NCD Alliance
PUTTING NON-COMMUNICABLE DISEASES ON THE GLOBAL AGENDA

**NCD Alliance Submission**

**WHO Discussion Paper: Draft Updated Appendix 3 of the WHO Global NCD Action Plan 2013-2020**

*August 2016*

NCD Alliance welcomes the process to update Appendix 3 of the Global Action Plan on the Prevention and Control of NCDs 2013-2020 (GAP) as well as the opportunity for civil society to comment online and in-person on the WHO Discussion Paper presenting the draft updated Appendix.

**Executive Summary**

- **We fully support the rationale to regularly update Appendix 3 as a continuously evolving section of the GAP to accommodate new scientific evidence as it emerges within the period 2015-2020.** We commend WHO's efforts for making this happen both in the context of updates to existing recommendations as well as new recommendations to Member States. As a vital implementation component of the GAP, Appendix 3 should be strengthened to reflect a comprehensive policy approach to the NCD response of prevention, treatment and care that can be tailored to national environments and populations. As the term of the GAP ends in 2020, we support the consideration of future updates as part of the development of the subsequent global strategies to address NCDs by 2030.
- **We welcome the breadth of new additions, which address interventions across the four main risk factors and NCDs and across the continuum of prevention and care.** We particularly support the new focus on the health system response to NCDs with, for example, the inclusion of multidisciplinary treatment of early cancers and of primary prevention for rheumatic fever and rheumatic heart disease, as well as the introduction of a separate section for physical inactivity. We also welcome the reference to non-financial considerations into recommendations to reflect on the inherent challenges associated with identifying a core list of interventions whilst taking into account ease of implementation issues.
- **We welcome the separation of non-specific interventions into an "overarching/enabling" section** and recommend that WHO list here all relevant, up-to-date WHO strategies, recommendations and guidance.
- **We support the proposal for WHO to develop an online interactive web-tool which could serve to provide nationally adapted information**. This tool should also expand on *non-financial considerations*, which need to be more detailed, in order to be useful to policy makers and health officers. In addition such a tool would provide an ideal platform for new features:
    - It could support specific **calls for research** in key areas to address the current gaps in cost-effectiveness data and help inform the Appendix 3 from the perspective of robustness of interventions or for fields with less data;
    - It could help provide guidance on other NCDs not currently covered in GAP so that countries can make informed choices based on their disease burden.
- **We would like to see more language to the effect that cost-effectiveness analysis (CEA) is an important tool, but that it has its limitations.** WHO should explain in greater detail that countries have to take into account additional parameters when prioritising interventions. Specifically, it should detail the limits of currently utilized thresholds for determining cost-effectiveness, and offer alternatives, and it could describe options for more pro-poor priority-setting. Each country is faced with its individual, specific context and disease burden, challenges and opportunities within which interventions have to be implemented. Therefore, WHO should emphasise more strongly that CEA has to be critically judged, and that it has limitations that have to be remedied.
- **We also encourage WHO to explore options to better understand how NCDs share risk factors and co-morbidities and reflect those relationships and interactions in cost-effectiveness analysis in order to better link policy recommendations and assess co-benefits, e.g. relationship between alcohol**

**consumption and unhealthy diet.** WHO should aim to prioritise integration across disease areas, e.g. NCDs and tuberculosis, HIV, child and maternal health, as well as within the NCD sector, e.g. cardiovascular diseases and cancers. This is already borne out in the interventions aggregated around cardiovascular diseases and diabetes but should be better reflected in all disease-specific sections to ensure greater policy coherence on integrated care across diseases.

- **We are concerned to see the lack of consideration given to multisectoral interventions, which accrue significant co-benefits that should be reflected in cost-effectiveness analysis**. While this area requires additional research, there are already a number of proven cost-effective interventions that could be included, such as reducing agricultural subsidies for unhealthy foods and food ingredients, supporting fruits and vegetables production among urban poor through technical assistance, and healthier school meals. We would also welcome more detail on how multisectoral co-benefits of interventions which are likely to have broader social, environmental and economic benefits outside the health sector are taken into account in the current methodology.
- **The current model fails to account for the need for health systems investments, which are essential to underpin the implementation of these interventions**. To that end, we support a stronger emphasis on needed capacities, including healthcare workforce training, health information systems, and more generally, the listing of necessary enabling factors for successful implementation of the recommended interventions in a more systematic manner. Specific references should also be made to the needs of vulnerable populations, such as children, young adolescents and women. This would support the goal of UHC by ensuring the inclusion of populations that are critical to reducing the burden of NCDs, but which are often neglected during the planning stage.
- **Finally, we appreciate that more clarity will be provided by WHO on the interventions under scrutiny for inclusion in Appendix 3.** Having access to the list of interventions that have undergone WHO-CHOICE analysis but failed to demonstrate their cost-effectiveness in the proposed online tool would also provide further guidance for countries when reassessing their own priority interventions against that list.

