



Non-Communicable Disease Prevention

Best Buys, Wasted Buys and
Contestable Buys

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4. Best Buys

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4.1 Introduction

4.1.1 Background

Because decision-makers need to prioritize policy options that bring the greatest possible health benefits from limited available resources, the World Health Organization (WHO) introduced Best Buys and other recommended cost-effective policy interventions to prevent and control NCDs.¹ The work, based on a rigorous process of review and selection, generated a menu of medical and public health interventions to reduce modifiable NCD risk factors in respect of diet, smoking, alcohol and physical activity, and to control and manage better the four major types of NCDs that contribute to 80% of global premature mortality from NCDs:² cardiovascular disease, diabetes, cancer and chronic respiratory disease, as summarized in Table 4.1.³

In addition to Best Buys, we also use the terms ‘Wasted Buys’ and ‘Contestable Buys’. This chapter mainly covers Best Buys and Contestable

1 World Health Organization, *Tackling NCDs: Best Buys*, 2017, <http://apps.who.int/iris/bitstream/handle/10665/259232/WHO-NMH-NVI-17.9-eng.pdf?sequence=1>

2 World Health Organization, *Non-communicable Diseases: Key Facts 2018*, 2019, <http://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>

3 World Health Organization, *Assessing National Capacity for the Prevention and Control of Noncommunicable Diseases*, ed. by Report of the 2017 Global Survey (Geneva: World Health Organization, 2017).

Table 4.1 WHO's list of Best Buys on NCD preventions.

Risk factor and diseases	Interventions
Tobacco use	• Tax increases
	• Plain/standardized packaging
	• Smoke-free workplaces and public places
	• Public awareness through mass media about the harms
	• Ban on tobacco advertising, promotion and sponsoring
Harmful alcohol use	• Tax increases
	• Restricted access to retailed alcohol
	• Bans on alcohol advertising
Unhealthy diet and physical inactivity	• Reduce salt intake in food through: <ul style="list-style-type: none"> ◊ Product reformulation ◊ Low salt options ◊ Food labelling ◊ Campaigns
	• Public awareness through mass media about physical activity
Cardiovascular disease and diabetes	• Counselling and multi-drug therapy (including glycemic and blood pressure control) for people with a high risk of developing cardiovascular events
Cancer	• Vaccination against human papillomavirus
	• Screening and treatment of pre-cancerous lesions to prevent cervical cancer

Buys.⁴ An intervention is a Contestable Buy if there are only aspirations for, and hence no direct evidence of, cost-effectiveness in the country setting in which the intervention is being considered. Interventions in the WHO's Best Buys list may still be Contestable Buys if there is no demonstrative evidence of cost-effectiveness in the particular setting in question. The main distinction between Best and Contestable Buys is thus the availability of context-specific evidence. The reason why the distinction is important is that local context strongly influences the cost-effectiveness of an intervention.

4 See Chapter 5 for full discussion of Wasted Buys.

Data reviews confirm the scarcity of evidence of cost-effective Best Buys. Our analysis of the current evidence base in LMICs, based on the Global Health Cost Effectiveness Analysis Registry, identified very limited local evidence of Best Buys or of cost-effective preventive policies even for widely popular interventions such as taxation on tobacco and sugar-sweetened beverages (see Online Appendix 4A for an analysis of evidence by interventional type (Table 4A.1) and by country (Table 4A.2). We found country-specific evidence of Best Buy tobacco control policies in two countries only: Tanzania and Vietnam. Similarly, evidence of Best Buy alcohol control policies was found only in four relatively high-income countries: Australia, Denmark, Mexico and the Netherlands. Lack of local evidence creates uncertainty for decision-makers, who often have to rely on evidence transferred from other settings.⁵

A recent country capacity survey by WHO demonstrated that their list of Best Buys and other cost-effective interventions was ‘underutilized’ and that progress on NCDs globally was insufficient to meet 2030 goals.⁶ There were many reasons for this, including but not limited to: 1) public health interventions are less likely than clinical interventions to have been subjected to cost-effective analyses for resource allocation decisions; 2) the evidence of the cost-effectiveness of those Best Buys as defined by the WHO report often does not come from their local decision context;⁷ 3) a lack of adequate local capacity in implementing a Health Technology Assessment (HTA); 4) a limited awareness or demand for Cost-Effectiveness Analysis (CEA) from policy-makers in NCD prevention; and 5) the general absence of guidance either as to how to implement the recommended interventions on the Best Buys list or how to draw credible conclusions from the transfer of evidence between settings that have different disease burdens, different decision-making and managerial capacities, different institutional and

⁵ See Chapter 6 for assessing the transferability of economic evidence.

