### Innovations

#### A. Prevention

1. **Front-of-package labelling – positive logos**
   
   In Finland, a variety of food products have been labelled with a FoP label called Heart symbol since year 2000, when the system was launched by the Finnish Heart Association and the Finnish Diabetes Association. The Heart symbol is a summary indicator that enables consumers to make healthier choices at a glance as to whether the product contains less salt, saturated fatty acids, and sodium than other products within the same product category. Sugar and fibre content are also acknowledged in some product groups. In 2009, the scheme was expanded to cover meals prepared and served outside home, too.

2. **Need to understand and document the impact of macro and macroeconomic policy on the causes and associations (determinants) with all the NCDs identified: need to move beyond considerations of only social determinants**

3. **Tax or Levy on Sugar sweetened beverages – the cost effectiveness of this intervention is already outlined in the WHO ‘best buys’. The approach in the UK of a levy on drinks that contain 5% free or added sugar content and a higher levy on those with 8% has resulted in the industry reformulating products early to get below the thresholds**

   Advertising control – restricting the promotion of high fat, sugar and salty foods (HFSS) to children and young people

   Structured / closely monitored sugar and calorie reduction and reformulation programme with the food industry – In the UK we are working directly with the food and beverage industry to improve the products the public buys. Our previous approach of letting industry sign up to voluntary targets did not yield sufficient results. So we have now challenged industry to reduce sugar in the most consumed high sugar foods by 20% by 2020 and calories in ready meals and on the go foods by 20% by 2024. Progress in these 22 categories of foods that make up 50% of a child’s diet is being closely publically monitored. Although many other countries may not have
the data or capacity to engage in a similar closely monitored programme, other countries such as Chile have used regulation to achieve the same reformulation result.

4. Create a global surveillance system of the packaged food supply.
The George Institute for Global Health has created FoodSwitch, a system that leverages smartphone penetration and crowdsourcing to create the largest, most comprehensive surveillance system of the packaged food supply in Australia, New Zealand, South Africa, United Kingdom and sub-nationally in India and China. The program has been recently launched in the United States and could be rapidly scaled to 50 countries in 5 years with investment from the World Health Organization and its member states.

5. **International public-private partnership for industrial transfat elimination.** WHO “best buys” include industrial transfat elimination. WHO will issue transfat dietary guidance forthcoming in 2018. Leading industry players have committed to industrial transfat phase out (IFBA commitment to achieve by end-2018). Leading public health actors are working to advocate for industrial transfat elimination.

While significant progress is being made in many advanced economies, progress is slower and uneven among LMICs. There is a clearly a need for knowledge transfer and capacity building. Industry and other non-State actors can offer expertise to complement and help implement WHO dietary recommendations.

A partnership model could look as follows:
- A WHO-led group of experts, including WHO, scientific, public health and industry experts, is established.
- It develops and agrees on:
  - A regulatory toolkit for phasing out industrial transfat from food products
  - A practical, technical toolkit to help companies, including SMEs, to phase out industrial transfat from food products in different categories
  - A protocol for monitoring and measuring progress and associated health outcomes
- The above deliverables are disseminated among and actively advocated towards national governments
- Knowledge transfer and capacity building among national authorities and local industries is driven in a concerted manner by the leaders represented in the WHO-led group of experts

A similar approach could be envisaged for salt intake reduction.
6. Introduce stringent regulation domestic and regional legislation on unhealthy foods and sugary beverages marketing to children under 18.

Outlaw
- Direct & indirect advertising – Eradicate the notion of fizzy drinks and fast foods as aspirational foods for the middle class and their children, especially in developing nation settings like Sub Sahara Africa.
- The covert & express promotion – Restrain fast food brands like KFC from socially positioning themselves as friends of vulnerable children, for example their “Add Hope Campaign for SOS Villages” in South Africa
- Sponsorship – Barr fast food and fizzy drinks companies from sponsoring schools, children’s sports, health & recreation events.
- Fast food dispensing vending machines from schools, children’s hospitals and any other space were children and adolescents congregate. Regulatory mechanism adopted must be binding and must have measurement tools akin to the interventions in the Framework on Tobacco Control.

Legal prohibition of junk food alone will not lead to lasting social change. Implementation of these legal interventions must include mandatory include health literacy training in junior schools. Children and adolescents must be taught the value of good nutrition, be taught to read food labels. And children & adolescents must be helped to understand how poor health choices could impact their health status as adults – for instance paediatric obesity increases the risk of adult obesity and other non-communicable diseases.

