

Executive Summary

Since the early 1990s, the importance of chronic noncommunicable diseases (NCDs) to global health has gained increased recognition. This report contains an agenda for action in response to the growing economic, social, and health problems posed by NCDs. Its objective is to enable the World Bank and its clients to examine and, where appropriate, strategically shift their approaches to public policy as a tool to prevent and control NCDs.

Introduction

The report highlights two broad themes. First, public policies need to prevent NCDs to the greatest extent possible and, in doing so, promote healthy aging and avoid premature deaths. Second, at the same time, public policies need to recognize that the burden of NCDs will increase because of population aging, and therefore public policy has a role to play in dealing with the pressures that this will impose on health services. Thus the report has a dual purview: how to avoid the burden of NCDs as much as possible and how to prepare for the consequences of more NCDs associated with demographic change.

NCD outcomes are typically measured in terms of mortality and morbidity, and the goal of policy is to improve both. Specifically, the main

objective of addressing the NCD burden is both to postpone mortality and, for a given mortality profile, to postpone morbidity. The latter is referred to as healthy aging or the compression of morbidity.

NCDs are currently responsible for 56 percent of all deaths in low-and middle-income countries (Lopez and others 2006), and the World Health Organization projects that the burden of disease due to NCDs will increase rapidly in the years ahead. NCDs are by far the major cause of death in lower-middle, upper-middle, and high-income countries, and by 2015, they will also be the leading cause of death in low-income countries. The same is true for mortality among those of working age.

In part, the recent increase in NCDs reflects progress with respect to other international health priorities, such as infectious disease prevention and lower fertility. Deaths from NCDs are expected to rise over the next 25 years essentially because projected epidemiological trends, that is, declining death rates at any given age, will not be rapid enough to offset the effects of an older population structure.

By how much can current mortality trends in low- and middle-income countries be improved upon? The report presents the implications of doubling historical rates of NCD mortality reduction worldwide during 2005–15. Because of the difficulty of offsetting aging trends, the total number of NCD deaths would still increase, but by about 3 million instead of about 6 million. This would be important progress, but it also shows that even extraordinary success with NCD interventions would slow down, but not reverse, the overall upward trend in NCD mortality caused by population aging. This finding is the basis for the dual message to policy makers to both avoid and prepare for the future NCD burden.

An equally important measure of NCD outcomes is morbidity. NCDs account for 46 percent of the disease burden measured in disability-adjusted life years in low- and middle-income countries, and large increases in NCD-related disability-adjusted life years are projected for the future. (For an explanation of disability-adjusted life years and other terms used in this report, see the glossary at the end of the volume.) Prospects for achieving the objective of healthy aging and its implications for public policy will depend on two relationships: between life expectancy and health status and between health status and health care.

What is the relationship between longevity and health status? Different scenarios are possible. One is that longer lives reflect improved survival by sick people to such an extent that overall disability rates decline more slowly than mortality rates, resulting in an expansion of morbidity. Alternatively, the opposite could happen; namely, the successful

control of risk factors and effective health care could mean that the health status of older cohorts improves more rapidly than longevity gains, leading to a compression of morbidity. Cross-country empirical evidence on these trends is inconclusive. Indeed, it suggests that patterns may evolve over time within the same country. In short, achieving healthy aging is possible, but by no means assured.

For public policy purposes, an equally important relationship is the one between health status and health care. If disability rates fall as morbidity is compressed (healthy aging), the need for medical care should, in theory, decline, but causation may also run in the opposite direction; that is, disability rates may decline precisely because of greater use of improved medical care. At present, many NCD interventions are not widely available in low- and middle-income countries, which spend far less on NCD care than the rich world. If healthy aging is achieved in this context, on balance it is more likely to be the result of more medical care rather than the cause of less medical care. This does not diminish the desirability of healthy aging, but rather underlines the need for policy preparedness for emerging challenges.

An improvement over past trends might be achieved through three broad channels. The first channel is achieving higher incomes through economic growth. The second channel is addressing NCD risk factors, such as tobacco use, obesity, high cholesterol, and high blood pressure, outside the clinical setting. The third channel is providing direct medical care for individuals in a clinical setting to screen for NCDs, to control risk factors clinically, or to provide treatment.