⁶ World Health Organization, *Assessing National Capacity for the Prevention and Control of Noncommunicable Diseases*, 2017, <https://apps.who.int/iris/bitstream/handle/10665/276609/9789241514781-eng.pdf>

⁷ Luke. N. Allen et al., ‘Evaluation of Research on Interventions Aligned to WHO ‘Best Buys’ for NCDs in Low-Income and Lower-Middle-Income Countries: A Systematic Review from 1990 to 2015’, *BMJ Global Health*, 3 (2018), e000535, <https://doi.org/10.1136/bmjgh-2017-000535>

delivery frameworks and different cultural and historical inheritances. Consequently, NCD policies are largely implemented without evidence of, or only with implicit assumptions about, cost-effectiveness.

4.1.2 What This Chapter Offers

Achieving Best Buy status largely depends on cost-effectiveness data, but there are many issues to settle if cost-effectiveness evidence is to be used for making decisions in real-world settings. These include the quality of the design and execution of the research on which the evidence is based, the extent to which cost and health outcomes observed elsewhere are likely to apply in a different context and the methodological challenges involved in comparing cost and health outcomes elsewhere with those of alternative interventions locally, as well as the practical challenges involved in introducing and sustaining the intervention. In this chapter we draw on real-world experiences in NCD policies and show how an intervention that is a Best Buy in ex-ante aspiration is compromised when implemented within a specific local context, turning it therefore into a Contestable Buy. This alteration is at least partly because real-world policies need to respond to the local context, such as culture, politics, history, market and law, within which they are implemented, and partly because of a common need to involve various stakeholders with vested interests who may be threatened by a novelty. There may also be important value judgements, such as judgements about equity, which might count in making decisions and which are locally specific. Furthermore, policies are not implemented in a vacuum but have synergistic and cumulative effects along with other policies, which in turn effect their potency. Prevention of NCDs is not just about addressing modifiable lifestyle risk factors but linking this to the social determinants of health, such as living and working environments, or economic policy and broader social policy.⁸ We use the analysis of real-world case studies on NCD prevention to develop a list of considerations to help guide NCD managers and policy-makers through the design of the implementation process. This is not an alternative to the WHO's list of Best Buys, which can provide policy-makers with a useful starting point for planning NCD

8 See Chapter 2 for the discussion from the political aspect.

prevention interventions that potentially offer best value for money. The list is a secondary step to assist NCD managers in identifying a true local Best Buy and ensuring that it remains so during implementation, i.e., not remaining Contestable or even becoming Wasted.

To give an example of how local context can affect the impact and reach of an intervention, bike-sharing schemes, although not listed as a WHO Best Buy, are now popular in many countries, as they can encourage active commuting, hence physical activity,⁹ as well as reducing congestion and potentially improving air quality. In Tehran, such a bike-sharing scheme is thriving, but only for men and not for women, due to the cultural and religious contexts that prevent women from taking part in the scheme.¹⁰ This does not necessarily mean that the scheme in Tehran is a Wasted Buy. The scheme is successful, at least for men, and it may be deemed a Best Buy within this specific context. In this example, culture and religion are not modifiable factors, but need to be considered when making policy. There are other types of contextual factors that policy-makers can potentially modify, which are discussed in the following section.

4.2 Determining Important Contextual Factors in NCD Prevention

Why does context matter so much, which contextual factors matter most and how can we measure their effect?

Local contextual factors are often not subject to formal quantification in the same way as they are in cost-effectiveness analyses performed in high-income contexts. Real-world experiences are potentially useful and thought-provoking sources of information that can be used to identify which and how contextual factors interact with the implementation process. To gain some appreciation of real-world experience, we invited policy-makers and researchers from across the globe to share case studies of local implementations of NCD preventive policies. We

9 James Woodcock et al., 'Health Effects of the London Bicycle Sharing System: Health Impact Modelling Study', *BMJ*, 348 (2014), g425, <https://doi.org/10.1136/bmj.g425>

10 Russell Meddin, *Tehran's 'Bike House' Shines Green*, 2010, <http://bike-sharing.blogspot.com/2010/03/tehrans-bike-house-shines-green.html>

collected forty-seven case studies on the implementation of Best or Contestable Buys and summarize them in Table 4.2.¹¹

Table 4.2 Summary of the collected case studies.