**1. General comments**

- We are concerned that the new denomination that distinguishes between specific "very cost-effective and affordable" (with WHO-CHOICE analysis) and “other cost-effective interventions” (without WHO-CHOICE analysis) could be misleading on a number of counts:
    - It suggests that all the "very cost-effective and affordable" interventions have priority over others;
    - It implies that the "other cost-effective interventions" detailed in Appendix 3 are therefore not affordable.
- The identification in bold of a select number of those interventions, which are considered most cost-effective and feasible for implementation, as well as the order of cost-effectiveness listing can indeed convey the idea that cost-effectiveness should be the most important criteria over affordability or feasibility. However many cost-effective interventions are actually neither affordable nor implementable in many settings. Some may not be amenable to economic analysis but should however not be discarded.
- Overall, the document does not recognise the fact that health systems investments are fundamental – a core message of the High Level Meeting and Declaration on NCDs - and will, over a reasonable time period, provide a return on investment as efficiencies emerge. It also fails to recognize that health systems investments need to be prioritised, but will largely not fit the methodology to be referenced in Appendix 3.
- The uptake of interventions in real practice is strongly dependent upon contextual features and multiple factors can affect decision-making, of which economic concerns are only one. While we welcome the inclusion of non-financial constraints to implementation in the analysis to indicate the main implementation considerations policy-makers should bear in mind, more clarity should be provided on how the dimensions of cultural acceptability, feasibility (economic, legal), need, impact, and ethical considerations/equity should be addressed. It would therefore be appropriate to include, in particular for

the treatment options that depend on health system capacity to be implemented, a list of the relevant items that constitute the necessary capacities needed, such as done for cervical cancer screening.

**Methodology**

- NCD Alliance welcomes the separation of analyses for two income groups, i.e. low and lower-middle income, and upper-middle and high-income countries, and the choice of countries, in an effort to ensure the wide applicability and comprehensiveness of the analyses. This allows the consideration of interventions that can be implemented successfully in low-resource settings but also additional interventions for more advanced countries.
- To strengthen the robustness of the criteria to identify interventions, we would recommend that one study in each of the two country income groups and at least one strong study from the lower income country group be the basis for the analysis (instead of only one published study in a peer reviewed journal). To ensure the list of interventions is actionable and well-understood, we would also suggest using a table to show the ranking of recommended interventions by a number of criteria, as previously mentioned, with clear information about the relevant sources, and structured around cost-effectiveness bands relating to per capita GDP. This will ensure that the data not only emphasises the relative magnitude of cost-effectiveness rather than a specific amount but also that the cost-effectiveness ratios are relevant to countries at different income levels. The economic cost of implementation could be expressed as thousands I$ per million, rather than based on cost in I$ millions so that differences are more apparent.
- While we support the reference to "non-economic implementation considerations such as acceptability, sustainability, scalability, equity, ethics, multisectoral actions and monitoring [as] essential in preparing to achieve the targets of the GAP", we note the failure to take full account of their implications. In particular, the technical annex misses multisectoral actions in the list of interventions for which cost-effectiveness information is provided. While this area would require additional research, there are already a number of proven cost-effective interventions that could be included, such as reducing agricultural subsidies for unhealthy foods and food ingredients, supporting fruits and vegetables production among urban poor through technical assistance, and healthier school meals. We would also welcome more detail on how multi-sectoral co-benefits of interventions which are likely to have broader social benefits outside the health systems are taken into account in the current methodology.

