

## Non-Communicable Diseases 2



# Country actions to meet UN commitments on non-communicable diseases: a stepwise approach

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Strong leadership from heads of state is needed to meet national commitments to the UN political declaration on non-communicable diseases (NCDs) and to achieve the goal of a 25% reduction in premature NCD mortality by 2025 (the 25 by 25 goal). A simple, phased, national response to the political declaration is suggested, with three key steps: planning, implementation, and accountability. Planning entails mobilisation of a multisectoral response to develop and support the national action plan, and to build human, financial, and regulatory capacity for change. Implementation of a few priority and feasible cost-effective interventions for the prevention and treatment of NCDs will achieve the 25 by 25 goal and will need only few additional financial resources. Accountability incorporates three dimensions: monitoring of progress, reviewing of progress, and appropriate responses to accelerate progress. A national NCD commission or equivalent, which is independent of government, is needed to ensure that all relevant stakeholders are held accountable for the UN commitments to NCDs.

### Introduction

The political declaration of the UN high-level meeting on non-communicable diseases (NCDs), held in 2011, committed member states to a comprehensive set of actions to prevent and treat NCDs, with a specific goal to strengthen national multisectoral plans by the end of 2013.<sup>1</sup> The declaration emphasised the need for a whole-of-government policy response, and recognised that to be effective, national actions need to go beyond the health system to address the social determinants of health and prevent exposure to NCD risk factors that are common to the four major NCDs: cardiovascular disease (heart disease and stroke), cancer, chronic obstructive pulmonary disease, and diabetes. National governments should also collaborate with other sectors in society, such as civil society, academia, and, when relevant and appropriate, the private sector.<sup>2</sup> Cost-effective interventions are essential to achieve the agreed global target of a 25% reduction in premature NCD mortality by 2025 (the 25 by 25 goal).<sup>3</sup>

An appropriate response needs both population-wide and individual-level strategies. Major reductions in NCD mortality have occurred in many high-income countries because of investment in both prevention and treatment programmes.<sup>4,5</sup> In addition to health advantages, economic,<sup>6,7</sup> environmental,<sup>8,9</sup> and other benefits can be gained from interventions to reduce the burden of preventable NCDs. Through a focus on a select set of interventions (so-called best buys) that are feasible, scalable, affordable, and cost effective, all countries can achieve rapid and substantial reductions in rates of death and disability.<sup>10</sup> Countries can adopt a more comprehensive approach after the priority set of interventions is implemented.

Many approaches to NCD prevention and treatment have been described, including the WHO NCD Action Plan, 2008–2013,<sup>11</sup> which is being updated, and regional

plans. These plans are often presented as action lists, with little clarity about the relative importance of their components.<sup>12,13</sup> Responses to NCDs should be set in the context of overall health systems and national development planning,<sup>14</sup> since NCDs are only one of many issues that need to be addressed.

In this paper, we focus on a small set of interventions, using a stepwise approach to NCD planning and action that is appropriate for all countries, but especially for low-income and middle-income countries. High-income countries can also benefit from optimum planning to achieve the best outcome from available resources. Case studies show how progress can be made.

### Key messages

- Strong leadership by heads of state and government is needed to meet national commitments to the UN political declaration on non-communicable diseases (NCDs) and to achieve the agreed goal of a 25% reduction in premature NCD mortality by 2025 (the 25 by 25 goal)
- A simple, phased national response to the political declaration needs three key steps: planning, implementation, and accountability
- Planning involves mobilisation of a multisectoral response to develop and support the national plan of action, and build capacity for human, financial, and regulatory change
- Implementation of a few feasible and cost-effective interventions for the prevention and treatment of NCDs would achieve the 25 by 25 goal, yet would need few additional financial resources
- National accountability involves monitoring and reviewing of progress, and acceleration of progress based on locally appropriate accountability mechanisms

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## A stepwise approach to national action

A clear, simple, and logical plan of action is more likely to be implemented than is a list of all possible actions. Panel 1 shows the proposed approach, which can be adapted to the local context.

Inevitably, actions taken will overlap and a linear process might not be possible or desirable. An accountability mechanism should be established from the outset, and, crucially, all sectors should develop an understanding of their roles and responsibilities early in the process, including how their contributions and commitments towards the achievement of NCD goals and targets will be assessed.

In low-resource settings, a stepwise approach provides an entry point for a national policy for NCDs.<sup>15,16</sup> The basis of this approach is that priority interventions should be simple, measurable, and part of a coherent plan that ensures that resources are directed towards interventions that will have the greatest health effects, but are still affordable in terms of financial and human resource needs. The criteria used to select priority interventions have been reported previously.<sup>17,18</sup> The appendix summarises the three major components that countries need to implement in their response to the NCD crisis.