No. of case studies	Type of intervention	Country
Risk-factor prevention		
5	• Reduce tobacco use	India, Iran Philippines, Uganda
4	• Reduce the harmful use of alcohol and other substance misuse	Bhutan, Democratic Republic of the Congo, Philippines
1	• Reduce tobacco use & harmful use of alcohol	Kenya
12	• Reduce unhealthy diet	Bangladesh, Chile, China, Hungary, India, Iran, Philippines, South Africa, Zambia
2	• Increase physical activity	Bhutan, Rwanda
1	• Reduce unhealthy diet & increase physical activity	Haiti
Reduce disease through screening or immunization		
7	• Prevent diabetes or cardiovascular diseases	India, Kyrgyzstan, Philippines, Sri Lanka, Turkey, Uzbekistan
3	• Prevent cancer	Bangladesh, Cambodia, Honduras
5	Improve health literacy	Bangladesh, India, Philippines
1	Increasing awareness and health literacy	Indonesia
6	Other — strengthen health system response	Bangladesh, Iran, Ireland, Nepal, Slovenia

Although the forty-seven case studies do not necessarily represent successful NCD preventive policies, they provide useful insights into the reality of policy implementation. Twenty-five cases were specific to risk-factor modification: reducing tobacco use and sweetened beverage consumption were the most frequent. Ten cases were interventions to

¹¹ See Online Appendix 4B for more detailed information and our analyses.

reduce disease through immunization or screening for risk or early disease. Six cases describe policies to increase public awareness and health literacy. The remaining six concerned strengthening the health system response to NCDs. We analyzed the case studies and then triangulated the findings with the existing literature on Best Buys and best practices in public health¹² to reveal factors that seem to be significant in the processes of policy formation and implementation in various contexts. The results are summarized in Table 4.3 and form a list of considerations. We propose that these considerations are used to supplement, but not to replace, cost-effectiveness when deciding whether and how to implement an NCD prevention intervention. We call them ‘additional considerations’ to emphasize that they are a supplementary step between the global list of NCD preventive policies and implementation in local settings, in order to ensure that a Best Buy when implemented is really a Best Buy — although this can be tested only through robust monitoring and evaluation.

In principle, whether an additional consideration is applicable is of course likely to be context-dependent, so what factors matter could differ by context. Although we applied the list of considerations to the forty-seven case studies as a score card (Online Appendix 4B), this list has not gone through the necessary testing to validate it as a tool, a quantitative measure, or a score for each of the considerations. At this stage, it is a summary of wisdom drawn from real-world experiences, or a set of prompts or questions to ask when implementing and evaluating NCD preventive policies — hence why we call them considerations and not prerequisite steps. Likewise, the list is not a checkbox tool to identify a Best Buy that substitutes for local evidence of cost-effectiveness. Rather, the list should be used to assess proposed interventions and predict critical stumbling blocks that stem from local contexts, in particular when there is a desire to acquire a particular Best Buy, but its suitability needs testing. The considerations can be used to complement the SEED Tool (in particular consideration 3, 4 and 5) in Chapter 3, to give the intervention a better chance of being a Best Buy in the specific context of its possible implementation.

12 Eileen Ng and Pierpaolo de Colombani, ‘Framework for Selecting Best Practices in Public Health: A Systematic Literature Review’, *Journal of Public Health Research*, 4.3 (2015), <https://doi.org/10.4081/jphr.2015.577>

Table 4.3 Additional considerations for making and judging Best Buy NCD preventive policies.

Category	Question to ask yourself	Common issues for consideration	Number of case studies
Relevance	Is the prevention intervention relevant to this community?	• Prevalence and burden of NCD	41/47
		• Policy-makers' awareness and knowledge	40/47
		• Priority of NCD in health system	24/47
		• Culture, tradition, convention and norm e.g., Religion, ethnicity, popularity of unhealthy behavior	23/47
		• Acceptability and consumer demand	11/47
Leadership, governance, compliance	Will I be supported to implement the intervention? Will the legislation be enforced?	• Other existing interventions to tackle this problem	17/47
		• Political mandate and stability to tackle NCD	32/47
		• Conflict of interest e.g., Industry opposition	17/47
		• System and market structure e.g., Market structure is too complex to design interventions	21/47
		• Enforcement of legislation locally e.g., Smuggling, black market	21/47
		• Transparency and accountability e.g., Held to account by civil society	21/47

Table 4.3 (continued) Additional considerations for making and judging Best Buy NCD preventive policies.