**Procedure and next steps**

- **Update frequency:** We would be keen to see a commitment to conduct additional updates every 3-5 years. As the term of the GAP ends in 2020, we support the inclusion of any future updates as part of the development of the subsequent global strategies to address NCDs by 2030.
- **Scope:** As Appendix 3 does not provide cost-effectiveness data for interventions beyond the four main NCDs at this stage, it may be timely to consider expanding the scope of Appendix 3 to provide guidance on other NCDs in the future so that countries can make informed choices based on their disease burden. In particular, we encourage greater alignment with the WHO Action Plan on Mental Health and the Global Action Plan on Dementia (currently under development). Risk reduction policies for dementia should not be a separate work stream but be integrated with the NCD GAP. Specific calls for research in key areas could be made based on this cycle of updates to help inform the Appendix 3 from the perspective of robustness or for fields with less data.
- **Tools/Resources:** Finally, we agree that the proposal in this document for WHO to develop an online interactive tool which could serve to provide nationally adapted information will be particularly useful, and that, building on previous comments, this could also:
    - Help identify and document emerging research that could be considered for future updates;
    - Feature calls for research in key areas needed to strengthen future versions of Appendix 3 from the perspective of robustness of recommendations or drive research attention to fields with less data;

- Link to literature supporting cost-effectiveness data beyond the four main NCDs;
- Provide additional explanation to national planners on costing, evaluation and cost-effectiveness measurement associated with implementation of their own efforts;
- Provide more insight into the types of investments that governments must make, but which do not fit the methodology for inclusion in Appendix 3.

**2. Comments on specific objectives**

### Objective 1

- The guidance in this section would need further clarification, in particular regarding how these actions should be carried out. Roles and responsibilities need to be clearly identified and relevant models and best practices should also be referenced.
- In addition to capacity building in health, we would welcome the recognition that both legal and economic expertise are necessary alongside medical/public health capacity building to strengthen any approach to tackle NCDs. Many countries lack capacity to do any economic modelling, e.g. of SSB taxes, or to use the law to create enabling environments in which an NCD plan can be implemented. Legal expertise is also necessary in fending off potential legal action (e.g. arbitration based on bilateral investment agreements) against governments' efforts to implement interventions as recommended under Objective 3.
- We agree that civil society engagement is crucial to advance the NCD agenda. We suggest that private sector and civil society should be dealt with separately, taking into account respective roles, responsibilities and relevant rules of engagement.
- "Health workforce training" should be followed by "and retention".

### Objective 2

- While international cooperation should be strengthened with respect to NCD financing (objective 1), we are of the view that Member States should significantly increase their budget allocated to NCD prevention and control not just to treatment. Therefore, we would suggest including guidance about the percentage of GDP that should be spent on health, based on previously agreed targets, such as the Abuja Declaration (2001) through which Member States of the African Union pledged to improve social and economic conditions in the world's poorest countries by 2015. We would also prefer that "as needed" is deleted as it weakens unnecessarily the need for prioritisation and increase of the budget allocated to NCDs is essential if NCD targets are to be met highlighted in the first bullet point.
- We would welcome explicit mentioning that a "multisectoral" approach has to include all relevant ministries, not just academia, civil society and private sector alongside the Ministry of Health. Furthermore, it is important to highlight that private sector is by no means a homogenous group. This umbrella term includes a variety of different actors whose products and practices differently affect public health. With reference to partnerships with the private sector, we support WHO's efforts to ensure that health policy is protected from vested interests, in particular producers from unhealthy commodities such as alcohol, infant formula and processed food and drinks high in fat, salt and sugar.
- Prior to developing a national NCD Action Plan, an assessment of national capacity is needed, based on a situational analysis of the NCD burden in the national context (including prevalence of lifestyle risk factors). Once the given capacity is assessed, the NCD burden determined, and existing programmes/policies mapped, needs assessment has to be conducted. We suggest adding an intervention that would refer to the importance of using WHO's planning tools to do so, including for assessing capacity, such as the SARA (Service Availability and Readiness Assessment). A prioritisation exercise is necessary to determine which interventions can, realistically, be implemented within the given resources and capacity. This is not mentioned, but should be included in the enabling/overarching actions.

