decision and the health need of the population prioritise effectiveness and affordability, equity and accessibility in that order, for health care resource allocation (Cromwell et al., 2015). However, explicit healthcare priority-setting can be challenging due to technical, institutional, political, financing, and social infrastructure (Chalkidou et al., 2016; Verguet et al., 2021). Nemzoff and others have proposed adaptive HTA for use in making decisions in scenarios where using explicit criteria are limiting (Nemzoff et al., 2021). This form of HTA adapts available international HTA data either from literature or other HTA bodies and uses it to inform policy decisions in a local context. This has been reinforced by Verguet and others, who have proposed adapting the lessons learned from the more recent Ethiopia experience in their revision of the EHP to other resource allocation settings especially during and after COVID19 (Verguet et al., 2021). These lessons include strengthening key in-country expertise in priority-setting processes, strong political commitment, interrogation of different forms and sources of data and contextualisation of data and prioritisation process within a COVID-19 world.

*Evidence For Appraisal and Decision-Making*

It is inevitable to understand the political economy, legalities and sociocultural contexts in addition to the traditional efficiency focus in priority-setting when it comes to the decision-making for the unprioritized SRH services. It is widely accepted that priority-setting of health

 doi:10.20944/preprints202108.0275.v1

interventions should seek to maximize health, reduce inequities in health and provide financial protection against the costs of ill health (Norheim et al., 2014). Health benefits maximization in healthcare is often achieved with the application of cost-effectiveness analysis (CEA) for resource allocation decisions. It is usual practice in CEA to focus on efficiency with the aim of maximizing health benefits for the lowest cost or minimizing cost for a specified outcome (Lal et al., 2018). But however, healthcare decisions are made based on criteria related both to the health need of the population and the organizational context of the decision following effectiveness, affordability, ethical issues and socioeconomic criteria (Cromwell et al., 2015). We in turn review these criteria in relation to resource allocation in LMICs.

*i) Sociocultural, sociopolitical and socioeconomic evidence*: In Malaysia, an analysis of the political economy of decision making recommended an advocacy strategy leveraging on understanding public demand and agenda, international commitments, the use of public sector internal and external champions and reframing SRH issues(Lim et al., 2020). The political economy was key to Thailand successful implementation of a universal coverage scheme which by 2015, had achieved 98% financial risk protection for the population. In this processes, the applied use of political economy evidence aided the navigation through institutional veto powers as changes restructured the governance systems for the UHC agenda and consequently veto powers by government ministries. These changes were particularly sensitive as the reform bordered around budgeting and the provider-purchaser split (Tangcharoensathien et al., 2019). In the revision of the National Essential Medicines List in Tanzania, the establishment of the HTA committee focused on the political will reinforced by strong engagement with the Government, capacity development and long standing evidence-informed government champions (Surgey et al., 2020).

*ii) Financial risk protection evidence:* Policy objectives in LMICs are often governed by the need to maximize population health, reduce unfair inequities and provide financial risk protection to the population. The traditional cost-effectiveness approach is only able to generate data for the first of the three priority-setting policy objectives (Karamagi & Dovlo, 2015; Wiseman et al., 2016). Inclusion of financial risk protection matrices in priority-setting aims at minimizing catastrophic health expenses and subsequently impoverishing effects. A project for the Disease Control Priorities version 3 (DCP3) used FRP estimates in addition to CEA in the prioritisation of their EHPs(Watkins et al., 2017). The DCP3 uses a composite FRP indicator based on the likelihood of medical impoverishment, the urgency of the intervention and average age of death with the level of disability. In Ethiopia for their recent essential benefits package review, the team solicited expert opinions using the Delphi approach to assign FRP estimates to each disease intervention (Eregata et al., 2020). Relatively new approaches as the extended cost-effectiveness analysis have been developed as a composite measure of FRP with CEA (Watkins et al., 2017). The extended cost-effectiveness analysis (ECEA) provides data on all three policy objectives by providing a breakdown of costs, health benefits, and financial risk protection benefits by socioeconomic quintile groups (Cookson et al., 2017).

*iii) Equity approaches:* A systematic study reviewing equity in policies and service utilization by key population in SSA showed that health inequalities are still prevalent among subgroups of women, youth, people living with HIV and people with disabilities (Mac-Seing et al., 2020).