See Online for appendix

### Step one: plan and mobilise a multisectoral response

#### Build the case for action

The first planning step is to build the case for sustained action by estimation of the burden of NCDs and their main risk factors, the unmet need for prevention and treatment services, and the need for interventions outside the health sector. Academics can help ministries of health to estimate the disease burden by combining data from mortality statistics with surveys of the prevalence of

the four major risk factors that predict NCD epidemics: tobacco and alcohol use, unhealthy diets, and physical inactivity. Collection of reliable data for risk factors—eg, with the WHO STEPwise approach to surveillance of NCD risk factors (WHO STEPS)<sup>19,20</sup>—needs far fewer human and financial resources than does collection of reliable data for NCD morbidity.

Data for the health, social, and economic effects of NCDs; the cost and cost-effectiveness of interventions; and the future costs of inactivity are helpful to build support for multisectoral policy action and law reform by governments.<sup>21</sup> Key components include health-care costs related to NCDs paid by governments, businesses, and families; and the social and economic costs of absenteeism and decreased work productivity related to NCDs.<sup>22,23</sup> However, countries do not need to delay action while awaiting these data, and some of the impact analyses and economic estimations might not be immediately feasible in low-income and middle-income countries. Rapid and substantial reductions in mortality can occur after improvements in risk factor levels, with subsequent economic benefits for governments.<sup>24</sup>

#### Ensure national leadership and a coordination mechanism

The UN political declaration emphasises the importance of strong and continuous national leadership by heads of state or governments to ensure that NCDs are a whole-of-government priority, since programmes and policies in other sectors affect health outcomes.<sup>25–27</sup> A whole-of-government response to the prevention and treatment of NCDs will be most successful when three requirements are met: an overriding political or legal mandate exists for multisectoral action; multisectoral governance processes and mechanisms are in place to develop and implement policies that take the interests of different sectors into account; and a framework for accountability exists that sets out the responsibilities of all ministries and partners to achieve shared goals.<sup>28</sup> Leadership by heads of state and governments and by health ministry officials has a mutually reinforcing role in the encouragement of cross-sectoral links and in promoting a shared understanding of the political importance of responding to NCDs (panel 2). National leadership will encourage the prevention and treatment of NCDs to be incorporated as a central part of the social and economic agenda, with recognition of their importance to poverty reduction, economic growth, health improvement, and environmental sustainability.<sup>29</sup> China provides an example of how high-level leadership can direct an appropriate response to the NCD crisis (panel 3).

Multisectoral processes to advance a coordinated response can take several forms, depending on their specific purpose, and can include cross-ministerial executive committees, task forces, action teams, and joint strategies that set out shared, interdepartmental goals, with integrated budgets. For example, in Mexico,

#### Panel 1: A stepwise approach to meeting the goal of a 25% reduction in premature non-communicable disease mortality by 2025

##### Step 1: plan and mobilise a multisectoral response

- Build the case for action and communicate with the public and partners
- Ensure national leadership and coordination mechanisms
- Promote civil society engagement and, if appropriate, the private sector
- Develop a national plan based on clear policies with appropriate goals and targets
- Strengthen capacity for change: human, financial, and regulatory

##### Step 2: implement priority interventions

- Tobacco control measures that meet or surpass the Framework Convention on Tobacco Control (FCTC) standards
- Dietary salt reduction to lower blood pressure
- Treatment for people at high risk of cardiovascular disease
- Other affordable and cost-effective priority interventions, as resources allow

##### Step 3: account for progress

- Monitor progress: leadership, results, and resources
- Review, assess, and report progress
- Take action to accelerate progress

the National Council for the Prevention and Control of Chronic Non-Communicable Diseases was established by presidential decree. As the permanent coordinating body for national action on NCDs and their risk factors, the Council links senior health ministry executives with their counterparts in other ministries, including finance, agriculture, education, and trade. The Council's role includes coordination of actions among federal government agencies, and between the federal government and state governments.

