Non-Communicable Disease Prevention

Best Buys, Wasted Buys and Contestable Buys

Edited by Wanrudee Isaranuwatchai, Rachel A. Archer, Yot Teerawattananon and Anthony J. Culyer
Chapter 1: Introduction

This first chapter provides general information to set the context for the book, such as information on non-communicable diseases (NCDs), the concept of Best Buys, Wasted Buys and Contestable Buys and general definitions and central ideas in economic evaluation and health technology assessment (e.g., the cost-effectiveness plane and willingness-to-pay threshold). This chapter also shares the story of the book, and more details on this project, its output and journey, including the target audiences: those working to support NCD prevention (in various roles).

Wanrudee Isaranuwatchai, Rachel A. Archer, and Anthony J. Culyer
Non-communicable diseases (NCDs) are a defining problem of the twenty-first century, accounting for the top 3 causes of death worldwide and 7 out of every 10 deaths in developing countries. Over the last decade, there have been several high-level international political attempts to affirm NCD action as essential to national and regional development. These political actions have been supported and reinforced by substantive technical guidance from the World Health Organization, including a global monitoring framework and the identification of Best Buy interventions. However, the continued rise of NCDs shows that increased political attention to and knowledge of prevention strategies have yet to translate into effective policy implementation at national and local levels. For example, NCDs receive very limited funding, most of which has been concentrated on
ensuring political commitment, as opposed to implementation activities. These challenges raise many questions, including how to build political momentum, augment capacities and identify resources. To analyse these obstacles, we focused on NCD program managers. In most cases an NCD program manager oversees an NCD unit within a national ministry of health and has a mandate over all or most NCDs. We conducted seventeen semi-structured interviews to learn about their experiences and perspectives. Our sample included eight NCD managers and nine others who worked with or above NCD managers, as well as five people at regional or global multilateral organizations and one urban-level official. We used the “Three-I’s” framework (Institutions, Ideas and Interests) to structure our findings and conclusions with recommendations for advancing progress against NCDs. Our interviews revealed several reasons why the attention paid to NCDs has not often translated into the implementation of effective programs, despite reported positive developments at legislative and upstream levels. In many cases, we found that ministries of health are organized into vertical directorates, and NCD program managers reported challenges in pursuing NCD work that would logically fall outside their own directorate, making it difficult for them to support both the treatment and prevention sides. This scenario is further compounded by the breadth of NCDs over which the units have a mandate, which creates operational challenges and confusion among stakeholders. NCD managers also noted the contrast between the multi-sectoral nature of NCD risk factors and intervention strategies, and the limited institutional mechanisms for facilitating multi-sectoral action. Additionally, global-level leadership has spurred many countries to establish NCD units and adopt legislation on NCDs, but these actions have not been accompanied by national political commitment to implementation. Our recommendations include: 1) expand global support for engaging political leadership in NCD agendas; 2) expand the managerial and institutional structures responsible for NCDs; and 3) generate effective guidance and support to stimulate multi-sectoral coordination, collaboration and action.
When non-communicable disease (NCD) program managers are faced with a decision to invest in an intervention, determining whether it is a Best Buy or Wasted Buy is not always easy or straightforward. Often, this is because Best Buys and Wasted Buys are two sides of the same coin, wherein an intervention that is a Best Buy could easily turn into a Wasted Buy if, for example, it were to be unwisely implemented. Chapter 3 introduces a framework called the SEED (Systematic thinking for Evidence-based and Efficient Decision-making) Tool, which outlines a step-by-step process for practical considerations to implement Best Buys and avoid Wasted Buys. Providing a backbone for in-depth discussions in other chapters of the book, the SEED Tool lays out a set of five fundamental questions (considerations) that aim to answer whether the intervention: has a sound theoretical basis (Consideration 1); is supported by good-quality evidence (Consideration 2); is transferable to the implementation setting (Consideration 3); can be implemented at reasonable cost (Consideration 4); and has sufficient political investment (Consideration 5). Should an intervention be lacking in any of these considerations, the framework suggests ways to improve the likelihood of turning it into a Best Buy by incorporating different types of measures. With this framework, a deliberate and evidence-oriented approach to decision-making for NCDs interventions can be adopted not just for individual interventions but throughout the system as a whole, with the ultimate aim, of improving health outcomes.
Chapter 4 provides practical considerations for achieving Best Buys in non-communicable disease (NCD) prevention. The World Health Organization (WHO) published an updated list of Best Buys and other recommended cost-effective policy interventions to prevent and control NCDs in 2017. Today, policy makers are required to judge whether a potential Best Buy intervention is effective and cost-effective in their own setting. However, data on the cost-effectiveness of NCD prevention are generally scarce in low-and middle-income countries. Moreover, the cost-effectiveness of a policy is crucially sensitive to the local context in which it is implemented; hence, available data from other settings are not always applicable or transferable to one’s own setting. We show through an analysis of case studies on NCD prevention that the current policy practice is largely informed by Contested Buys; these are policies that aspire to cost-effectiveness, rather than being direct, local evidence to demonstrate that they are a Best Buy. The analysis also identifies important factors that are associated with the successful implementation of preventive policies that prove to be Best Buys. We develop a list of considerations for policy implementors and we apply this list to featured case studies from different countries, in order to explore what else matters beyond cost effectiveness. We also examine the challenges in achieving a Best Buy and approaches to finding solutions.
The existence of Wasted Buys and even Contestable Buys has only started to gain traction in the health community. The concept of Wasted Buys is broad and examples abound in many countries. Chapter 5 is an attempt to demonstrate that tackling inefficient spending or ‘Wasted Buys’ is a value-enhancing agenda, which acts as a catalyst in achieving the ultimate goals of a healthy society and healthcare ecosystem. It provides an operational, pragmatic definition of a Wasted Buy, which will help program managers and policy-makers to identify inefficient spending and initiate a constructive dialogue. This chapter explains the common characteristics of inefficient spending incurred in the prevention of NCDs by using current examples, and shows how inefficient spending can be avoided by substituting better programs or care.
Chapter 6: Assessing the Transferability of Economic Evaluations: A Decision Framework