## Objective 3 (NCD risk factors)

**Tobacco use**

- As the foundational instrument in global tobacco control, the WHO Framework Convention on Tobacco Control (FCTC) is an outstanding achievement, but we must press for its full implementation. To this end we would recommend the Overarching/Enabling Actions section be amended as follows:
    - We suggest an additional bullet point which would read: "Protect the setting and implementation of public health policies from the vested interests of the tobacco industry, in line with the guidelines for implementation of FCTC Article 5.3".
    - We recommend the addition of an overarching/enabling action to urge Member States that are not Parties to the FCTC to become Parties to the Convention.
    - In the spirit of Article 4.7 of the FCTC, which states that "the participation of civil society is essential in achieving the objectives of the Convention and its protocols", we recommend that the proposed overarching/enabling action be amended as follows: "Establish and operationalise national mechanisms for coordination of the FCTC implementation as part of national strategy with specific mandate, responsibilities**,** ~~and~~ resources **and participation of civil society**."
- We recommend aligning the intervention on tobacco taxes in T1 with Article 6 of WHO FCTC and its guidelines for implementation "any policy to increase tobacco taxes that effectively increases prices reduces tobacco use"[1]. We would also support the need for strengthening administrative measures on tobacco tax policy. We understand that T1 has been assessed with WHO-CHOICE analysis but would welcome the consideration of the following edits in T1: "*Raise tobacco taxes and strengthen* ~~the implementation of tax policy and administrative measure~~ *tax administration* to reduce the *affordability of and* demand for tobacco products" in subsequent updates of Appendix 3.
- Given the demonstrated impact and cost-effectiveness of mass media campaigns[2], we are surprised to see that these are no longer included in the updated Appendix 3. We recommend that WHO consider the following intervention: "Implement several times a year mass media and social marketing campaigns that educate the public about the harms of smoking and second hand smoke".

**Harmful use of alcohol**

- Given that the majority of the evidence linking alcohol advertising and harm relates to *exposure* to alcohol marketing practices[3], the wording for A2 should be amended to read "Enforcement of bans or comprehensive restrictions on exposure to alcohol advertising (across multiple media)".
- Strong evidence supporting the efficacy of restrictions on the availability of alcohol to address NCDs has also been developed over the past few years[4]. The WHO Global Strategy to reduce harmful use of alcohol acknowledges that 'implementation of laws that set a minimum age for the purchase of alcohol show clear reductions in drinking-driving casualties and other alcohol-related harm and recommends, alongside the WHO European action plan to reduce the harmful use of alcohol, that Member States adopt minimum

[1] WHO (2014), Guidelines for implementation of Article 6 of WHO FCTC, Available at: http://www.who.int/fctc/guidelines/adopted/Guidelines_article_6.pdf
[2] WHO (2015), WHO report on the global tobacco epidemic, 2015, Available at: http://www.who.int/tobacco/global_report/2015/en/, as well as: 1) US National Cancer Institute. Monograph 19: The Role of the Media in Promoting and Reducing Tobacco Use (2005). See in particular Chapter 12: "Assessing the Effectiveness of the Mass Media in Discouraging Smoking Behavior" and 2) Durkin S, Brennan E, Wakefield M. Mass media campaigns to promote smoking cessation among adults: an integrative review. Tobacco Control (2012): 21: 127-138
[3] Brown, K. (2016) Association Between Alcohol Sports Sponsorship and Consumption: A Sytematic Review, *Alcohol and Alcoholism,* 1-9 doi: 10.1093/alcalc/agw006
[4] OECD (2015), Tackling Harmful Alcohol Use. Available from: <http://www.oecd.org/health/tackling-harmful-alcohol-use-9789264181069-en.htm>. [Accessed 16 August 2016].

legal purchase age laws of 18 years for on-trade and off-trade establishments[5]. It would be useful to assess if intervention A3 could not reveal to be even more-cost effective if amended as follows: 'Enforcement of restrictions on the physical availability of retailed alcohol (via reduced density of retail outlets, reduced hours of sale *and minimum legal purchase age laws*)'.