In countries where public health institutes are outside the ministry of health, but where there is a specific mandate to improve health, the institute can convene scientific expertise not available within ministries, while protecting programmes from inappropriate political interference.<sup>36</sup> In many federal countries, the primary responsibility for health is at the subnational level. For example, in India, each state government must devise its own plan for the implementation of NCD programmes, which can help with innovation when more progressive regions implement new ideas. For example, a state-wide community intervention addressing risk factors for NCDs in Kerala, India, was led by senior officials in the departments of education and health, the chief of local government, and the managing directors of major industries; their combined efforts ensured good commitment and resources.<sup>37</sup>

### Promote civil society engagement

Civil society, including patient organisations, is an essential partner in national responses to NCDs because it holds governments accountable for the commitments made in the UN political declaration on NCDs. Civil society organisations can voice support for the national programme, whereas public officials cannot always do so for political reasons. Unfortunately, civil society is often weak and fragmented, but international and regional alliances have been created to support country-level non-governmental organisations; both types of alliance have crucial roles in advocacy, programme development, implementation, and monitoring. The NCD Alliance unites more than 2000 organisations and provides a shared platform for collaboration and advocacy. The Healthy Caribbean Coalition was established when heads of government of the Caribbean community realised that the NCD burden could be reduced through collaborative programmes, partnerships, and policies supported by governments, non-governmental organisations, the private sector, and other regional and international partners.

### Develop a national action plan for NCDs

When multisectoral coordination processes are in place, countries should create a national action plan for NCDs or modify their existing plan. When appropriate, academia can provide data to inform the design of such a plan. At present, only a few national plans are adequately resourced and few specify multisectoral

actions.<sup>38</sup> A plan should stipulate the goals being pursued and include a time-bound commitment to implement at least three priority interventions for NCD prevention and treatment that combine both population-wide strategies (eg, tobacco control and salt

For the **NCD Alliance** see <http://www.ncdalliance.org>

For the **Healthy Caribbean Coalition** see <http://www.healthycaribbean.org>

### Panel 2: Seven measures of success for working outside the health sector

- 1 Clear leadership by heads of state and government has been demonstrated
- 2 The ministry of health has initiated dialogue and action with other sectors, including the finance, education, and trade sectors
- 3 Data for the burden of non-communicable diseases (NCDs), their major risk factors and social determinants, and their health, social, and economic effects, have been shared and communicated with relevant ministries, non-governmental organisations, and partners
- 4 Multisectoral procedures and a coordinating mechanism are in place for collaboration with all stakeholders, including civil society, supported by the ministry of health
- 5 Information about the policies and programmes needed to reduce the health, social, economic, and environmental effects of NCDs has been shared with other ministries and sectors
- 6 Methods of collaboration for implementation of priority interventions, including the role of civil society and the private sector, have been discussed and agreed
- 7 The progress of intersectoral efforts to implement priority interventions is being monitored and assessed

### Panel 3: Health, economy, and the environment in China

#### Leadership

China faces enormous challenges from a rapidly increasing burden of non-communicable diseases (NCDs) and associated pressure on resources.<sup>30</sup>

Health reforms in China are driven, to a large extent, by macroeconomic and social factors, and by the increasing health and economic costs of NCDs. In response to the UN political declaration on NCDs, Chinese Premier Jiabao Wen has indicated that China will adjust its economic structure to ensure that economic growth does not take place at the expense of the environment and public health, and that China will consolidate and improve its system of medical insurance, essential drugs, and community-level medical services.<sup>31</sup>

#### National plan of action

China's 12th 5-year plan, endorsed by the National People's Congress in 2011, calls for an increase in life of 1 year during this period.<sup>32</sup> National guidelines for the prevention and control of NCDs were issued by China's Ministry of Health in 2011, with systematic instructions and recommendations for agencies at all levels, including China's Centre for Disease Control, hospitals, and local health authorities. A National Plan for NCDs 2012–15, incorporating 15 different ministries and commissions, was issued in May, 2012.<sup>33</sup>

Healthy cities initiatives in China, led by local governments in collaboration with various government agencies, have made substantial progress in recent years and are spreading from major cities to smaller-sized cities. For example, the Healthy Beijing Action Plan (2009–18), under the leadership of the Beijing Government, established a series of indicators of health improvement for a 10-year period, which encompasses the health status of the population, health services, and healthy environments.<sup>34</sup> Key indicators of success include a 10% decrease in age-specific mortality rates for each of the major NCDs (cancer, heart disease, stroke, injury, and poisoning), and a 25% decrease in smoking prevalence in adults. Beijing and four other cities have implemented smoke-free laws. The call by the ministry of health for stronger, national tobacco control is an important step in efforts to accelerate implementation of the Framework Convention on Tobacco Control (FCTC).<sup>35</sup>

**Panel 4: Brazil's response to the UN political declaration on non-communicable diseases****Leadership and multisectoral action**