Category	Question to ask yourself	Common issues for consideration	Number of case studies
Sustainability	Will the intervention be sustainably implemented?	• Funding and affordability	22/47
		• Human resources and skills	22/47
		• Infrastructure, facility and equipment	23/47
		• Integration of NCD prevention into health system e.g., Practical guidelines, monitoring system	18/47
		• Local ownership	15/47
Multisectoral collaboration	Who should I collaborate with and how? Who are the stakeholders who will make this happen?	• Implementation as part of non-health policy e.g., Tax policy, bike share	16/47
		• Motivation and incentive	15/47
		• Networking and power dynamic among stakeholders	21/47
		• Overlapping priorities among ministries	13/47
		• Community engagement	28/47
Community and stakeholder involvement	Will the community engage? Will my intervention reach my target population?	• Community's access to NCD prevention programs e.g., Scaling up an intervention to a wider population	27/47
		• Community and organizational capacity e.g., Health literacy	18/47
		• Health equity and effect on health inequalities	13/47
Ethics and values	What might be the unintended consequences of this action or externalities?	• (Re)distribution of burden	6/47
		• Economic side effects e.g., Unemployment	4/47
		• Ethical permission	2/47

4.3 Policymaking Challenges and Cost-Effectiveness Data

In this section, we apply cost-effectiveness and the additional considerations in Table 4.3 as a score card to assess policies for NCD prevention in LMICs and highlight those contextual factors that are critical; we also set out why and how these contextual factors make the implementation of NCD preventive policies complicated and challenging.

When the set of questions in Table 4.3 was applied to the forty-seven case studies submitted by policy-makers and researchers,¹³ the most striking finding was that in the real world many of the Best Buys became Contestable Buys because of the nature of the evidence and implementation issues within the specific context. We give examples of this below. In fact, only three out of the forty-seven cases were explicitly informed by local cost-effectiveness data, suggesting that such data are probably rarely available and highly unlikely to be used by policy-makers in the decision-making process. We hypothesized in the introduction that cost-effectiveness evidence alone was in any case insufficient to determine which interventions should be prioritized and indicated the other considerations that might apply. This set of case studies suggests that cost-effectiveness evidence is rarely used to prioritize interventions. Further, fewer than half of the cases (seventeen out of forty-seven) were even informed by local data on effectiveness. Table 4.3 (fourth column) shows the number of case studies that mentioned each consideration, as judged by the chapter authors. The local relevance of NCDs was addressed in most of the case studies. They described the burden of disease, its magnitude and the awareness of the problem, but fewer than half the cases described the relevance of the chosen intervention in terms of the local culture, traditions and behavior, or in relation to other interventions already being implemented. Only half of the case studies explored the potential acceptability of their proposed approaches or the sustainability of the intervention in terms of financial or human resources. The case studies that described the implementation of a fiscal measure, for example taxation on tobacco or on sugar-sweetened beverages, particularly emphasized the importance

13 See Online Appendix 4B.

of political economy issues, including industry and other stakeholders' opposition to implementation.

The literature discusses the importance of effective public engagement and the need to ensure equitable representation of all groups in the composition of participation. Health equity and distributional justice are offered as critical issues given that an approach that seeks to maximize health benefits for a population can conflict with efforts to achieve equity.¹⁴ Despite this, community engagement or health equity were rarely considered or explicitly mentioned in our cases.

4.4 Investigating Case Studies

The case studies gave a rich description of contextual challenges and enablers. We feature and investigate the forty-seven case studies¹⁵ and share examples of NCD prevention policies that faced challenges in implementation.

Case Study 4.4.1 Cardiovascular screening in Sri Lanka¹⁶

Sri Lanka is estimated to have the highest death rates due to NCDs in South Asia¹⁷, with many patients presenting late in the disease progression. A national survey reported that 36% of all patients with diabetes were undetected.¹⁸ In response, the government formulated a National Policy and Strategic Framework for prevention and control of chronic non-communicable disease which included implementation of a CVD risk screening program at community level.¹⁹ This policy was implemented nationally through the establishment of 'Healthy

14 Ng and Colombani.

15 In Appendix 4B you can see the detailed analysis of the forty-seven case studies.

16 Authors of this case study: Rohan Jayasuriya (University of New South Wales, Australia), Sumudu Karunaratne (Ministry of Health, Sri Lanka) and Amala de Silva (University of Colombo, Sri Lanka).