Equity remains a common priority for health systems in LMICs but however, evidence on the equity impacts of policies is often scarce (Love-Koh et al., 2020). Different approaches have been advanced for reducing inequities in priority-setting. Health inequities are the systematic, avoidable and unfair differences in health outcomes that can be observed between populations, between social groups within the same population or as a gradient across a population ranked by inequality aspects ( social, gender, geography etc.) (McCartney et al., 2019). Equity indicators in priority-setting predominately target the worse-off (Brock, 2015). In Measuring equity, the DCP3 used the health-adjusted average age of death (Dawkins et al., 2018a). The measure identified causes that would be very severe or result in extremely premature mortality or both using epidemiological modelling in LMICs. two composite CEA measure have been introduced to measure inequities, the extended CEA (ECEA) and distributional CEA (DCEA). Both the ECEA and DCEA analyses the expected social distributions of cost and health benefits and potential trade-offs that may exist between maximizing total health and reducing health inequality (Dawkins et al., 2018b). But however, DCEA has predominantly been applied in developed contexts due to relatively data sparse contexts in LMICs and it does not measure FRP (Asaria et al., 2015).

*iv) Availability of tools for Use in priority-setting*: There has been increasing focus to legitimise the priority-setting process. The 'What's in and What Out' book generated a narrative repository by experts globally on pertinent EHPs design processes (Glassman et al., 2012). Chalkidou and others also introduced ten core elements of setting health benefits. In this framework, appropriate approaches on setting the goals for priority setting, the criteria, the governance, the evidence, the appraisal process and implementation are discussed (Chalkidou et al., 2016). Wilda and others provide a process of HTA institutionalisation in their Guidance for the Development of a National HTA-Strategy framework (Wild et al., 2017). In 2021, the WHO also introduced the How-to guide for institutionalising HTA (World Health Organization et al., 2021). The Guidance on Priority-Setting in Health approach was initiated by the World Health Organisation to incorporate criteria related to the disease, characteristics of social groups and non-health consequences of an intervention (Norheim et al., 2014). With this tool, it is possible to explore equity and efficiency amidst other decision criteria. Another tool, the Health Interventions Prioritisation Tool brings together a wealth of data from the Institute for Health Matric and Evaluation on disease burden and DCP3 EHPs (HIPTool, 2019). This provides decision-makers with an opportunity to optimise interventions across cost-effectiveness, FRP, equity and burden of disease data.

**Conclusion**

The onset of the SAS-CoV-2 (COVID-19) virus unintendedly has strengthened the terminal, process and content evidence in healthcare priority-setting processes. The use medical and epidemiological evidence informed decisions on global lockdown initiatives at the onset of the pandemic. Discussions on global public health security has continued to be critical on Covid-19 vaccines distribution and trade-related aspects of intellectual property rights on vaccines (Šehović & Govender, 2021; Williams et al., 2021). Within countries, choices on what should constitute essential services of healthcare service provision amidst the response to COVID19 against the constrained fiscal space has highlighted what constitutes country goals and criteria in priority-setting. In addition, decisions on who should receive the vaccine first is indicative of solidarity, transparency and accountability of decision-making processes.

 doi:10.20944/preprints202108.0275.v1

Multi-stakeholder initiatives have been introduced in countries to appraise evidence and generate decisions on interventions on the reopening of the economy, commodity modelling, mass media and screening strategies. The political and public acceptability has been vital in influencing these value laden decision-making process. The in-country institutional capacity gains achieved and lessons learnt in strengthening system in evidence-informed priority setting during COVID19 are essential for a strengthened HTA and broader EHP processes after the pandemic for LMICs.

COVID-19 has highlighted SRH services (and more especially unprioritized SRH services) are foundational for improving population health outcomes and inevitably must be included in policy reforms for health service packages. Understanding terminal, processes and content evidence through the social value judgment lens for SRH in priority-setting processes is urgent. The unprioritized EHP SRH services present an opportunity to progressively and systematically generate and appraise decision evidence in priority-setting extending beyond the traditional efficiency focus to include equity impact, sociocultural, sociopolitical and socioeconomic evidence. In addition, they highlight the extent of institutional and political economy architecture to generate, synthesise, appraise and deliberate on healthcare priority setting evidence. Whereas some examples and resources shared are not specific to SRH, the lessons learnt must be explored as countries pursue their UHC agenda.

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