David D. Kim, Rachel L. Bacon, and Peter J. Neumann

Chapter 6 provides a practical decision-making framework and checklist to help researchers and decision-makers who wish to apply existing economic evidence to their local settings. This transferability is defined as ‘the extent to which particular study findings can be applied to another setting or context.’ Results from highly transferable studies could be used in various decision-making contexts without further adjustment. In this chapter, after reviewing the existing literature on the transferability of economic evaluations, we summarize critical factors for consideration and provide a decision-making framework to help determine whether local decision-makers should accept external evidence without further adjustment, modify it to reflect local data, or reject it altogether. We develop a worked example to provide a step-by-step illustration of how to perform a transferability assessment using our framework. We also discuss the use of an ‘Impact Inventory’ to aid decision-makers who wish to conduct for themselves original economic evaluations in local settings. The final section of the chapter provides conclusions and future steps.
Knowledge changes constantly. Therefore, non-communicable disease (NCD) program managers must be able to find up-to-date evidence, and to interpret and integrate that evidence into their local decision-making processes. Chapter 7 reviews the armory of research designs that may be used to understand causes and effects in NCD prevention intervention and treatment. In addition, this chapter uses an umbrella review of systematic reviews to demonstrate the process of evidence synthesis, and how this process can affect the efficacy of lifestyle interventions on health-harming behavior for type 2 diabetes mellitus, cardiovascular diseases, and hypertension. The evidence synthesis can be used to inform policy development and to identify the most effective intervention; however, monitoring and evaluation of policy implementation remains the key component to ensure that the policy remains a Best Buy.
Chapter 8: Cross-Sectoral Policies to Address Non-Communicable Diseases