17 World Health Organization, 'Global Health Estimates 2016: Deaths by Cause, Age, Sex, by Country and by Region, 2000-2016' (Geneva: World Health Organization, 2016).

18 Prasad Katulanda et al., 'Prevalence and Projections of Diabetes and Pre-Diabetes in Adults in Sri Lanka-Sri Lanka Diabetes, Cardiovascular Study (SLDCS)', *Diabetic Medicine*, 25.9 (2008), 1062–69, <https://doi.org/10.1111/j.1464-5491.2008.02523.x>

19 Ministry of Healthcare and Nutrition Sri Lanka, *The National Policy & Strategic Frame Work for Prevention and Control of Chronic Non- Communicable Diseases*, 2009, <http://www.health.gov.lk/enWeb/publication/Act/NCDPolicy-English.pdf>

Lifestyle Clinics' (HLCs) in 2011, initially funded by the World Bank. At present, there are 800 HLCs functioning in Sri Lanka.²⁰ Several pilot studies informed the decision including the NCD Prevention Project (NPP), which was funded by the Japan International Corporation Agency.²¹ The NPP study tested two approaches. Both approaches had similar criteria for inclusion, all individuals between 40–75 years of age, without a history of NCDs. The first approach (a two-step model) involved screening by body mass index and blood pressure in the community and then diagnostic testing (fasting capillary glucose and blood pressure) in a health clinic. The second approach (a one-step model) implemented screening and diagnostic testing at the same time in hospital. They achieved similar detection rates for risk factors including high blood pressure and diabetes and coverage of population. However, the two-step model saw a significantly higher follow-up rate of 85%, compared to 19% in the one-step model, which is a crucial finding as chronic disease management resulting in glycaemic control and control of hypertension in moderately high-risk individuals is the motivation for screening. In the two-step model, the field staff (Public Health Midwives — PHMs) were able to trace those who were at risk, resulting in higher follow up. However, neither model evaluated the cost-effectiveness of the approaches. Policy makers felt unable to justify implementing the two-step model in the national rollout due to issues of feasibility (affordability, health system structure and workforce capacity). The PHMs could not be deployed on a national level as it would distract from their core midwifery functions. Donors and policy-makers therefore backed the expansion of the one-step model through HLC, accepting that compromises in implementation are often necessary.

The case study from Sri Lanka, featured in the box, describes one of the pilot studies undertaken and the review of evidence generated prior to designing a National Cardiovascular (CVD) Screening program. If they

20 D.S. Virginie Mallawaarachchi et al., 'Healthy Lifestyle Centres: A Service for Screening Non-communicable Diseases through Primary Health-Care Institutions in Sri Lanka', *WHO South-East Asia Journal of Public Health*, 5.2 (2016), 89, <https://doi.org/10.4103/2224-3151.206258>

21 Japan International Cooperation Agency, *Project on Health Promotion and Preventive Care Measures of Chronic NCDs Final Report* (Tokyo: Japan International Corporation Agency, 2013), http://open_jicareport.jica.go.jp/pdf/12112322.pdf

had applied the list of additional considerations, Sri Lanka could have ticked many of the boxes. Relevance was established, local evidence was generated and political will and donor support were critical to realizing and determining the contents of this national program. Inadequate local capacity, however, became a stumbling block to implementing the preferred model of delivery. Evidence suggests that drug treatment for those at high risk of CVD (total risk of CVD event >30%) is a cost-effective intervention and a Best Buy,²² so by choosing the approach that yielded fewer follow-up visits and therefore chronic disease management the Sri Lankans may have undermined the effectiveness and cost-effectiveness of this program. Compromise and pragmatism are often required in the real world, but the consequences of decisions need to be captured. An evaluation of the program should capture not only the percentage of the eligible population that has been screened and identify modifiable risk factors like smoking and hypertension, but also outcomes such as the number of patients with controlled hypertension. This is a way of measuring the impact of the program as currently structured. The results may point to some constraints that could be easily addressed. For example, a recent review of the routine data for this CVD risk screening program showed that more than two thirds of the attendees were women. It was quickly realized that this was because the screening occurs during the official working week, i.e., Monday to Friday, which was preventing men from benefiting from the scheme and resulting in a rectifiable inequity. The Public Health Midwives or other primary health staff, as well as community representatives, should be invited to contribute to finding a solution for the workforce capacity issues and community participation in the screening program. Local areas may want to pilot different solutions.