**Unhealthy diet**

- We welcome the decision to disaggregate the risk factors of unhealthy diet and physical inactivity and overall commend WHO's work to add to and further specify the interventions listed in this section.
- However, we note that the interventions with WHO-CHOICE analysis most directly impact cardiovascular disease rather than all three main nutrition-related NCDs (cancer, CVD, type 2 diabetes) or obesity & overweight more broadly. In view of the high prevalence and rising incidence of overweight & obesity and nutrition-related NCDs (NR-NCDs) worldwide, this seems inadequate.
- We therefore strongly recommend that a more comprehensive set of interventions be analysed with the WHO-CHOICE methodology during the next review cycle, as more cost-effectiveness data becomes available for WHO recommended policy interventions aimed at addressing overweight & obesity and NR-NCDs more broadly.
- We recommend that under Overarching/enabling actions, the following be added:
    - Implement of WHO's International Code of Marketing of Breast-milk Substitutes, including implementation of the WHO Guidance on Ending inappropriate promotion of foods for infants and young children[6] (Resolution WHA 69.9).
    - Implement the WHO Guideline on free sugars intake for adults and children"[7].
    - Implement the recommendations of the WHO Commission on Ending Childhood Obesity.
- We welcome the added focus on reduction of sugar consumption and the new intervention on taxation of sugar sweetened beverages. However, we strongly urge WHO to refer to "sugary drinks" rather than "sugar-sweetened beverages" as WHO's own Guideline on free sugars intake for adults and children recommends the reduction of "free sugars" which includes both added and naturally occurring sugars in honey, syrup, fruit juices and juice concentrates.
- Under U11 and U14 we recommend that "to decrease consumption of ultra-processed foods" be added and that "increase intake of fruits and vegetables" be changed to "increase intake of whole foods such as whole grains, fruits and vegetables".
- While we welcome the inclusion of the WHO recommendations on the marketing of foods and non-alcoholic beverages to children as an overarching/enabling action, we strongly encourage that a specific intervention on restrictions on marketing of unhealthy foods and beverages, in particular to children, be considered in the next review cycle as more evidence on cost-effectiveness emerges[8]. This is an example of the type of research that could be highlighted in a "calls for research" section of Appendix 3.
- Finally, we find that more emphasis should be put on mandatory or co-regulatory approaches rather than focusing on interventions which put no obligations on the food industry. Voluntary reformulation has generally been shown to only be effective when incentivized through an underlying "threat" of legislation.

[5] WHO (2011) European action plan to reduce the harmful use of alcohol 2012-2020. Available from http://www.euro.who.int/__data/assets/pdf_file/0008/178163/E96726.pdf?ua=1 [Accessed 16 August 2016].
[6] http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_R9-en.pdf
[7] World Health Organisation (2015), Guideline on Sugars intake for adults and children WHO. Available from: http://apps.who.int/iris/bitstream/10665/149782/1/9789241549028_eng.pdf?ua=1 [Accessed 18 August 2016]
[8] Magnus A, Haby MM, Carter R, Swinburn B. The cost-effectiveness of removing television advertising of high-fat and/or high-sugar food and beverages to Australian children. Int J Obes 2009;33(10):1094-102

**Physical inactivity**

- We strongly welcome the WHO's decision to disaggregate the risk factors of unhealthy diet and physical inactivity, which reflects that physical activity is independently associated with reducing risk of NCDs and not just through the mediated pathway of overweight and obesity.
- The new standalone section on physical inactivity highlights the relative paucity of cost-effective physical inactivity interventions available to Member States to date and we regret that only one intervention has been analysed with WHO-CHOICE to date. We wish to highlight that the scientific evidence has increased rapidly furthering our knowledge of both the causes of inactivity and importantly the effective policy interventions across the life course and that much greater engagement with this issue is urgently needed.
- We believe intervention P2 on urban design for physical activity should be expanded to refer to complementary policies, such as subsidising public transport or increased taxation of private transport that encourage greater use of public transportation.
- We strongly recommend that intervention P4 be amended to specify the provision of regular quality physical education rather than only "adequate facilities to support recreational physical activity" to reflect a comprehensive whole-of-school approach to the promotion of physical activity as recommended by the WHO Health Promoting Schools Policy approach and the recent 2016 UNESCO International Charter of Physical Education, Physical Activity and Sports. Quality physical education is essential for developing fundamental movement skills and equipping children with physical literacy for later life.
- Finally, while we welcome the inclusion of the policy actions to address the built environment (specifically P2 and P5) as these are well established upstream determinants of inactivity and supported by robust evidence in both high and low income countries, we note the omission to provide convenient, safe, access to quality **public open space**. The provision of green space is not only an effective intervention to promote physical activity, but provides multiple co-benefits and synergies with several SDGs: SDG 3 Health and Wellbeing, SDG 4 Education, SDG 5 Gender Equity, SDG 11 Healthy Cities, SDG 13 Climate Change, SDG 15 Healthy Natural Environments.