Many promising interventions designed to prevent or mitigate non-communicable diseases (NCDs) require collaboration with sectors other than the health system, such as the education sector or private employers. As well as seeking to improve health, such cross-sectoral interventions often also promote the objectives of the other sectors involved, and so should be evaluated with those multiple perspectives in mind. Chapter 8 notes that the design and implementation of cross-sectoral interventions is complex because of the different perspectives of the partners involved. It nevertheless shows that it is possible to assess such projects using a simple analytic framework that is consistent with conventional cost-effectiveness analysis but takes account of the objectives of the other sectors involved. However, this chapter notes that the most challenging barrier to successful cross-sectoral working arises from the different institutional structures, priorities and lines of accountability in the participating sectors. It therefore argues that great attention should be given to the governance of cross-sectoral interventions, possibly involving the commitment and authority of a high level of government or legal enforcement. Two case studies highlight the importance of governance arrangements.
Chapter 9: Deliberative Processes in Decisions about Best Buys, Wasted Buys, and Contestable Buys: Uncertainty and Credibility

Everyone involved in non-communicable disease (NCD) prevention and treatment needs to be aware that social values permeate all aspects of both. Decisions are not merely ‘technical’, let alone scientific. Moreover, since uncertainty abounds, all decisions require the exercise of judgment about issues including the quality of the evidence, the difficulty of implementation, the value of the outcome and the value of what is forgone when resources are committed to specific purposes, to name but a few. As a result, any criterion for what constitutes a Best Buy embodies value judgments. Chapter 9 discusses deliberation as a means of eliciting and incorporating value judgements in decision-making process. We revisit the definition of ‘evidence’ through the lens of deliberation and from the perspective of different stakeholders both within and beyond the research community; we explore the uncertainty about and credibility of processes and end decisions; and we finish with a case study of the National Institute for Health and Care Excellence (NICE), the agency that provides evidence for policy decisions in the UK’s National Health Service, which, during its early days at least, had a stated and applied commitment to deliberation as a means of using evidence to inform decisions. We conclude with eight reasons why deliberation is deemed to enhance the impact of decisions about Best Buys and Wasted Buys. Without implying or guaranteeing consensus, deliberation is about facing up to inevitable difficulties rather than burying them and demonstrating reasonability in the ways they are handled. This makes deliberative processes and their outputs credible.
The final chapter summarizes the space between an ideal world and the real world in which we live. We highlight how this book has tried to bring the two worlds together and has made a number of suggestions for enhancing the ability of societies to address the rising burden of non-communicable diseases (NCDs) more effectively and efficiently. While this book cannot solve all problems related to the NCDs, it does offer key considerations and guidance for assessing and implementing NCD prevention interventions. We are not denying that there is a long road ahead and that universal problems may lack universal solutions. Buys, in the case of NCD prevention, are often complex, constantly changing and unique to each jurisdiction. There is no ‘one-stop shop’ for policy-makers, but there are positive steps we can take to continue our efforts to support NCD prevention.
Non-communicable diseases (NCDs) are the leading cause of death worldwide, contributing to over 73% of all deaths annually. Each day NCDs cause more than 100,000 deaths, 80% of which occur in low- and middle-income countries. NCDs, however, are largely preventable, and a great deal of technical knowledge exists about how to prevent and manage them. Why, then, have we, as a global community, not been more successful at reducing this NCD burden? Does a universal problem not have a universal solution?

Created by an international consortium of experts, this informative and accessible book provides practical guidelines, key learning points, and dynamic, real-world case studies to aid NCD program managers, policy officers and decision-makers in low- and middle-income countries, so that they can assess interventions for the prevention and control of NCDs.

The book comprises ten chapters, which collectively explore the reasons behind, and strategies for, preventing and managing the NCD burden. It spans key themes such as political economy, the transferability of economic evidence, the role of cross-sectoral policies, the importance of deliberative processes, and health technology assessment.

NCD Prevention is written for the benefit of the global health community, and is primarily targeted at those individuals who are involved in NCD programs. This book will also be of interest to NCD champions, policy advocates, and educators spearheading the movement for increased visibility of NCDs.

As with all Open Book publications, this entire book is available to read for free on the publisher's website. Printed and digital editions, together with supplementary digital material, can also be found at www.openbookpublishers.com