Case Study 4.4.2 Prevention and control of cervical cancer in Cambodia

Another case study, authored by Koum Kanal, concerned prevention and control of cervical cancer in Cambodia. Cervical cancer in Cambodia is one of the most serious yet preventable health problems. Cambodia implemented a pilot study of a new cervical cancer program, which was

22 World Health Organization, *Tackling NCDs: Best Buys*.

based on the WHO's guide to Comprehensive Cervical Cancer Control.²³ The program aimed to: 1) raise access to cervical cancer screening among factory workers; 2) improve gynecologic capacity for diagnosis and treatment of precancerous lesions; and 3) strengthen pathological capacity for cancer diagnosis. The implementation was supported by strong political will and involved ministries and donors, which facilitated international collaborations of professional associations. The cost of the new screening program was estimated to be less than 1 US dollar per person per year and was therefore financially sustainable. Although there is no direct cost-effectiveness evidence, the program was likely to be highly cost-effective and hence a Best Buy. However, the most striking barrier to nationwide implementation was again an inadequate local capacity to scale up the program nationally — there were only four pathologists in the country and built infrastructure was also needed. Cambodia started a new pathology residency program in the country in 2015, in which five residents are trained with support from Japanese and German universities. A technician-capacity-building program was also initiated. While these capacities are being developed, temporary measures could be explored and, wherever affordable, adopted to meet the needs of the screening and management, including outsourcing; e.g., contracting a pathology service with neighborhood countries or requesting international co-operation, which means setting up a program and guidelines for pathologists from outside of the country to effectively work in the Cambodian context with limited human resources and skills.

Case Study 4.4.3 Sugar-Sweetened Beverage (SSB) taxes

The SSB tax to discourage sugar consumption is probably the approach currently being most tested, partly because of the popularity of SSBs across cultures, the worldwide increase in sales and their price-sensitivity, especially in low and low-middle-income countries.²⁴ South

23 World Health Organization, *Comprehensive Cervical Cancer Control: A Guide to Essential Practice* (WHO Library Cataloguing-in-Publication Data, 2014), https://apps.who.int/iris/bitstream/handle/10665/144785/9789241548953_eng.pdf?sequence=1

24 Yevgeniy Goryakin et al., 'Soft Drink Prices, Sales, Body Mass Index and Diabetes: Evidence from a Panel of Low-, Middle- and High-Income Countries', *Food Policy*, 73 (2017), 88–94, <https://doi.org/10.1016/j.foodpol.2017.09.002>

Africa, Zambia, Chile and Philippines all submitted case studies on SSB taxation (authored by Karen Hofman, Surgey et al., Cristóbal Cuadrado, Frances Claire Onagan, respectively). They described the policy process and the challenges faced when implementing an effective tax to improve health, as well as how the impact of these additional considerations can affect whether the intervention is a Best Buy for health or not.

SSB taxes are notably announced and led by Ministries of Finance (MoF) or Health (MoH) or in some instances by the Head of State and thus are a classic example of a multisectoral approach. When implementing SSB taxes, the MoF's primary objective is not necessarily health improvement, but revenue creation. Implementation of an SSB tax tends to be subject to strong opposition by industry, which tries to limit its impact. Even when there is strong political leadership in tackling NCDs, such special interests can have implications for the level at which taxes are set and this is a challenge for the health sector. In many countries, SSB tax rates are moderate (for example at 5%), which may not significantly influence consumer purchasing in the long run, in which case the tax serves only as a revenue-raising mechanism.²⁵ For example, Zambia is proposing a 3% tax that modelling has shown to have no benefit on health, but which will raise about \$33,314 USD per annum in revenue. For the authors of this chapter, the Zambia SSB tax would be a Contestable Buy as it is unable to demonstrate health benefit, but it is not a Wasted Buy as it generates government revenue that could be used to fund other preventive or treatment interventions — hence the tax policy can be part of a Best Buy policy package and creates awareness of the risk of SSB consumption among the public which can lead to behavioral change.

