GLOBAL HEALTH IS at a crossroads. The 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs) has come with ambitious targets for health and health services worldwide (United Nations 2015). Universal health coverage (UHC), including financial risk protection for everyone, is just one of these targets. To reach the SDGs, many more billions of dollars need to be spent on health (Røttingen et al. 2014; Schmidt-Traub 2015). However, development assistance for health has plateaued and domestic funding on health is growing at rates far too low to close the financing gap (Dieleman et al. 2016; Institute for Health Metrics and Evaluation 2016). National and international decision-makers face tough choices about how scarce health care funds should be spent.

In every country, national health planners have to set priorities for the health system (see Chapter 2 in this volume). In particular, they need to decide what services to offer and finance through public funds. For example, should coverage for skilled birth attendance or antihypertensive treatment be expanded to full scale before less cost-effective interventions are introduced into the health system? These choices are critical in the pursuit of UHC (Voorhoeve et al. 2016) and for the establishment of more systematic processes for priority-setting, such as health policy assessment and health technology assessment (HTA). At present, two “model” lists of interventions have been proposed to serve as reference points for the development of national packages (Jamison et al. 2018; Stenberg et al. 2017).
For each, estimates have been made of costs and impact. Both analyses point to the potential practical applications of the methods this volume critically reviews.

At the global level, there are many multilateral institutions whose decisions affect how health resources are allocated. Some of these have health as their primary purpose, including the World Health Organization (WHO); the Global Fund to Fight AIDS, Tuberculosis and Malaria; and Gavi, the Vaccine Alliance. Others have broader objectives, like the World Bank, the United Nations Children’s Fund (UNICEF), and the United Nations Development Programme (UNDP). Philanthropic foundations—such as the Bill & Melinda Gates Foundation—are also important players on the global scene. In addition, bilateral donors, such as the United States Agency for International Development (USAID), the Department for International Development (DFID), and the Norwegian Agency for Development Cooperation (Norad), allocate large amounts of funds across countries and programs. In effect, all of these international actors are already making priority-setting decisions. They partly set priorities directly by funding health programs, since as part of the funding process they decide what topics, disease areas, and interventions to focus on. But these decisions are made even if some of the funding goes to concrete proposals submitted by countries or other organizations. For most multilateral institutions, there seems to be ample room to improve the way priorities are set. We think that they should acknowledge that this is what they are doing (where it is not currently explicit) and make use of tools that can help them to set spending priorities in a systematic way.¹

This book has sought to inform efforts to improve systematic, evidence-based priority-setting by assessing the state of the art of methods for priority-setting, engaging with the fundamental normative issues at stake, and providing specific recommendations for improving current practice. While there remain disagreements,² as well as gaps in the tools, methods, and data needed for priority-setting, we, the editors of this volume, have reached agreement on multiple important issues during our work. We have formulated these points of agreements in the form of seven key recommendations for future priority-setting in global health.

¹ Some of these institutions have also developed very useful priority-setting tools, such as Disease Control Priorities, 3rd edition, EQUIST and the OneHealth Tool, which includes LiST.
² Some of the issues discussed in this book are particularly complex and controversial, such as the valuation of infant deaths and how much weight to give to distributional concerns as compared with efficiency concerns; agreement among stakeholders cannot be expected anytime soon. Another such issue is discounting, here understood as the devaluation of delayed benefits (see Chapter 13 in this volume). Some commentators, including some authors in this volume, argue that one should at least not discount future life-years merely because they occur in the future. At the same time, others have argued for substantial annual discount rates of 3% to 6% or more.
SEVEN KEY RECOMMENDATIONS

1. A More Systematic Approach to Priority-Setting in Health is Needed

There is ample room for national and global actors to become more evidence-based, systematic, and explicit in the way they set priorities. More systematic and explicit priority-setting will not only improve outcomes but will also improve the quality and legitimacy of decisions and promote accountability. We will discuss some of the criteria that should be considered, and by whom, but our first and fundamental recommendation is that decisions about the allocation of scarce resources for health should be based on some explicit criteria.

Priorities are often set without explicit criteria. Even those setting the priorities seem often to lack a clear understanding of the basis on which they are doing it. Even when there is some agreement on which criteria are appropriate, methods for applying them in practice may be missing or absent. This invites haphazard spending decisions that are unduly influenced by powerful interest groups and achieve suboptimal outcomes, as noted in Chapter 1 in this volume. For example, decisions about sub-targets for the new SDG for health (health and well-being at all ages) were inclusive and process-driven, but there was no apparent willingness to set priorities among sub-targets (Norheim et al. 2015). Consequently, we fear that the SDGs will provide less guidance and direction for countries and international actors, compared with the Millennium Development Goals.