Non-communicable diseases (NCDs) account for almost three quarters of deaths in Brazil.<sup>40</sup> In response to the UN political declaration on NCDs, the Brazilian Government, led by President Dilma Rousseff, launched a national plan of actions to tackle NCDs in 2011–22.<sup>41</sup>

The NCD plan was led by the ministries of health and treasury and set out multisectoral actions involving more than 20 sectors and stakeholder groups, including the government, private sector, civil society organisations, medical organisations, and the National Health Council that publishes health guidelines in Brazil. A declaration of commitments to reduce preventable NCD mortality was signed by the partners and the government. The plan, which includes actions to be undertaken by other government sectors (agriculture, education, sport, social communication, and the ministry of social development), was presented to the tripartite council, which brings together representatives of the health secretaries of 27 states and more than 5000 municipalities.

**Prevention**

In December, 2011, a law was approved to accelerate the implementation of the Framework Convention on Tobacco Control (FCTC) by creation of more smoke-free environments, increase of cigarette taxes to 85% of the retail price, imposition of health warnings on the front of tobacco packages, and authorisation of a ban on all forms of tobacco advertising, promotion, and sponsorship. Agreements were signed with the food industry for the reduction of salt in processed foods and the elimination of trans-fats,<sup>39,42</sup> with an overall goal to reduce daily salt consumption from 12 g per person to 5 g by 2022. Interventions are being undertaken in cities to promote physical activity.<sup>43</sup>

**Treatment**

Brazil's health system aims to provide coverage for everyone, and to integrate services at all levels of health care (primary, secondary, and tertiary). To reduce cardiovascular risk, people at high risk have access to free drugs (thiazides, angiotensin-converting-enzyme inhibitors,  $\beta$  blockers, statins, aspirin, insulin, and an oral hypoglycaemic as part of a multidrug regimen) through the Health is Priceless programme.<sup>40</sup>

**Financing**

The plan provides additional budgetary resources to the Ministry of Health. The Health Academy Program finances the construction and functioning of spaces dedicated to public actions to promote health and encourage physical activity. Widespread media campaigns about healthy habits, with the motto "The Future Promises. I Want to Get There Well", have been undertaken by partners with their own funding.

**Monitoring, reporting, and accountability**

A technical advisory committee for NCDs that includes the participation of civil society, will monitor the goals of prevention and treatment with the NCD surveillance system that includes national household population surveys every 5 years, annual telephone surveys, and information systems on mortality and morbidity. A monitoring committee will be established with partners from all sectors to report and disseminate results.

reduction) and individual-based strategies (eg, multi-drug use for people at high risk of NCD and those who have already had a heart attack or stroke).

In many low-income and middle-income countries, only a few people might have responsibility for NCDs within the ministry of health, and these people often also have oversight of other areas of work. Development of a comprehensive plan for all NCDs could initially be too ambitious and might divert resources from the most productive actions. Countries should start with a

small set of priority interventions, and work with partners in civil society and relevant government sectors. As human and financial resources increase, countries can work towards implementation of a broader range of interventions, tailored towards the country's specific needs. Since many countries have similar challenges, sharing of experiences with other countries, especially those in the same region, is important.<sup>39</sup> Brazil provides an example of how an NCD action plan can be developed quickly through high-level leadership and multisectoral coordination (panel 4).

Methods exist to help policy makers and planners, both inside and outside the health ministry, to identify the local evidence base to support and facilitate appropriate NCD prevention strategies.<sup>44</sup> Practical guidance is also available to help with national decision making,<sup>45</sup> guide national actions,<sup>46</sup> and assist countries to develop the capacity for multisectoral action.<sup>27</sup>

**Strengthen human, financial, and regulatory capacity for change***Human capacity*

Many ministries of health find it difficult to assume a leadership role, and some have yet to clarify who, within them, is responsible for NCDs or for creation of the infrastructure to support a national response. The head of state, vice-president, or prime minister must empower the ministry of health and create the political mandate for health ministry officials to work with their counterparts in other ministries to ensure multisectoral coordination and implementation of key policies. The establishment of a funded unit for prevention and treatment of NCDs inside the ministry of health, with dedicated staff who possess the requisite skills and capacities, including those to develop multisectoral collaboration, is essential.

An important challenge is retention of appropriately skilled staff. People undertaking NCD work need both the technical skills in the range of disciplines of public health, and the political and communication skills necessary to work with other sectors including the private sector. Capacity building in public health law, including mechanisms for dissemination of country experiences and good practices,<sup>47</sup> is a major priority for advancement of national responses to NCDs, since implementation of many of the priorities to respond effectively to NCDs rely on governments making and enforcing policies and laws. Academia should undertake translational research to ensure that interventions are appropriate for the national context. Global partnerships and collaborative arrangements are needed to help to address this research capacity gap in NCDs.