These case studies highlight the importance of conflict of interest and of taking account of the resulting powerful influence of industry in creating doubt, determining the rate of the tax and on mediating the impact of taxation on consumers, thus weakening the political will for action. They underline the importance of engaging with the public, the need for strong advocacy, the value of local evidence and the importance of publicly countering industry arguments. Where taxes have been implemented without strong public health messaging to encourage

25 World Health Organization, *Using Price Policies to Promote Healthier Diets*. Copenhagen: WHO Regional Office for Europe, 2015, http://www.euro.who.int/__data/assets/pdf_file/0008/273662/Using-price-policies-to-promote-healthier-diets.pdf

consumer demand for healthier products, populations have interpreted the policy action as governments finding another way to extract money from them, which makes the intervention less acceptable to the public.²⁶

4.5 Discussion

We endorse the WHO Best Buys for tackling NCDs but recommend that NCD decision-makers use local, context-specific cost-effectiveness information where obtainable, as well as the additional considerations, to prioritize interventions and to undertake the effective implementation of their chosen intervention. The Best Buy list is a list of evidenced interventions that have been shown to be cost-effective in more than one setting. The list contains interventions that are indeed Best Buys in some places and times and it provides a strong resource for countries to draw on. Unfortunately, there is no 'one size fits all' and the user of the list should not generalize and passively expect the interventions to be cost-effective in their setting just because they were in another; instead they should actively enquire whether the intervention is likely actually to be cost-effective in their setting. The user should assess any additional considerations that are of local relevance, given their specific country with its own constraints (budgetary and other), values, institutions and capacities. Users should also appreciate that contexts will require a different combination of policies to address a health challenge, that an intervention on its own might not be cost-effective, but in combination with others might form a cost-effective package.

We have proposed a list of considerations for assessing the possible importance of locally contextual, additional considerations, covering relevant areas including: culture, religion and ethnicity; leadership, governance and compliance; sustainability; multisectoral collaboration; community and stakeholder involvement; ethics and values (Table 4.3). The case studies have demonstrated that, in the real world, compromises are often made in the implementation process.

As a policy-maker, adviser or NCD manager using this list of additional considerations in your planning process, what do you

26 Orly Tamir et al., 'Taxation of Sugar Sweetened Beverages and Unhealthy Foods: A Qualitative Study of Key Opinion Leaders' Views', *Israel Journal of Health Policy Research*, 7.1 (2018), 43, <https://doi.org/10.1186/s13584-018-0240-1>

do if there are unsatisfactory answers to some of questions posed in Table 4.3? How do you explore whether the consequence of these considerations is sufficiently serious to reject the proposed intervention or whether it is possible to take complementary steps to mitigate the consequences? One solution could be to conduct a workshop and/or set up an advisory group with experts and policy-makers to explore the issues and any potential controversies, and design the necessary monitoring and measurement programs for an evaluation. Constraints (especially political and professional ones) could be overcome in several ways, for example: through price negotiations to increase affordability of the more effective model; investment in training and human capital to strengthen the sustainability and infrastructure elements; involving a wider range of public and private stakeholders from other governmental departments, the universities, professions and industry; and facing up to ethical and cultural challenges, for example, by encouraging open public debate on the critical issues.

Sometimes a Buy may be deemed to be Contestable on the grounds of the quality of the evidence. This is not usually a matter of local context.²⁷ The problem will often lie in the design of the primary research or in the reviews and meta-analyses that underlie the case, or in the data used, which may raise significant questions of transferability. Again, one way forward might be to conduct workshops of experts and policy-makers at which the issues and possible solutions and compromises can be explored. The forty-seven case studies demonstrated that little local evidence of effectiveness or cost-effectiveness is currently being utilized, probably because it is not available, but possibly also because of a lack of awareness that workable tools exist. Therefore, another possibility might be to conduct further research to address data deficiencies either at a local level or regionally, to incorporate other criteria than cost-effectiveness alone in the evaluation of the intervention in question and, in general, to raise awareness that will have consequential implications for training. All these will raise further questions of timing and funding.

In all cases good judgment is called for, which underlines the importance of regarding cost-effectiveness analysis and related methods as aids to thought rather than substitutes for it. It is important for decision-makers to understand the basics of the evaluative methodologies

27 See Chapter 7.

involved and their limitations, so that they can interrogate both the evidence and the experts intelligently and reach sound conclusions about the design and operation of the decision-making processes used in the country.