2. Information on Cost-Effectiveness is Essential

In some areas of health financing, cost-effectiveness is now consistently used as a criterion in priority-setting. Many high-income countries use cost-effectiveness analysis (CEA) to guide decisions about the introduction of new health technologies, including pharmaceuticals (see Chapter 5 in this volume). At the same time, there are few strong institutions in low- and middle-income countries with the capacity to integrate and apply cost-effectiveness information to policy.

Decision-makers and donors at the global level also utilize such information to a lesser extent than is politically feasible. For example, the WHO Model List of Essential Medicines is said to be based on cost-effectiveness; however, CEA is rarely cited as a rationale for the inclusion of new medicines on the list. Indeed, very costly medicines for hepatitis C were recently added to the list even though they are not considered cost-effective in many countries (WHO 2015). The same critique has been leveled against national essential drug lists, such as in Tanzania (Mori et al. 2014).
Cost-effectiveness information should be one component of nearly every priority-setting decision. If they do not consider such information, decision-makers risk wasting money, saving fewer lives, and improving health less than they could have done.

3. Distributional Impact Needs to be Integrated

Even where CEA and cost-effectiveness information is used to inform decisions, the distributional impact of health interventions tends to be ignored or inadequately considered. This is problematic, since the most cost-effective intervention may not be the one that will have the optimal impact on equity. Indeed, a cost-effective intervention may actually have a negative impact on equality of outcomes within a population.

In the United Kingdom, for example, the National Institute for Health and Care Excellence (NICE) bases its recommendations almost exclusively on CEA. NICE rarely includes formal considerations of distributional impact, even though it endorses as one of its principles an “egalitarian approach, [which] involves distributing healthcare resources to allow each individual to have a fair share of the opportunities available” and commits itself to “actively consider reducing health inequalities” (NICE 2008, pp. 9 and 28). In Thailand, on the other hand, the Health Intervention and Technology Assessment Program (HITAP) appraises a wide range of health technologies and public health programs by six criteria, including, among others, cost-effectiveness, economic impact on household expenditure, and equity and social implications (see Chapter 17 in this volume).

Allocation decisions should consider the distribution of coverage and outcomes within countries. This should be done systematically as part of the formal analysis and not as a mere afterthought (see Chapters 5–8 in this volume). The reduction of inequalities is a central objective of health systems, and extra priority should be given to populations and individuals who are more disadvantaged (see Chapter 11 in this volume).

Pure inequalities in health outcomes across patient groups, including in age of death and lifetime health, are one key target (see Chapter 10 in this volume). In addition, there is a need to pay attention to health disparities experienced by marginalized or disadvantaged groups, including in terms of socioeconomic status, gender, race/ethnicity, and the urban–rural divide. Finally, we see several other kinds of inequalities as relevant, including health-related capabilities that are central to a person’s status as a citizen (see Chapter 9 in this volume).
4. Stillbirths Need to be Integrated

Almost 2.6 million stillbirths occur every year, with stillbirths defined as a fetal death after 28 weeks of gestational age (Blencowe et al. 2016). A recent *Lancet* series turned the spotlight on these deaths (Lancet Ending Preventable Stillbirths Series Study Group 2016). Yet, stillbirths are largely ignored in many settings. They are not mentioned in the Millennium Development Goals or the SDGs and are not typically taken into account in summary measures of population health (Jamison et al. 2006). This neglect includes, for example, disability-adjusted life-years (DALYs) as they have been constructed in the Global Burden of Disease (GBD) studies, even though more recent GBD analyses provide mortality estimates for stillbirths. Excluding stillbirths in measures like DALYs has profound implications for the priority assigned to interventions preventing stillbirths, such as antenatal care and skilled birth attendance (de Bernis et al. 2016).

In opposition to current practice, Millum et al., in Chapter 14 of this volume, provide several arguments for why stillbirths are relevant to priority-setting decisions. We agree that stillbirths should be integrated into summary measures of population health and should influence prioritization across interventions. More specifically, we believe the value attributed to an averted stillbirth just before birth should be similar to that attributed to preventing the death of a newborn. Lower weight should be given to the prevention of earlier stillbirths. While the detailed weighting function is yet to be determined, a reasonable change from current practice would greatly increase the priority assigned to interventions preventing stillbirths.

5. Non-Health Effects Need to be Integrated

Some argue that priority-setting in health should only depend on “medical” factors, and, often, the only outcome of interest is health improvements (Brock 2003). This is for the most part also the case for traditional CEAs. The effectiveness unit in these analyses is QALY gained, DALY averted, or a similar metric, and these metrics usually do not directly capture non-health outcomes from interventions. Similarly, in the development of essential benefit packages for UHC, the consequences of out-of-pocket expenditures are sometimes considered, but little attention is generally paid to other non-health effects (Glassman et al. 2016).