Indicators for certain NCD risk factors tend to grow worse as countries develop, and thus the challenge in many low- and middle-income countries will be to stay ahead of high-income countries in this regard. This highlights the importance of early action through population-based interventions to prevent an increase in exposure to the main NCD risk factors. At the same time, research into the successes of high-income countries in improving NCD outcomes has accorded a significant role to clinical interventions, and thus improved medical care in low- and middle-income countries will also be essential to reduce their NCD burden. Success in reducing the NCD burden will require action across many fronts.

Improving NCD Outcomes

Three distinct factors are likely to play an important role in determining the impact of public spending on NCD outcomes, and the overall chain

that binds them together will be only as strong as its weakest link. These factors are (a) the net impact of the public sector, which depends on the extent of market failures; (b) the budget allocation decisions, which imply either more or less value for money, depending on the cost-effectiveness of interventions; and (c) the public sector's capacity to translate money into effective services on the ground. This trio of factors offers a useful framework for analyzing public policy related to NCDs.

NCDs impose a significant economic burden, not just on patients, but also on their households, communities, employers, and health care systems and on government budgets. Typical cost of illness studies often underestimate this burden.

The net impact of the public sector will be greatest when market failures are largest. If these are absent, government interventions may only serve to displace the private health sector without improving outcomes in either allocative (efficiency) or distributive (equity) terms. The economic rationale for interventions for primary prevention of NCDs rests primarily on taxes to address externalities related to tobacco, alcohol, and the environment, as well as the provision of information about various risk factors (tobacco, diet, exercise, and so on). The economic rationale with regard to treatment distinguishes between low-cost and high-cost NCD services, with equity concerns representing the main reason motivating a public role for the former, and efficiency issues related to insurance markets largely motivating the latter. For all services, governments can play a key regulatory and quality assurance role.

To what extent do NCDs affect the poor? The answer depends to some extent on the country and the indicator of the NCD burden that is considered. However, in all countries and by any metric, NCDs account for a large enough share of the disease burden of the poor to merit a serious policy response. While the potentially catastrophic costs of NCDs can be a cause of impoverishment, in most developing countries, infectious diseases remain a more important cause of the gap between rich and poor in relation to health outcomes, and NCDs are of relatively greater importance in middle-income countries than in low-income countries. This has implications for addressing inequality and for prospects for targeting the poor with NCD services.

What will an expanded NCD response mean for health budgets? A growing burden of NCDs will have potentially large budget implications, but the fiscal consequences of aging are likely to be much less important than the growth of age-specific expenditures (that is, spending at any

given age), in particular because of the greater demand for both high-cost technologies and insurance coverage that NCDs may generate. Health technology assessments and the judicious expansion of benefits packages can help ensure that NCD costs remain sustainable over the long term. Nevertheless, a relatively larger burden of NCDs will mean that developing countries increasingly face the same challenges as high-income countries, where cost containment has become a constant theme in health sector reform.

Given a fixed budget, decisions about how funds are allocated (which interventions to “buy”) will play a key role in determining the volume of services that can be delivered, and ultimately their impact on reducing morbidity and mortality. Budget allocation decisions are often based on political economy considerations (echoed in the common complaint that spending is biased toward expensive tertiary hospitals catering to an urban elite), and a more technical approach can potentially lead to better outcomes.

Cost-effectiveness analysis, despite its limitations and if all else is equal, can offer useful information for budget allocation decisions. Contrary to some beliefs, highly cost-effective interventions for the control of NCDs do exist. Among the most cost-effective are tobacco taxes and clinical interventions, including aspirin, beta-blockers, and statins, when appropriate, for primary and secondary prevention of cardiovascular disease. NCD services delivered at the tertiary level are generally not cost-effective. The report provides evidence on the cost-effectiveness of a wide range of interventions.

The third and final consideration affecting the extent to which a dollar of public spending on NCDs can lead to better outcomes is the public sector’s capacity to translate its health budget into services of adequate quality. Service delivery in the health sector can be challenging, and often the ability of governments to achieve results on the ground has been weaker than hoped. The discretionary and transaction-intensive nature of many NCD services makes service delivery particularly challenging.

Service delivery issues will be central to achieving better NCD outcomes. Key characteristics of NCDs—including the need for long-term, sustained interaction with multiple levels of the health system; the importance of community engagement to improve access and patient self-care; and the intensive use of technology and drugs—can help inform policy decisions to improve service delivery. Many of the issues involved constitute what is often referred to as a health systems approach to improving outcomes.