*Financial capacity*

All countries have resource constraints. Fortunately, the costs of implementation of priority interventions can be low—and often cost-saving—especially when they are

directed towards the whole population.<sup>48–50</sup> Countries can estimate the resource needs for priority interventions by use of a WHO costing device based on the methodology used to derive global prices for scaling up interventions related to the Millennium Development Goals (MDGs).<sup>51</sup> Countries need to be guided by choices tailored to the available resources, rather than adopting guidelines that have been developed without cost considerations. Treatment decisions should be based on the overall risk of an event, with several easily measured risk factors considered together. This method has the advantage of preventing many more events than decisions based on one risk factor alone.<sup>52</sup> Risk factor thresholds for treatment should vary according to the resources available.<sup>53</sup>

Various financing options are available for national NCD prevention programmes. One source of income is an additional surcharge on tobacco,<sup>54,55</sup> which has raised revenue successfully in many countries. For example, the Jamaica National Health Fund was established to respond to NCDs and is funded partly by tobacco taxes. Similarly, ThaiHealth, an autonomous state agency outside the formal governmental structure in Thailand, is funded entirely by taxes collected from producers of alcohol and tobacco. Panel 5 shows the approach used in South Korea.

#### Regulatory capacity

Effective implementation of all population-wide interventions will need the emphasis to shift from information and health education for individuals to legal, fiscal, and regulatory actions by governments.<sup>57</sup>

The first step is to assess the status of current policies, laws, and programmes to identify where responsibility lies for key policy areas within the government; the WHO National Capacity Survey is a starting point for assessment of the state of policies.<sup>50</sup> For assessment of law reform priorities, governments must respond to the obligations they owe under international law to implement the provisions of international agreements, including the Framework Convention on Tobacco Control (FCTC). Strong leadership is essential to resist attempts by powerful organisations with vested interests (eg, the tobacco, food, and alcohol industries) to undermine the development and implementation of effective policies and laws.<sup>2,58</sup>

## Step two: implement priority interventions

### Priority interventions

There are three high-priority interventions, which, if applied rigorously, will achieve the 25 by 25 goal: tobacco control, salt reduction to reduce blood pressure in the whole population, and the management of people at high risk of heart attack or stroke. All countries can improve their implementation of these three interventions.

### Tobacco control measures

Although 175 countries have now ratified the FCTC, worldwide coverage of the key tobacco control policies is low and accelerated implementation is a global and

national health priority. Panel 6 summarises the measures of success of a tobacco control programme.

As shown by the experience in the Seychelles (panel 7), a crucial starting point for tobacco control is the establishment of a small group of people, within a well defined structure (eg, NCD section of the ministry of health), who are committed to achieve government action in this area. National and international advocacy groups can also provide advice and support.

### Dietary salt reduction to lower blood pressure

18% of deaths worldwide (9·4 million deaths) are attributable to raised blood pressure,<sup>63</sup> which is largely due to

#### Panel 5: Health Promotion Fund from tied taxes on tobacco in South Korea

The prevalence of tobacco use in South Korea has halved over the past 20 years, with prevalence in men decreasing from 75% in 1991, to 41% in 2008. Despite initial reluctance to address tobacco control, the government was encouraged by the actions of anti-smoking non-governmental organisations such as Korean Association on Smoking and Health (KASH). The Health Promotion Law, which was passed in 1995, strengthened health warnings, designated smoking and non-smoking areas in public places, restricted advertising of cigarette smoking, and banned sponsorship for women and children's events.<sup>56</sup> To fund tobacco control efforts, the law imposed a surcharge on cigarettes; these funds were used to establish a Health Promotion Fund. This fund provides an annual budget of more than US\$30 million for tobacco control, based on a progressively increasing tax on cigarettes.

For ThaiHealth see <http://en.thaihealth.or.th>

#### Panel 6: Seven measures of success of a national tobacco control programme

- 1 An adequately resourced tobacco control unit, integrated within the non-communicable diseases unit, has been established or reinforced in the ministry of health
- 2 A policy statement setting out the key actions needed (with goals and time-bound targets, in line with the WHO Framework Convention on Tobacco Control [FCTC]) has been generated, with widespread endorsement
- 3 Governments have allocated adequate resources for tobacco control, including for monitoring and enforcement
- 4 A public awareness campaign for the benefits of reductions in tobacco use has been introduced, with the aim of creating tobacco-free norms and building support for tobacco control policy
- 5 Non-governmental organisations and professional societies have had a major role in the generation of public and political support for strong legislation
- 6 A media strategy has been developed and media are used to gain public support for smoke-free policies, packet warnings, bans on advertising, promotion and sponsorship, and other key tobacco control measures such as increased taxation
- 7 Monitoring and assessment systems are completed regularly to track progress towards targets and amount of tobacco used with the reporting instrument of the Conference of Parties of the WHO FCTC<sup>59</sup>