7. Create community schools at primary and secondary levels, including an opportunity to develop healthy meals (low sugar, low salt) available for all students and school staff. Community schools will be encouraged to consider many options to provide healthy meals, including school-based gardens, nutrition education as part of the school curriculum, and limited access to salt and sugar additives at mealtime. Physical activity that is appropriate for the age and skill levels will be available at schools, as before- and after-school activities, and as part of the regular school day. School challenge events will be organized to highlight successful school-based solutions to improve diets, increase physical activity, and reduce obesity.

8. Develop the WHO Overcoming Obesity Intervention Exchange

9. What we eat is the biggest cause of premature illness globally and getting food and nutrition right is a crucial component of addressing NCDs. However, looking at diet as a stand-alone issue will not be sufficient to overcome health challenges. Healthy diets must also be healthy for our planet, if we are to thrive in the face of population growth and a number of sustainability and climate challenges. The forthcoming report by the EAT-Lancet Commission
on Food, Planet and Health emphasizes the need for a systems approach to healthy and sustainable diets, linking human health and nutrition with the food-related biophysical processes required for a functioning planet. Bringing a food systems perspective into the NCDs agenda will unlock synergies with the environmental and green economy agendas, enabling different communities to tackle health and sustainability challenges in an integrated and transformative way. The following three recommendations will help advance progress on tackling NCDs while promoting sustainability:

a. Advance and incorporate cross-sectoral measures of dietary quality at local, national and regional levels
b. Implement food-based dietary guidelines that integrate health and environmental sustainability, with a focus on supporting implementation measures such as enforcing or enabling legislation and policies.
c. Increase availability and physical access to healthy and sustainable diets, with a focus on urban environments.

10. A national legislation on taxation on sugar-sweetened beverages (SSBs) is recommended with the tax collection used for funding health services. The recommendation is both a health measure and a tax measure.

The Philippines has legislated the imposition of excise tax on sugar sweetened beverages, among others, under the Tax Reform for Acceleration and Inclusion (TRAIN) Act as part of the government’s overall tax reform measures.

Under the TRAIN law, additional Php6.00 (about US$0.12) excise tax per liter of volume capacity for SSBs using purely caloric sweetener and purely non-caloric sweetener, or a mix of both is imposed. Additional Php12.00 (US$0.24) per liter of volume capacity for beverages using purely high fructose corn syrup or in combination with any caloric or non-caloric sweeteners is imposed. The products covered by SSB excise tax under TRAIN law are sweetened juice drinks; sweetened tea; all carbonated beverages; flavored water; energy and sports drinks; other powdered drinks not classified as milk, juice, tea, and coffee; cereal and grain beverages; and other non-alcoholic beverages that contain added sugar. The beverages excluded for the excise tax are all milk products, 100% natural fruit juice, 100% natural vegetable juice, meal replacement and medically indicated beverages, ground coffee, instant soluble coffee and pre-packaged coffee products. The revenue generated from the tax reform will fund health services along with education and infrastructure programs in the next 5 years.
To complement the SSB excise tax, there are also non-tax measures organized. The strategy is envisioned to include regulatory measures on marketing, mandatory labelling, information and advocacy measures for health promotion, and improved nutrition literacy among Filipinos.

11. **Tax tobacco, alcohol, and sugar-sweetened beverages.**

The research is clear that increasing cost will reduce consumption, especially among children and adolescents. In line with WHO’s General Programme of Work (GPW) 13 to reduce tobacco use by 25%, recommendations to increase tobacco taxes have been supported by WHO, as stated in the Tobacco Free Initiative, “the most potent and cost-effective option for governments everywhere is the simple elevation of tobacco prices by use of consumption taxes.” As a result, Article 6 of the WHO Framework Convention on Tobacco Control calls on governments to implement tax and price policies. Similarly, both the Institute of Medicine and the U.S. Community Preventive Services Task Force, support increasing tobacco taxes, citing “an intervention that increases the unit price for tobacco products by 20% would reduce overall consumption of tobacco products by 10.4%, prevalence of adult tobacco use by 3.6%, and initiation of tobacco use by young people by 8.6%.” Another study showed a 13.6% reduction in smoking rates in the U.S. from 1993-2003, largely due to increasing prices of tobacco.