**Objective 4 (disease-specific interventions)**

- We believe the Overaching/Enabling action (bullet point 2) "Explore viable health financing mechanisms and innovative economic tools supported by evidence" should be illustrated by concrete examples. As one of the keys to successfully implementing any NCD strategy, a focus on how to finance an increased budgetary allocation should be included in objective 2 as one of the overarching/enabling actions.
- We welcome the Overaching/Enabling action (bullet point 4) "Train health workforce and strengthen capacity of health system particularly at primary care level to address NCDs". The role of front line health workers is instrumental both in educating the population on NCD prevention, and in delivering integrated care for people with NCDs.
- We however note with disappointment that there are very few non-medical interventions listed, except for certain sections of Objective 4, such as chronic respiratory disease, and urge WHO to undertake more research in this area. For instance, Intervention CR3 on improved stoves and cleaner fuels to reduce indoor air pollution is a primordial intervention which impacts not only chronic respiratory disease, but also CVD and some cancers. We suggest that the impact of this intervention across diseases is made more explicit in the Appendix, to demonstrate its impact across the population.
- We would suggest a rewording of the Overarching/Enabling Action section on digital technology for Objective 4 (bullet point 8) to: 'Expand *and integrate* the use of digital technologies *within the national health system]* to increase health service access, efficacy and equity for NCD prevention, [education of people with NCDs, and to reduce the costs in heath care service delivery'. mHealth technologies are unlikely to lead to positive changes in health equity unless integrated and scaled-up within the wider health system. Additionally, it is important to better highlight one of the purposes of mHealth solutions, which is to support patient empowerment.

- There is a need to better set out how NCDs are associated with increased risk of developing co-morbidities. We encourage WHO to prioritise integration across disease areas, e.g. NCDs and tuberculosis, as well as within the NCD sector, e.g. heart diseases and cancer, in the Overarching/Enabling Actions of Objective 4. This is already borne out in the interventions aggregated around cardiovascular disease and diabetes but should be better reflected in all disease-specific sections.
- We would also welcome the addition of an overarching action that would read:" Support quality improvement to ensure service appropriateness and accessibility for people living with NCDs, in particular vulnerable populations, such as children and adolescents".
- We would welcome if nutrition and weight-loss counselling in the primary health care setting were expressly included in Objective 4 for both prevention and treatment. Diet and weight are not only important factors for disease prevention, but they are also important to support a positive outcome of medical treatment, prolong remission of cancer, protect against repeated episodes of cardiovascular disease, prevent the progression from pre-diabetic stage to type 2 diabetes and improve glycaemic control in type 2 diabetes patients.

**Cardiovascular disease and diabetes**

- We are pleased to see a range of cardiovascular diseases targeted, including retained interventions on atrial fibrillation, heart attack, stroke, rheumatic heart disease, and heart failure.
- We note that CV1b (on drug therapy for secondary prevention of moderate-high risk CVD patients) has been re-evaluated as very cost effective, and accordingly emboldened in the text. WHO guidance should refer to the need to tailor risk stratifications for CV1a and CV1b to national settings.
- We welcome the new intervention CV3a on primary prevention of rheumatic fever and rheumatic heart disease. This intervention complements the primary health care agenda and should therefore gain traction with Member States in resource-poor settings, many of which correspond with high rates of rheumatic heart disease. We also support the expanded language around CV3b on secondary prevention of rheumatic fever and rheumatic heart disease, to include reference to a register-based approach.
- We support the 'Non-financial Consideration' attached to CV3a/b, which acknowledges the prevalence of rheumatic heart disease in sub-populations. WHO may consider providing guidance to Member States who may not know their rheumatic heart disease burden.
- We welcome the intervention CV7 on Low-dose acetylsalicylic acid for ischemic stroke.
- We support the new inclusion of CV8 (on care of acute stroke and rehabilitation in stroke units), especially as there is no WHO-CHOICE analysis available for stroke interventions beyond secondary prevention drug therapies. We urge WHO to consider a cost-effective analysis to assess the impact of this intervention that may be bolded in the future given current evidence.
- The following proposed interventions have not undergone WHO-CHOICE analysis[9], but we would deem them worthy of consideration for inclusion into Appendix 3:
    - CV9: "Provision of tobacco cessation counselling and, if necessary, medication for individuals who have had a myocardial infarction or stroke''. This intervention is drawn from an existing official policies and recommendations of the WHO, found in the WHO Package of Essential NCD Interventions (WHO PEN) in Table 2 (p.26). Formulated as CV9 within Objective 4, this intervention would complement intervention (T5) in Objective 3 on tobacco cessation support for primary prevention, while capturing the need to address tobacco use in populations who have already experienced a cardiovascular event.
    - CV10: "Provision of acute therapy of ischemic stroke with intravenous thrombolysis", in view of how this therapy revolutionised acute stroke care over the last decade, making it a treatable disease that requires rapid admission to hospital and public knowledge on stroke symptoms;

[9] As per WHO-CHOICE interventions webpage: http://www.who.int/choice/interventions/rf_cvd/en/ [Accessed on 18 August 2016].