excess dietary salt intake and which substantially increases the risk of stroke and cardiovascular disease.<sup>64-67</sup> A 15% reduction in salt intake, if sustained for 10 years, could prevent 8·5 million deaths in the 23 countries that account for 80% of the global NCD burden.<sup>48</sup>

There are multiple options for reducing national salt consumption. In all countries, non-governmental organisations have an important role in promotion of national programmes. In many low-income and middle-income countries, and especially in rural areas, most excess salt is added at the household level (during cooking and at the table). Therefore, mass education is needed to encourage reductions in salt consumption and salt substitution; iodine fortification to prevent iodine deficiency can be combined with salt reduction programmes.<sup>68</sup> Regulatory measures to reduce salt content in processed foods should also be considered or planned in low-income and middle-income countries, especially in those countries experiencing rapid urbanisation and industrialisation.

In high-income countries, most salt is consumed through processed foods, breads, and sauces. This situation creates huge opportunities for food manufacturers to reduce the amount of salt in their products.<sup>69</sup> The salt content of foods varies substantially, not only by type of food but also by company and by the country in which the food is produced. If food companies

substantially reduced the salt in their products, it could result in huge population health gains.<sup>70</sup> When voluntary strategies fail, regulatory and fiscal strategies to reduce salt amounts in processed food will be needed.<sup>71</sup> Panel 8 shows seven measures of success in the development of an effective national programme to reduce dietary salt intake.

#### Treatment for people at high risk of cardiovascular disease

The third recommended priority intervention is multi-drug treatment for people who have had a heart attack or stroke, and patients identified within primary care as being at high risk of a cardiovascular event.<sup>49,72,73</sup> The capacity of countries to fully implement this intervention will depend on the pace at which countries are able to shift from treatment based on single risk factor measures to treatment based on overall cardiovascular disease risk. At the least, all people who have had a heart attack or stroke should receive appropriate drugs, when possible as fixed-dose combination pills. Treatment that combines different medications in only one pill (one pill per day) could offer advantages in terms of improved adherence, simpler guidelines, task shifting, and reduced cost.<sup>74</sup> The treatment gap to be filled is large; only 6% of people who survive a stroke or heart attack in low-income and middle-income countries receive essential generic drugs.<sup>72</sup>

The next step, if resources and services allow, would be to provide a similar treatment approach to people identified in primary health care as being at high overall risk of cardiovascular disease (>30% chance of a cardiovascular disease event within 10 years, or a lower cutoff if resources allow) stratified on the basis of age, sex, self-reported interview data, and blood pressure measurement.<sup>49,75,76</sup>

The success of a framework based on multidrug treatment for high cardiovascular disease risk will need a new method of care delivery, in view of the shortages of skilled health workers and drug costs in many low-income and middle-income countries. This approach will need task shifting to middle-level health workers (based on appropriate regulatory changes to allow them to prescribe drugs), clear but simple evidence-based guidelines, physician back-up, and systems to ensure reliable supplies of low-cost generic combination treatment. The approach will also need support from health professionals, especially physicians, who must become more involved in NCD prevention and management programmes. In appropriate cases, an inter-disciplinary committee could be appointed with oversight of national roll-out of this risk-based approach in order to avoid so-called business-as-usual treatment based on blood pressure alone.<sup>53</sup> Many countries support innovative approaches to the challenges of NCD management in primary health-care settings.<sup>77</sup> Panel 9 summarises the actions needed to develop a comprehensive approach to risk reduction.

#### Panel 7: Tobacco control in the Seychelles

In the past two decades, a notable decrease in smoking prevalence in the Seychelles has contributed to a large fall in cardiovascular disease mortality.<sup>60</sup> The WHO Framework Convention on Tobacco Control (FCTC) was a catalyst for action by clarifying the priority interventions, building universal agreement for action, and accelerating local policy development. The reporting instrument, which requires countries to report biennially on tobacco control measures enforced nationally to the Conference of the Parties, fostered a willingness to strengthen national tobacco control policy.