Similarly, alcohol and sugar sweetened beverage taxes have public health benefits and can reduce consumption. WHO recognizes “increasing excise taxes on alcoholic beverages as one of the most cost-effective interventions governments can use. In fact, alcohol influences at least a third of the 42 GPW targets. The U.S. Community Preventive Services Task Force recommends raising taxes on alcohol to reduce excessive consumption and associated harms, including motor vehicle crashes and violence.

For sugar-sweetened beverages, WHO states that “taxes could substantially reduce consumption and may contribute to a reduction in overweight and obesity.” In Mexico, a 10% tax is projected to decrease consumption by 10-12% and may have a substantial impact on reducing the prevalence of overweight and obesity in that country. Although the epidemiological impact from sugar-sweetened beverage taxes remains to be seen, it is clear that these taxes have been effective in reducing consumption for these types of drinks.
12. **Implement comprehensive tobacco control programs.**

The WHO Framework Convention on Tobacco Control cannot be realized without the enactment of comprehensive tobacco control programs, utilizing the MPOWER package. As recommended by the U.S. Community Preventive Services Task Force, comprehensive tobacco control programs, “reduce the prevalence of tobacco use among adults and young people, reduce tobacco product consumption, increase quitting, and contribute to reductions in tobacco-related diseases and deaths. Economic evidence indicates that comprehensive tobacco control programs are cost-effective, and savings from averted healthcare costs exceed intervention costs.” The WHO MPOWER measures have shown progress in the fight against tobacco, demonstrating that 7.4 million premature deaths will be averted due to the MPOWER measures being adopted from 2007 to 2010 at the highest levels. Accordingly, the GPW 13 indicator describes WHO’s role to “implement the MPOWER technical package, in line with the WHO Framework Convention on Tobacco Control, in an additional 30 LMICs where tobacco prevalence is highest.” These efforts must continue at a rapid pace if the SDG targets are to be met.

13. **Reduce sodium and eliminate artificial trans-fat.**

The GPW 13 calls for evidence-based WHO guidance to support countries to reduce the use of salt and to eliminate artificial trans-fats. Excess sodium increases blood pressure and risk of cardiovascular disease. Globally, excess sodium consumption (>2.0g per day) is responsible for 1.65 million deaths from heart disease, stroke, and related causes each year. Four of five of these deaths occur in low- and middle-income countries, and nearly half are among people younger than 70. Average sodium intake is nearly twice the recommended level. In 99% of the world’s population, estimated average levels of sodium intake exceed the World Health Organization’s recommendation of 2.0g per day, or just under one teaspoon per day. Experience from the United Kingdom shows that with concerted and coordinated effort, food manufacturers can substantially reduce the sodium content of food. These strategies were associated with a 15% decrease in sodium consumption and a 40% decline in heart disease and stroke deaths in less than 10 years.

Artificial trans-fat is a toxic chemical that increases the risk of heart attack and death. Globally, artificial trans-fat intake is estimated to cause 540,000 deaths every year. **Artificial trans-fat can be eliminated.** Experience from food manufacturers shows artificial trans-fat can be eliminated (it may take 2-3 years for certain foods) and replaced with healthier alternatives without altering taste or increasing cost. Elimination of artificial trans-fat has substantial health benefits. Eliminating the addition of artificial trans-fats to foods in Denmark reduced
deaths from cardiovascular disease. In New York State, people living in counties with artificial trans-fat restrictions had a 6.2% greater decrease in hospital admissions for heart attacks and strokes than people in counties without restrictions.

14. **Restrict advertising for tobacco, alcohol, and unhealthy foods to children.**
As stated in the WHO Framework Convention on Tobacco Control, “a comprehensive ban on advertising, promotion and sponsorship would reduce the consumption of tobacco products.”
At a minimum, member states should apply restrictions on all tobacco advertising and require that health warnings accompany ads. Research has shown that implementing a comprehensive set of tobacco advertising bans can reduce tobacco consumption, but a limited set of advertising bans will have little or no effect.

Similarly, restricting marketing for alcohol can lead to a decrease in alcohol consumption. The WHO’s Global Strategy to Reduce the Harmful Use of Alcohol calls for reducing the impact of marketing, especially on youth and adolescents, by setting up regulatory frameworks for alcohol monitoring.

Finally, in alignment with the GPW 13 and the WHO Global Strategy on Diet, Physical Activity and Health, there is a need to restrict marketing of unhealthy foods to children in order to address childhood obesity and other NCDs. Enough evidence exists to show that calorie-dense, low-nutrient food marketing has a direct, harmful effect on children’s food preferences, knowledge and behavior. Both the U.S. President’s Council on Fitness, Sports & Nutrition and the U.S. Centers for Disease Control and Prevention recommend limiting food marketing to children.