Best Buys are not necessarily ‘quick fixes’. Modelling their return on investment involves projections over two to three decades. The fact that benefits from NCD prevention policies and interventions might not be felt until way into the future makes them politically difficult to justify, especially when the benefits accrue to one government department, but the spend falls on another. A significant number of the Best Buy policies need to be implemented by other sectors or with other sectors.²⁸ Even in the case of the revenue-generating fiscal policies where the costs of implementation and monitoring could be covered by the revenue generated, it was acknowledged that there were challenges with enforcing legislation or guidance.

Policy-makers need to balance national spending priorities fairly and efficiently while at the same time safeguarding an individual’s right to health. Achieving equity can be costlier as it means reaching less accessible, often marginalized groups, thus potentially deeming the intervention, or some aspects of it, cost-ineffective. This emphasizes one of the challenges of applying CEA tools to public health interventions. Public health interventions are often more concerned with the distribution of health gains rather than maximizing health benefits or efficiency. The current economic evaluation methodology almost exclusively concerns the latter. In addition, due to the broad nature of the costs and benefits incurred, economists need an intersectoral approach to identify them and to measure health and social gain (see Chapter 8 on cross-sectoral policies to address NCDs). For example, a DALY may not be broad enough to identify all the benefits to society.²⁹

4.6 Conclusion

In this chapter, we have made the case that cost-effectiveness data are generally scarce in NCD prevention in LMICs and that available data are

28 See Chapter 8 for cross-sectoral policies to address NCDs.

29 Helen Weatherly et al., ‘Methods for Measuring Cost Effectiveness of Public Health Interventions: Key Challenges and Recommendations’, *Health Policy*, 93.2–3 (2009), 85–92, <https://doi.org/10.1016/j.healthpol.2009.07.012>

not always generalizable to different settings. A crucial element of cost-effectiveness analysis is context sensitivity, meaning that a list of Best Buys generated at a global level cannot be assumed to be a Best Buy in a local setting unless there is local evidence of cost-effectiveness. Through a series of case study examples, we have sought to demonstrate the importance of context and developed a list of considerations in policy implementation to help NCD managers to judge whether a potential Best Buy intervention is effective and cost-effective in their own setting. In order to strengthen the effectiveness and cost-effectiveness of NCD prevention interventions, funders, national governments and technical agencies should consider investing in the following:

1. Regional support units to assist in the generation of regional and local cost-effectiveness evidence with local academics and health economists. This collaboration can enable the sharing of experiences and insights both in implementing NCD preventive policies and conducting HTAs, and also build the capacities of junior researchers and policy-makers through experiences and knowledge exchanges.³⁰
2. Prioritization and decision-making processes that are informed by cost-effectiveness evidence such as the Lancet NCDI (non-communicable diseases and injuries) Commission³¹, which familiarizes NCD managers and policy-makers with cost-effectiveness data and tools. This should increase the demand for such information and, hence, its production.
3. Development of further tools to assist in implementation. The list of additional considerations is a starting point for guiding managers and policy-makers. Further efforts should be invested in designing and validating a tool that is user friendly with a quantitative measure and/or composite score. Tools such as the tobacco control playbook developed by WHO Europe, which supports NCD managers and policy-makers with evidence-based arguments to defend tobacco control

30 Yot Teerawattananon et al., 'Historical Development of the HTAsiaLink Network and Its Key Determinants of Success', *International Journal of Technology Assessment in Health Care*, 34.3 (2018), 260–66, <https://doi.org/10.1017/s0266462318000223>

31 Gene Bukhman et al., 'Reframing NCDs and Injuries for the Poorest Billion: A Lancet Commission', *The Lancet*, 386.10000 (2015), 1221–22, [https://doi.org/10.1016/s0140-6736\(15\)00278-0](https://doi.org/10.1016/s0140-6736(15)00278-0)

policies in parliament, are useful guidance documents in that they prevent the weakening and subsequent ineffectiveness of such policies,³² but offer no assessment of the implementation process. Academics are currently working to develop a tool to explicitly incorporate the notion of context when implementing public policies, which could be used to steer this process.³³

4. Monitoring and evaluation of existing NCD prevention policies and interventions with a view to strengthening implementation and impact.
5. Best practice pilots that can generate further evidence of implementation methods and pitfalls.

32 World Health Organization, *Tobacco Control Playbook*, 2019, <http://www.euro.who.int/en/health-topics/disease-prevention/tobacco/policy/tobacco-control-playbook>

33 Politics and Ideas, *Context Matters: A Framework to Support Knowledge into Policy*, 2016, <http://cm.politicsandideas.org/homepage>