Key provisions in the tobacco legislation include a total ban on direct and indirect tobacco advertising; a total ban on smoking in all indoor public and work premises, on all public transport, and in the outdoor areas of all education and health-care premises; and mandatory health warnings and graphics covering at least 50% of the main surfaces of cigarette packages.<sup>61</sup> Taxes on tobacco products have been increased gradually to roughly 70% of the retail price of a cigarette packet.

Essential components of success in tobacco control in the Seychelles include mobilisation and sustaining of leadership and commitment at all levels; effective surveillance supplemented by focused research;<sup>62</sup> consultative mechanisms to generate a broad consensus in stakeholders; use of both local and international expertise; a multisectoral approach focused on health targets; and building on the FCTC and its related instruments.

### Other affordable and cost-effective interventions

When these high-priority interventions are in place, countries should start to implement policies and laws to reduce harmful use of alcohol, to encourage physical activity, and to improve food environments (food composition, food advertising [especially to children], food labelling, access to healthy foods, and food prices). If resources and capacity allow, these issues should be addressed as the next logical step in this target-setting process.

### Step three: account for progress

Accountability, in the sense of holding governments responsible for implementing policies and programmes to meet the UN commitments, is an essential aspect in the assessment of progress towards the 25 by 25 goal. WHO and member states have developed a set of voluntary global targets and indicators.<sup>78</sup> This process will be finalised in May, 2013, and countries will be requested to develop national targets aligned to the global targets. Establishment of national targets is one step towards accountability.<sup>18</sup>

Accountability encompasses three key cyclical components: monitoring of progress, reviewing of progress, and responsive action. The principles of simplicity and a phased approach that underpin the suggested approach to prevention and treatment also apply to accountability. Accountability for national progress in mobilisation of resources and implementation of a national plan on NCDs should ultimately rest with national political leadership.

### Monitor progress

Monitoring of progress encompasses the acquisition of data to assess leadership commitments, the availability and sufficiency of human and financial resources, and progress towards national goals and targets. Leadership is assessed by the strength of governments' commitments to the UN political declaration and by the establishment of internal and external accountability mechanisms, to be overseen by an independent national NCD commission. Progress will be measured by: the establishment and funding of a national NCD unit to lead the activities of the ministry of health; mechanisms for collection of national NCD mortality rates and the main NCD risk factors; and the creation of national targets for tobacco use, dietary salt consumption, and treatment of individuals at high risk of cardiovascular disease.

WHO STEPS is an ideal method for risk factor surveillance through repeated cross-sectional population surveys;<sup>19</sup> detailed technical materials, manuals, questionnaires, data entry and data analysis devices, and training modules are readily available to help countries to establish NCD risk factor surveillance.<sup>20</sup> About 132 low-income and middle-income countries have already used this approach to establish baseline measures of population NCD risk, with plans to repeat the surveys every 5 years to establish age-specific and sex-specific trends; 27 countries have

### Panel 8: Seven measures of success of a national salt reduction programme

- 1 A coalition of governmental and non-governmental health professionals and organisations has been established to provide leadership and to mobilise, sustain support for, and build the case for action
- 2 The national health and financial benefits of reductions in salt consumption have been estimated
- 3 Likely allies and potential obstacles and opponents to a national salt reduction programme have been identified; a media campaign has been undertaken to generate broad public support
- 4 A policy statement setting out goals and time-bound targets, with key actions needed for implementation, has been developed, with endorsement of major policy actions by key stakeholders
- 5 Dialogue between the government and industry on food labelling, agreed targets for food reformulation, and public reporting of progress, has been established
- 6 Legislative support for a regulatory approach that mandates participation by larger food manufacturers and retailers in food reformulation efforts has been endorsed in case voluntary efforts do not succeed
- 7 Monitoring and assessment systems have been established to track progress towards the national target

completed a second round of surveys. Personal digital assistants are used for sampling and data collection, which increases the speed of interviewing, accuracy of information and eliminates the use of paper-based interviews. The addition of a salt module to the STEPS survey instruments and information about past history of stroke or heart disease, will provide all the data that countries need to report on the five key targets to meet the 25 by 25 goal.<sup>18</sup>

### Review, assess, and report

Analysis and review of data for leadership, resources, and progress towards the goal and targets is best undertaken by a national NCD commission or an equivalent independent organisation that has responsibility for oversight of NCDs.<sup>79</sup> To ensure independence is often difficult, and the method of doing so will depend on the constitutional context. It might, for example, involve having membership appointed by legislature rather than by government ministries. Transparent recruitment processes, based on objective criteria, will be necessary, which is a substantial departure from the norm in many countries. Secure budgets, preferably for several years at a time, are also needed to prevent independence being eroded by budget cuts. The review process must be transparent and independent of government agencies, but with regular reports, ideally to the national parliament and, through WHO, to an international accountability mechanism that reports to the UN Secretary-General. In particular, the review process must ensure that the leadership and resources are sufficient to implement the priority interventions. This process can be supplemented by so-called shadow reports undertaken by non-governmental organisations, as happens with several international conventions dealing with human rights.