15. **Carry out behavior change communications campaigns that reduce smoking, promote physical activity and change the environment to make the healthy action the default action.**
Behavior change communication campaigns can make an enormous impact on healthy behaviors and environments, and can be implemented immediately. Evidence exists to support that mass media campaigns can produce positive health-related behavior changes across large populations. The U.S. Community Preventive Services Task Force recommends mass-media health communication campaigns citing they have, “strong evidence of effectiveness for producing intended behavior changes.” Although epidemiological impact is difficult to measure, physical activity promotion has been shown to be effective. For example, the U.S. Centers for Disease Control and Prevention’s VERB campaign, promoting physical activity among children, achieved population-level changes over two years.
Mass advertising campaigns targeted on tobacco prevention and cessation have also shown to be effective. Several campaigns were associated with a reduction in smoking outcomes, and should be included as a key component of approaches to improve population health behavior. As stated in the GPW 13, “WHO will continue to develop evidence-based public health messaging, advocacy initiatives and campaigns aligned with the Organization’s strategic priorities.”

16. **Recommended actions for a holistic, multi-sectoral and life-cycle approach**, specifically, a focus on maternal health, pregnancy, childhood, and adolescence, as well as, a scope that includes education, communication for development, community development, and social protection in addition to health and nutrition.

1) **Innovation**

1.1 **Invest in early prevention and scale-up impact by mainstreaming new efforts into already existing programmes and services**, such as:

a. The integration of children and adolescent NCD prevention and treatment into basic primary health care services and packages, in particular reproductive, maternal, newborn and child health (RMNCH) and nutrition platforms, to screen for those in need of NCD treatment.

b. The promotion of healthy behaviours across the life cycle, beginning with maternal health and the pre-natal period and extending throughout childhood and adolescence and into adulthood.

c. The expansion of service delivery platforms that provide NCD prevention services for adolescents and young people to include schools and community-based platforms.

1.2 **Enable children and adolescents to engage in planning, policy and response processes related to decisions that affect them** (e.g. on the age of a child to be marketed at, on channels of marketing, on interpretive labels, on issues that affect them, etc.). Use of innovation technologies such as RapidPro, MTrac, or U-Report to receive real time information from adolescents and young people, testing their knowledge on NCDs, as well as, offering tailored solutions that meet their needs.

1.3 **Holistically address the impacts of businesses on children’s health and nutrition** through comprehensive regulatory frameworks to ban exposure to marketing of unhealthy/harmful products, support implementation of the Code, require interpretive product labeling, create economic disincentives for unhealthy and harmful products and incentives for better access to unprocessed/local foods; **leveraging the influence of the financial and ICT sector to put health outcomes over financial returns and technological barriers.**
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<td>17.</td>
<td>To establish a NCD corner in every school with facilities to measure BMI, get information on healthy diet and physical exercise, healthy food menus etc. in addition, dietary counselling to be made available to all overweight adolescents. The counsellors must be selected and trained for this activity.</td>
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<td>18.</td>
<td>Invest in Behaviour modification through establishing “Nudge Units” or their equivalents</td>
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<td>20.</td>
<td>The approach to NCD prevention and control should be driven by patient-centred care. This calls for reinforcing the life course approach, which examines risk factors at each stage of a person’s life, to determine vulnerability to different NCDs. The debate on NCDs should and cannot be limited to adults, but should consistently—as a matter of principle—look at risk factors from gestation through adolescence and youth, and until old age. By using such an approach, the discussion on NCDs does not get limited to certain populations alone, but becomes part of a new paradigm in health care that looks at the patient and holistically assesses their unique risk factors and clinical needs. This also ensures integration of NCDs in mainstream programs on nutrition, reproductive and maternal health, etc.</td>
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<td>21.</td>
<td>Build gender equity and community empowerment principles into NCD prevention programming. Engage networks of women and young people for greater advocacy on prevention and control of NCDs</td>
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<td>22.</td>
<td>Strengthen municipal planning processes to ensure inclusion of health promoting urban environments</td>
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### B. Health Systems