Important outcomes that are not fully captured by focusing on health effects of interventions include educational attainment, the financial consequences of being sick (e.g., lost time, lost wages, and work absenteeism), and impoverishing or catastrophic financial hardships due to out-of-pocket health expenditures.
At the household level the reduction in resources allocated to other important components of welfare—such as education, food, and housing—can be devastating, as Miljteig et al. discuss in Chapter 3 in this volume.

Contrary to this practice, Persad and du Toit, in Chapter 12 in this volume, argue that non-health effects should be taken into account. We agree that non-health effects should be systematically considered as these represent important consequences for people’s life and well-being. In the context of UHC, it is particularly important to consider financial burdens and poverty arising from out-of-pocket payments for health services.


While substantive criteria—such as relative cost-effectiveness or impact on disadvantaged groups—are undeniably crucial to priority-setting, the larger process of priority-setting must also be given due attention (WHO 2014; see Chapter 4 in this volume). Many HTA procedures, for example, have been criticized for being overly technocratic, even when the substantive criteria involved are considered reasonable. Likewise, the process leading up to the Millennium Development Declaration in 2000 was criticized for lacking transparency and not being inclusive, even though the chosen goals and targets for health followed from a set of widely accepted substantive principles.

As priority-setting is value-laden, and often controversial, it is particularly important to ensure that the priority-setting process itself is fair. In addition, priority-setting inevitably calls for the exercise of judgment in the face of reasonable disagreement and incomplete information, so that substantive criteria alone are never sufficient. Open and transparent processes can, at least in theory, improve legitimacy. They can also help stakeholders hold decision-makers accountable and increase understanding of priority-setting problems and decisions among stakeholders. Public participation is a central aspect of a fair process, as argued by McCoy et al. in Chapter 16 in this volume. As the Accountability for Reasonableness framework has emphasized, allocation decisions and their rationales must be publicly accessible and there must be institutionalized mechanisms available for people to challenge the decisions made (Daniels 2000). Deliberative methods also need to be institutionalized, as discussed by Glassman et al. in Chapter 15 in this volume.

7. Develop and Use New Methods and Tools

Many priority-setting methods are available today (Mitton and Donaldson 2003; Rudan et al. 2010). Some of these, like multi-criteria decision analysis, are broad
frameworks that help integrate all considerations that the users would like to include (Baltussen et al. 2006; Baltussen and Niessen 2006) Other methods, such as CEA and disease-burden assessments, produce more specific outputs. A challenge today is that the commonly used methods for formal economic evaluation or disease-burden assessment disregard many of the considerations we have highlighted.

To bridge this gap, decision-makers could employ extended cost-effectiveness analysis (ECEA) (see Chapter 6 in this volume) and other inclusive methods more consistently, while ensuring that the methods concurrently undergo further refinement. One promising new approach includes, in addition to ECEA, distributional cost-effectiveness analysis (Asaria et al. 2015, 2016; Cookson et al. 2017). Similarly, distribution-sensitive cost-benefit analysis has played a minuscule role in the health sector, and methods for such analysis of health interventions should be more intensively explored (see Chapters 7 and 8 in this volume).

Tools should be developed to help capture all outcomes considered relevant for decision-makers and the population they serve. These would include the levels and distribution of health, and the levels and distribution of non-health effects, as well as other considerations that are not so easy to measure and quantify. Such tools should also allow for tradeoffs and allow analysts to assess different scenarios and their impact based on public preferences, or political and ethical constraints. Donors face somewhat different resource allocation issues than do national governments, including how to finance global public goods (particularly new product development); how to reduce cross-border flows of infection, antibiotic resistance, and harmful substances; and how to avoid having external money simply substitute for national government. Better tools for addressing these issues are needed, including tracking aid by these functions rather than simply by recipient country or disease category (Schäferhoff 2015).

User-friendly interactive tools are now being developed—easy access to global burden-of-disease information is but one example—that have the potential to improve decision-making in global health (Institute for Health Metrics and Evaluation 2018). The development of such tools would benefit greatly from robust grounding in established theoretical frameworks, while at the same time being simple and flexible enough to allow for user involvement and broad deliberation.

THE WAY FORWARD

The areas of agreement and the corresponding recommendations are relevant to a wide range of actors in global health. Among them are the decision-makers who
make life-and-death priority-setting decisions on a regular basis. Some are national policymakers who set priorities for their health systems. Others operate at the global level and set priorities involving multiple countries and health systems. As well as actors affiliated with the health sector, key decision-makers are found in other areas, such as finance, law, education, transportation, and the environment. It is this range of actors—across sectors and levels—who should compare their current practices with the recommendations we have offered and take appropriate action.

While the decision-makers should incorporate the available methods and evidence into their decisions, the research community must continue to develop rigorous priority-setting methods and generate the evidence needed to use them effectively. Priority-setting in global health is a collaborative endeavor and the stakes are enormous. We must get it right.

REFERENCES