- CV11: "Provision of acute reperfusion therapy with endovascular thrombectomy for patients suffering from the most severe strokes", given the existing evidence[10];
- CV12: "Provision of drug therapy with statins to patients who suffered a heart attack or stroke" to treat specifically ischemic strokes and heart attacks, in view of the existing strong evidence base on the availability of generic statins at low cost and ongoing discussions about the polypill.

- We would suggest an additional bullet to the 'Overarching/Enabling Action' section that would read "Train health care workers in TB, HIV, and antenatal clinics to screen for hypertension and diabetes and offer appropriate medical advice on disease management".

**Diabetes**

- Building on comments made in the previous section, we would like to suggest adding the following enabling action "Integrate management of diabetes with other conditions such as HIV and CVD" to highlight the need for stronger integrated approaches.
- We welcome the introduction of the new intervention D3 to promote effective glycaemic control for people with diabetes.
- Mitigation of hypoglycaemia is critical for appropriately managing patients with diabetes, a challenge which is compounded in individuals who experience hypoglycaemia unawareness, which results in hospitalisations and high costs for health systems. We would support the consideration of interventions in WHO-CHOICE aiming to both raise awareness on the risk of hypoglycaemia as a limitation to achieving tight diabetes control and ensuring quality of life, and address hypoglycaemia unawareness.
- We would welcome additional research regarding the cost-effectiveness of providing care during pregnancy as part of intervention D6. Similarly, the impact of the inclusion of information on healthy diet and weight in education measures for women of reproductive age would need to be assessed from a cost-effectiveness perspective. In addition to glucose management, weight management prior to conception and during pregnancy should be added.
- We regret the deletion of intervention "Detection, treatment and control of hypertension and diabetes, using a total risk approach" which was featured in previous Appendix 3, and would support the reintroduction of a dedicated intervention to increase awareness of micro and macro cardiovascular complications.

**Cancer**

- We welcome the update to CA 1, underscoring the highly cost-effective nature of HPV vaccination given the evolution is price per dose since the first iteration of this document as well as the 2-dose rather than 3-dose recommendation. Similarly, the extension of recommendations under CA 2 reflects the current state of the art and is well received.
- We also welcome the introduction of the new interventions CA 3, 4, 6 and 7 to promote the treatment of early stage cervical, breast and colorectal cancer as well as the promotion of the cross-cutting issue of palliative care with the inclusion of a basic palliative care package for cancer. We would recommend that the interactive tool proposed to complement Appendix 3 showcases this package as fundamental for health systems, important for communicable as well as noncommunicable diseases and trauma, in addition to cancer. Similarly, we would also recommend that this platform showcases some of the emerging good-practice on procurement and production of oral morphine in low income settings.

[10] Goyal M and al (2016), Endovascular thrombectomy after large-vessel ischaemic stroke: a meta-analysis of individual patient data from five randomised trials, Lancet. 2016 Apr 23;387(10029):1723-31, Accessible at: http://www.ncbi.nlm.nih.gov/pubmed/26898852
Campbell BC and al (2015), Endovascular stent thrombectomy: the new standard of care for large vessel ischaemic stroke. Lancet Neurol. 2015 Aug;14(8):846-54, Accessible at http://www.ncbi.nlm.nih.gov/pubmed/26119323

- While recognising that the level of evidence is low and examples currently confined to high income settings, due to the heavy global burden and contribution of lung cancer to cancer deaths, we wish to flag the emerging data in high income settings showing decreased lung cancer mortality with CT screening. This is an example of the type of activity that could be highlighted in a "calls for research" section of Appendix 3 that highlights interventions on the horizon for high impact populations.