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<td>1.</td>
<td>Financial incentives to communities and cities expand access to community programs to promote healthier lifestyles and early diagnosis and treatment of NCDs</td>
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<td>2.</td>
<td>Countries to strengthen implementation of health programs in schools and training institutions in order to prevent non-communicable diseases</td>
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<td>3.</td>
<td>Enhance the cascade of care by building a decentralized NCD detection and management services, linked to quality referral network:</td>
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<td>4.</td>
<td>Ensure primary care settings extend to community settings through frontline care providers, including CHWs</td>
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<td>5.</td>
<td>Enable community leaders to drive health seeking behaviour; enable community members in response to time critical events (including bystanders response), Strengthen referral capacity and systems</td>
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<td>6.</td>
<td>Developing and implementing an innovative health management information system for NCD surveillance, resource allocation and patient follow-up care is critical for health system strengthening.</td>
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7. Meaningful inclusion of patients and caregivers in all health policy creation processes is critical. It allows health systems to understand the meaning of true patient value, to understand disconnects across where providers and patients disagree and how to set up a health system to address true patient value.

8. Improve quality and access to care for severe NCDs and injuries that disproportionately impact the poorest and most vulnerable populations by training and equipping specialized teams of mid-level providers, auxiliaries, and physicians to deliver integrated packages of highly cost-effective and equitable interventions at first-level hospitals based on shared workflow and infrastructure.

9. Mitigate pressures on the health care delivery system and advance universal access to quality care by taking lessons from management of HIV/AIDS: adopt a chronic care model which is integrated, rather than siloed; addresses co-morbidity in a co-ordinated manner; considers innovative approaches to delivery of “chronic meds” (use of commercial pharmacies, post offices, drones, e.g.); reduction of stigma.

Note: All of this applies equally to mental health care.

10. Maximize the potential of multisectoral collaborations through public-private partnership platforms focused on sustainable people-centred health systems strengthening, convening stakeholders, identifying and reducing barriers to treatment and care for NCDs in line with national priorities and the Sustainable Development Goals, particularly SDG 3.4. Access Accelerated is a public-private partnership and healthcare industry-led pilot initiative implementing at the national level that seeks to address capacity gaps and reduce barriers to treatment and care for NCDs in developing countries in the context of national priorities and the SDGs.

11. Promotion of policy changes which encourage public sector health systems to allow comprehensive service delivery for chronic noncommunicable diseases (NCD) at all levels of the health care system; from referral hospitals down to community based care delivery. This change must all include mechanisms which ensure the uninterrupted availability of NCD medications at all levels of the health system.

Creation of a regulatory framework to promote care delivery outside of facilities (i.e. allow community health worker based deliveries and cash collection for medications for chronic NCDs or support group care where providers can meet patient groups outside of facilities and in community groups)

Inclusion of coverage for inpatient and outpatient services (including medications) for chronic noncommunicable diseases within all National Health Insurance Schemes.
12. To introduce the Index of healthy lifestyle to the surveillance and monitoring systems based on WHO STEPS methodology. It includes the components which are currently estimating in the STEPS: absence of smoking, fruits and vegetables consumption not less than 400 g per day, absence of habits which increase salt consumption, enough physical activity and absence of heavy alcohol drinking.

13. Change the way health systems work. Focus more on disease prevention and promotion of health and well-being by supporting early interventions, essential public health functions, and integrated social and health services. Special attention should be paid to vulnerable and deprived groups, socio-demographic differences and those with most problems like mental health patients and lower socioeconomic groups.

14. By 2030
   a. All registered nurses include prevention of NCD in their practice and NCD nursing/clinical management roles are developed in Primary and Community Care: this will require access to quality education and training at both the undergraduate and postgraduate levels to provide improved interventions in the prevention, promotion, early detection and control of NCDs.
   b. There is a strengthened contribution of nursing leadership in policy and program decision making. This will require investment in nurse leadership and in nursing research related to NCDs, including efficacy and cost-effectiveness of interventions, and translation of knowledge into evidence-based practice (Nursing Now provides an opportunity).
   c. NCD supported self-management and nurse led clinical management maximises the use of technology. This will require investment in sufficient numbers of registered nurses with skills and access to appropriate infrastructure and technologies within Primary Health Care to provide optimal care for the community. This includes increasing access with outreach nursing services and mobile clinics. (see ICN IND Resource Guide 2018/17).

15. Expand global and regional pooled procurement mechanisms to include procurement & health technology assessment of standardized treatment regimens for hypertension, COPD, cancers and diabetes (unsubsidized if necessary).