### Panel 9: Seven measures of success of individual-based cardiovascular disease risk reduction

- 1 A policy statement for national goals and targets for the treatment of individuals at high risk of cardiovascular disease has been prepared and endorsed by clinicians and professional associations
- 2 National treatment protocols that focus on reductions of high overall cardiovascular disease risk (rather than basing treatment decisions on single risk factors) have been developed, adapted to the local context, and implemented
- 3 A coalition of health organisations is providing leadership to build a stepwise approach to clinical management of people at high risk of cardiovascular disease, including changes to health-care delivery such as shifting of tasks to middle-level health workers when appropriate
- 4 Training methods and standards for screening and treatment (or referral for treatment) in primary health care have been developed; these methods should be based on the cardiovascular disease risk charts developed for WHO regions<sup>6</sup> and adapted according to available resources and national standards
- 5 Access to appropriate and affordable essential medicines for cardiovascular disease treatment in primary health care has been assured
- 6 Pilot programmes have been undertaken to test guidelines for screening and treatment with fixed-dose combinations of drugs for the prevention of cardiovascular disease
- 7 Monitoring and assessment systems to track progress towards targets have been implemented

#### Take action to accelerate progress

The third step in accountability, responsive action, aims to accelerate progress towards national goals and targets by ensuring that the leadership and resources are sufficient to implement the priority interventions. The national NCD commission should lead this process. A major aspect of this function is to create a transparent accountability mechanism that engages all stakeholders involved in NCD prevention and treatment—government, civil society, and, as appropriate, the private sector. Independent progress reports should be produced collaboratively, and publicly disseminated at least every 2 years.

#### Conclusions

This paper presents a simple, structured, sequential process for countries to consider as they work towards implementation of the commitments made at the UN high-level meeting on non-communicable diseases in September, 2011. It focuses on a subset of the interventions recommended by WHO member states.<sup>78</sup> Governments should consider implementing these interventions first, since they are affordable and cost effective and will have the greatest return in terms of reduction of the NCD burden and in achievement of the 25 by 25 goal. Countries with more resources and capacity should undertake a broader range of interventions, starting with tackling of alcohol use and physical inactivity, once the core interventions are in place.

The case studies show that, with strong leadership, the combination of these simple interventions can lead to substantial progress. We encourage actions that are sensitive to local conditions and especially local resources,

and appreciate that interventions developed in high-income countries, which have traditionally relied heavily on expensive individual clinical approaches, are inappropriate for most countries. Considerable opportunity exists for sharing of experiences about the implementation of the most effective and powerful interventions to reduce NCDs.

The priority interventions discussed in this review need only a modest financial investment from governments. Although the economic costs of NCDs are staggering and—if intervention efforts remain ineffective—could exceed US\$7 trillion in low-income and middle-income countries in 2011–2025,<sup>23</sup> the interventions described in this paper will cost as little as \$1.00–2.00 per head.<sup>10</sup> Donor and country financing, especially additional taxes on tobacco and other harmful products, can provide the resources needed. A separate challenge is to build human capacity within the health sector and other sectors that have a role in an effective national response. As the lead global health agency, WHO has a major role in strengthening national capacity for NCD prevention and management.

Although we have focused on only a few interventions, we note that their implementation will need concerted multisectoral action and the engagement of all government sectors and several other stakeholders, including civil society, academia, and professional associations; in turn, these multisectoral actions will ensure that the benefits reach all populations within society.

The goal of this paper is to encourage countries—especially those with scarce resources—to maintain focus on a few high-priority cost-effective interventions that will bring the greatest health benefits to all. Strong leadership and an ability to resist pressures to expand the range of targets will be needed. Implementation of the proposals in this paper will lead to major health and economic improvements and ensure that the 25 by 25 goal is met.

#### Contributors

RBo was the lead author of the paper and prepared the initial draft. All authors were involved from the beginning and contributed to the literature search and to each successive draft. Case studies were provided by DZ for China, DCM for Brazil, KRT for Kerala, IS for Korea, and PB for Seychelles. Drafts were also discussed in two face-to-face meetings. All authors approved the final version.

#### Conflicts of interest

We declare that we have no conflicts of interest.

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