**Chronic respiratory diseases**

- Overall, the importance of enabling factors and non-financial considerations should be better highlighted in this section. For instance, better access to improved cook stoves will not move the needle on reducing indoor air pollution, unless clean fuels, behaviour change, and ventilation are also provided.
- We agree the disease-controlling treatment for asthma is inhaled corticosteroids. These medicines may also help those with chronic obstructive lung disease. When discussing quick-relief agents, we believe that in addition to salbutamol, the cost-effectiveness of the anticholinergic (drug, ipratropium) to treat symptomatic relief for those with airflow limitation should be assessed for inclusion in CR1. Cost-effectiveness studies on long-acting bronchodilators in developing countries are important for COPD and asthma, as they have proved to be better than short-acting bronchodilators in clinical and cost-effectiveness studies in developed countries.
- Intervention CR2a should mention that the use of oral corticosteroids should generally be reserved for severe asthma.
- A lower respiratory tract infection in children is a risk factor for asthma and chronic obstructive pulmonary disease in adults. Preventing these infections through universal immunisation of children with vaccines especially pneumococcal conjugate vaccine should be included as a strategy to prevent chronic lung disease.
- We would welcome additional research on the cost-effectiveness of using long-acting bronchodilators, anticholinergics, oxygen, management of acute exacerbations and rehabilitation-exercise given WHO recommendations[11].
- We note that intervention CR4 is the only intervention relating to occupational lung diseases without referring to a specific intervention. The cost-effectiveness considerations of preventing asbestos-related disease should be subservient to human rights-based considerations. The same is true for coal mining and its resultant pneumoconiosis. Additional research on occupational and environmental interventions in this area would be needed in future updates of Appendix 3.
- It is worth noting the absence of recommended interventions on addressing air pollution and ensuring clean air, despite the growing challenge it represents. Different simple interventions could be considered for cost-effectiveness analysis, such as setting more stringent standards for air pollution and vehicle emissions or supporting people to walk, cycle, and use mass transit.

**Objective 5 (research for NCDs)**

- While we welcome a focus on research and development, we believe it shouldn't only focus on medical prevention and treatment but also include policy research, both with respect to implementation research (i.e. how and why health policies were successfully or unsuccessfully put on the political agenda, adopted and implemented) and research on the impact of implemented policies on health outcomes. Therefore, policy research should be expressly included in objective 5 as an important part of both national and international research agendas, and costing and cost-effectiveness studies should be highlighted as one priority area to support the implementation of the GAP.
- We would also welcome the following additional bullets in the 'Overarching/Enabling Action' section:

[11] http://www.who.int/respiratory/copd/management/en/

- "Promote the use of the WHO International Statistical Classification of Diseases and Related Health Problems list when classifying diseases and symptoms";
- "Promote the use of the WHO STEPwise approach to surveillance protocol when assessing the prevalence of NCDs and their risk factors"

**Objective 6 (trends and determinants of NCDs)**

- A situational analysis is a necessary precursor for monitoring and evaluation as it serves as a baseline against which government activities and progress towards achievement of targets and indicators can be measured. Without clear knowledge of the current NCD burden, existing capacity and already implemented policies/programmes, governments cannot track if resources are effectively invested. Therefore, a situational analysis should be mentioned as an overarching/enabling measure.
- Objective 6 only mentions the inclusion of monitoring and evaluation into national health information systems. Appendix 3 should include an overarching/enabling action detailing that monitoring and evaluation processes (including a process to revise the National NCD Plan if evaluation shows it is not effective) and financing have to be included in NCD Action Plans and programmes.
- It would be useful in bullet point 3 to mention that population-based cancer registration needs to be in alignment with the GAP indicators on surveillance.
- Given the large and varied needs of people suffering from or living with NCDs, we would welcome an additional bullet point on "Disaggregate data by age and sex to better monitor morbidity and mortality data". Improved data collection is essential for effective planning that includes the needs of children and adolescents, as well as to ensure that women, poor and marginalised populations, and individuals with disabilities and special needs receive equitable access to care.

*This submission was put together by NCD Alliance (Alzheimer's Disease International, Framework Convention Alliance, International Diabetes Federation, Management Sciences for Health, The Union against Tuberculosis and Lung Disease, the Union for International Cancer Control and the World Heart Federation) with input from the following organisations: Global Alcohol Policy Alliance (GAPA), Forum of International Respiratory Societies (FIRS), FDI World Dental Federation (FDI), Institute of Alcohol Studies (IAS), International Osteoporosis Foundation (IOF), International Society of Physical Activity and Health (ISPAH), McCabe Centre for Law & Cancer, NCD Child, RTI International, World Cancer Research Fund International (WCRI), World Obesity Foundation (WOF), World Stroke Organisation (WSO).*

*NCD Alliance unites a network of over 2,000 civil society organisations in more than 170 countries and works for a future where all people affected by or living with non-communicable diseases live full and healthy lives, free from stigma and discrimination, and preventable disability and death. More information can be found at www.ncdalliance.org.*