16. Public awareness campaign on the national dietary guidelines through multi-media. The Nutritional Guidelines for Filipinos is a set of dietary guidelines based on the eating pattern, lifestyle and health status of Filipinos. To popularize the Nutritional Guidelines for Filipinos, the National Nutrition Council developed the “10 Kumainments” (kumain in Filipino means “to eat” and Kumainments is a tweak on the 10 Commandments in the Bible) that
consists of 10 simpler messages for better recall and understanding. This has also been translated into more than 10 regional languages for better comprehension, including one for Muslim Filipinos consistent with the Qur’an (Koran).

The campaign entails the development of a communication strategy and development of various communication materials for TV, radio, print, social media and collaterals. Another strategy adopted by the NNC is the organization of local media groups that are sensitized on nutrition and became NNC’s partners in the promotion of nutrition to widen the audience reach at the sub-national level. Members of the local media groups are practitioners in the broadcast, print, and social media from both national government agencies as well as local government units.

To sustain the funding for the promotion of nutrition, the NNC was able to include this investment in the regular budget of the NNC as part of the annual General Appropriations of the government.

A major investment area is the promotion through radio. Radio remains to be a major channel for promotion in the Philippines with 65.6% of Filipinos active listeners to radio (2013 Functional Literacy, Education and Mass Media Survey, Philippine Statistics Authority). Promotion through radio includes the establishment by NNC of community radio stations (called Nutriskwela community radio) in areas with high prevalence of malnutrition and with no or limited access to radio broadcast. To date, it has 45 licensed radio stations that are managed in partnership with local governments or state universities and colleges. The Nutriskwela Community Radio Network Program aims to empower the community through the dissemination of correct, relevant and up-to-date nutrition and health information, as well as educational and developmental information from all relevant sectors of the community, government agencies, and non-government organizations. The national government through the National Nutrition Council provides the broadcast and telecommunications equipment, training and technical assistance while the partners’ (local government units or school/universities/colleges) counterpart include the space, personnel and maintenance of the radio station. (http://www.nnc.gov.ph/plans-and-programs/nutriskwela-community-radio).
Aside from the community radio, the NNC also airs nutrition radio programs (a magazine-type and a drama format program) as block time in two leading commercial radio stations. These are also aired over the Internet through YouTube, Facebook and live streaming sites. Each episode of radio programs features an sms/text contest, which serves as feedback mechanism and at the same time to check listener’s grasp on the topic being discussed. Text winners are selected by the National Nutrition Council and given with prepaid cell phone load as prize. There are also mechanisms for queries through a hotline number where listeners can comment or ask questions on nutrition. Another unique feature of one of National Nutrition Council’s radio programs is the dramatization of real life stories of listeners on how listening to the program has improved their nutrition situation and their way of living.

Television is also being used to promote nutrition. Considering the relative high cost of airtime for television, the NNC partnered with a television network through its foundation to produce a 30-minute television program on the First 1000 Days and on healthy diet for children. The government through the NNC shoulders the production cost while the network through its foundation provides free airtime.

17. **Treat every patient with hypertension and high-risk patients with statins and aspirin.**

High blood pressure kills more people than any other condition – approximately 10 million people each year, more than all infectious diseases combined. Reducing blood pressure prevents stroke, heart attack, kidney damage, and other health problems. An estimated 1.4 billion people worldwide have high blood pressure, but just 14% (1 in 7) have it under control. Blood pressure can be controlled, with access to medications and the right treatment. Health providers in high- and low-income countries, urban and rural areas, and across different health systems show it can be done. Canada has reached nearly 70% control nationwide, and Barbados and Malawi have shown it is possible to increase control rates rapidly. To meet the GPW 13 target of reducing prevalence of raised blood pressure by 20%, every patient with hypertension should be treated with statins and aspirin. As supported by the U.S. National Institutes of Health, “lowering the threshold for statin treatment to 3% or 4% could avert another 125,000 and 160,000 cardiovascular events, respectively.” The evidence is clear – every day of delay implementing these actions, more lives are lost.