How easily can the poor be reached through NCD clinical interventions? This will be an important challenge for policy makers to address. Achieving equity goals through NCD interventions will be a challenge in low-income countries for both conceptual and empirical reasons. While middle-income countries have a better track record in reaching the poor, in all settings, the challenge is to find innovative approaches to make interventions pro-poor.

The Agenda for the World Bank

The World Bank's approach to NCD control will be guided by the World Bank Strategy for Health, Nutrition, and Population Results (World Bank 2007). The preliminary recommendations underpinning the strategy underline the following: (a) renewing the emphasis on results (health, nutrition, and population outputs, outcomes, and system performance); (b) paying greater attention to the intersectoral linkages that contribute to better outcomes; (c) strengthening health system knowledge creation, policy, and technical advice in areas in which the Bank has a comparative advantage; (d) ensuring synergy between health system and single-priority disease control approaches in low-income countries; and (e) working with global partners selectively to complement the Bank's and global partners' comparative advantages at the country level. Each of these points is relevant to the prevention and control of NCDs.

The Bank will focus its policy discussions with countries on those areas in which it has a comparative advantage. It will emphasize the provision of technical assistance to countries to integrate NCD prevention and control into their health and development strategies and policies. Opportunities for engagement include the poverty reduction strategy papers of low-income countries, country assistance strategies, country economic memorandums, and informal consultations.

The Bank's focus with respect to analytical and advisory services will be on two mutually reinforcing approaches. The first approach emphasizes information generation and the sharing of knowledge that strengthens the basis for country decisions. Accordingly, the Bank will emphasize countries' capacity to develop results-based monitoring and evaluation systems for health policy and health systems. It will also actively promote the use of information for decision making with regard to public policies pertaining to NCDs and to health systems.

The second approach will involve coconvening with countries intersectoral forums to address tobacco control policies, alcohol abuse

prevention, food and nutrition policies to prevent obesity and NCDs, and interventions to increase regular physical activity. The framework of the Multisectoral Bottlenecks Assessment for Health Outcomes (World Bank 2006b) will be adapted for this purpose as appropriate. This approach could build confidence among country officials, Bank staff, and partner agencies and could stimulate country demand for lending operations.

In addition, the World Bank can also play a key role in providing analytical and advisory services to help ensure the sustainability of health systems and financing through appropriate definition of benefits packages, supply- and demand-side reforms aimed at cost containment, health technology assessments, availability and affordability of pharmaceuticals, and other measures as needed.

Depending on country requests, the Bank will consider increasing its support for country-led efforts to prevent and control NCDs. This will be done within the context of both health sector and multisectoral programs that affect NCD outcomes. In this connection, the stepwise framework of interventions recommended by the World Health Organization provides a useful basis for action.¹ In terms of financing country-led programs, the Bank will support approaches that are consistent with the emerging consensus on the alignment and harmonization of aid with country operations and that are integrated into country strategies with predictable and sustainable financing.

The findings of this report can be reflected in World Bank lending operations through at least three approaches. The first is the inclusion of NCDs in multisectoral programs that include outcome and impact indicators of NCD prevention and control. The second consists of health system operations that help countries prepare for the pressures of a rising burden of NCDs associated with population aging. The third consists of NCD-specific projects, especially in countries where NCDs are most significant and governments request such an approach. The approaches will vary across countries.

What are the costs and benefits of treating NCDs? What are the market failures and how should they be addressed? Are public subsidies for treating NCDs through public health care systems more likely to benefit the rich or the poor? These are critical questions for efforts to tackle NCDs on a large scale, yet they are difficult to answer. Certain knowledge generation activities can be undertaken to help find some answers. Two particular priorities for the World Bank are (a) long-term monitoring of households and (b) monitoring and impact evaluation of large-scale programs for NCD prevention and control. In collaboration

with partner agencies and financiers, the Bank will explore opportunities to commission such studies.

Overall, the appropriate policy response will entail avoiding the looming NCD burden to the extent possible, for example, through public health interventions and improved health care, while simultaneously preparing to deal with the health system and cost pressures arising from the increase in NCDs resulting from demographic forces. Policy makers should be made aware of both issues. An exclusive focus on prevention may lead to unrealistic expectations of a disease-free future, and thus a lack of readiness for emerging challenges. An overemphasis on aging, however, could result in a mistaken belief that policy cannot make a difference. The case for the World Bank and its clients to respond with action on both fronts is compelling.

Note

1. WHO 2005a.