18. **Prevent cervical cancer through vaccines, screening and treatment.**

Through vaccination, screening, and treatment, cervical cancer can be almost completely prevented, resulting in millions of lives saved. This recommendation is consistent with the GPW 13 indicator to increase coverage of cervical cancer vaccine by 40 percentage points, but in order to meet that target, swift action must be taken. In 50 low and lower-middle-income
countries, it's estimated that for a 10-year intervention period: a) HPV vaccination would avert an estimated 3.3 million cervical cancer cases and 2.4 million deaths; and b) screening efforts would avert an estimated 1.9 million cervical cancer cases and 1.3 million deaths. However, fewer than 10% of eligible girls worldwide are estimated to have been vaccinated against HPV, and countries with high HIV prevalence have very low coverage rates of HPV vaccine, despite the fact that there is an increased risk for cervical cancer among HIV-positive women. Administering the HPV vaccines could prevent cervical cancer cases in roughly 20 out of 1,000 women, and research supported by the U.S. National Institutes of Health states, "In low and middle income countries, widespread uptake of current HPV vaccines by adolescent girls could reduce this cancer's incidence and mortality by approximately two-thirds, with cost-effective screening programs of adult women having the potential to reduce mortality more rapidly." Recent successes from Australia shows that the prevalence of vaccine HPV types is down to 1.5% for women 18–24, and to 1.1% for women 25–35, and elimination of cervical cancer seems possible in the near future.

19. Provide effective primary care, including effective behavioral health care
   Programs to treat hypertension, cervical dysplasia, and other precursor conditions of chronic diseases rely on a primary care system that provides high quality, accessible, affordable care. Primary care is also a key venue for the provision of care for behavioral health conditions such as serious mental illness, depression, and anxiety disorders, for which evidence-based treatments exist but are not yet widely used. Access to affordable, lifesaving medications and appropriate diagnostics is also essential for effective care. We must act now before millions more lives are lost unnecessarily to preventable diseases.

20. Recommendation 1: Nutrition
   • Assessment of the success/effect of national programs in nutrition that lead to decreased NCD’s is essential to ensure cost-effective programs that have a significant impact. Inexpensive stable isotopic techniques can quantitively assess the results of these programs. We recommend accountable assessment of these programs through supporting the use of stable isotopes to accurately monitor malnutrition (undernutrition, overweight and obesity) as risk factors of NCDs will enable better nutrition intervention planning and evaluate progress towards global nutrition targets.

Recommendation 2: Radiotherapy for Cervix cancer
   • One area where a significant effect can occur is in the treatment of cervical cancer since the survival benefit can increase from 0% to 65% with cross cutting, affordable radiotherapy interventions. However, human capacity building, quality assurance and segmentation can be a challenge. The use of innovative IT technologies such as virtual
tumor boards, webinars and e-learning platforms as well as virtual simulation technologies are essential in partially addressing the significant cost of human capacity building and implementing and maintaining effective training programs for healthcare workers. In addition, automated remote medical physics quality assurance and automatic planning and contouring for radiotherapy can support services that are understaffed that serve geographically isolated populations.

- The objectives that can be achieved by these technologies include: To train the human resources needed for appropriate operation of the brachytherapy equipment (safe, quality and effective). Target: at least a team of 1 radiation oncologist, one medical physicist, one radiation therapy technician and one oncology nurse trained in each new centre equipped with a HDR brachytherapy afterloader. In addition this allows expansion of access to brachytherapy by adding a HDR brachytherapy afterloader in each radiotherapy center in LMICs. Target: an increase of 50% in the 2018 brachytherapy capacity by 2025. In addition this can facilitate access to radiotherapy by creating at least one radiotherapy center in LMICs that do not have currently any radiotherapy center. Target: a reduction of 50% of countries that do not have radiotherapy services by 2025.

21. Tackling NCDs should be framed within the broader context of health systems strengthening (leveraging existing platforms, eg. HIV/AIDS) and of Universal Health Coverage. Better prevention and control of NCDs should be framed as central to the attainment of these objectives, which resonate with policy makers and go beyond specific diseases. This approach will also support debate on increased financing for health, which should ultimately increase resources to support NCD prevention and control.

22. To build a global partnership of governments, civil society, the private sector and development partners, to bring to scale cervical cancer prevention, screening, treatment and care programming, in order to eliminate cervical cancer as a public health threat by 2050.

23. Integration of health services to increase coverage and uptake of NCD services. An example would be integration of cervical cancer screening with HIV testing services, for bi-directional increases in detection of both cervical cancer and HIV. Further areas of integration could be feasible eg cervical cancer screening with family planning, antenatal services
### C. Mental health

1. **To change the way that mental health research is conducted resulting in more effective interventions.**
   
   There is a huge potential for science to improve mental health outcomes by improving the effectiveness of both the active components of interventions and the mechanisms through which interventions are delivered.

   **Shift 1 | Conduct mental health science in a standardized way at scale**

   **The problem:** There has not been enough investment in mental health research to fund the large-scale studies and data infrastructures that are needed to understand the complexity of mental health and make the kind of advances that have been made in fields like cancer and genomics. Disciplines are siloed and fragmented with different approaches to diagnosis and treatment and a disconnect between work in basic and applied sciences.

   **The approach:** A common set of tools are needed that allow multiple disciplines to collaborate towards the common goal of improving outcomes for people with mental health problems. This could include:

   a. Working with researchers, practitioners and people with mental health problems to select a set of common assessment measures. These measures should cover patient outcomes including clinical symptoms and economic and social functioning, mediators of the effectiveness of interventions (such as cognitive functioning), and biomarkers of illness.

   b. Promoting these common measures to the community (researchers, funders, policy makers and possibly practitioners) so that they become a widely-adopted standard and can also be used to monitor global progress towards achieving development goals.

   c. Creating an open-science global platform that will host patient level data from existing trials, and new data from studies using the common measures. Establishing a set of validated and closely curated high quality data will open the field to machine learning approaches so we can better understand what interventions work for whom and why.

   d. Taking concrete actions to foster the super-field of Mental Health Science, so that it is recognized and respected by the research community, practitioners, policy makers and funders.

   **Shift 2 | Use this new research infrastructure to make interventions for depression and anxiety more effective, better targeted, and optimized for scalability**

   **The problem:** New interventions take too long to develop and evaluate (especially digital interventions), and we do not understand enough about how to scale them, or feed this knowledge back into the design of new interventions.
The approach: A coordinated pipeline of large-scale studies for intervention development, evaluation and scale-up is needed. By ensuring this is done in a systematic way, the mechanisms through which interventions work can be revealed, and this knowledge can be back-translated to develop new and more effective interventions that are precision-targeted to individuals. This could involve:

e. Working to increase public participation in mental health research.

f. Establishing supportive structures to create a coordinated pipeline funding studies to rapidly develop, evaluate and understand how to scale promising interventions. The data from these studies would be uploaded onto the global data platform.

g. Using data analytics of pooled data from multiple studies to gain insight into the patient phenotypes (cognitive, neural and social) and diagnoses that contribute to treatment outcomes.

h. Commissioning research to improve understanding the biological actions of interventions to facilitate the search for biomarkers. This could include using cognitive tasks, human imaging, genomics, and pharmacology to identify the mechanisms responsible for dysfunction and recovery.

i. Working with Industrial partners (e.g., Digital; Pharmaceutical) to leverage trial data and motivate new investments under the data platform approach.

Shift 3 | Cement and advance the current political momentum to ensure that mental health is a global political priority resulting in increased investment and large-scale implementation of effective solutions

The problem: New more effective and scalable interventions will not improve mental health if there is not enough political or financial resource to scale them.

The approach: The global policy landscape is rapidly advancing with mental health now part of the UN NCD agenda, and efforts to create new financing facilities for mental health science and services. This opportunity must be seized by ensuring that the best scientific evidence plays a key role in ensuring that evidence based solutions for mental health are implemented, both for what we know works now, and what we hope will work better in the future. This could include:

j. Strengthening partnerships with key stakeholders such as the WHO, the World Bank, the UN, the Global Campaign for Mental Health and large research funders to create new opportunities for evidence-based investment in mental health research and services.
k. Creating strong policy arguments that highlight the human, economic and social benefits of mental health interventions to create a ‘pull’ for new interventions from government and industry. More accurate economic modelling could be conducted on data collated on the global platform so that countries can plan new mental health care models or change existing mental health care services.

Presenting evidence for effective, evaluated, cheap and scalable interventions that can be implemented, for example through an ‘intervention marketplace’ which brokers investment in promising interventions that are ready to scale.

2. Provide policy guidelines to governments on how a combination of different financial instruments can promote healthy behaviours (e.g. added taxes a/o tax reductions)

A private sector compact in the area of health food a/o infrastructure with the objective to incentivise industry to contribute to better health

Creating a new platform around Healthy Societies focusing on empowering and equipping people to make more healthy choices for themselves and their families

3. Include an indicator in SDG 3 on mental health service coverage (severe mental disorders as mentioned in the WHO Mental Health Action Plan), underscoring the comorbidity of mental disorders and NCDs and impact on morbidity and mortality.

At the same time to scale up mental health services and that address comorbidity and premature mortality in persons with MNS Disorders through applying WHO Global Mental Health Action Plan and WHO mhGAP – LMIC to ensure inclusion in national and district mental health policy.

4. Implement a multi-sectoral action to address the social determinants of MNS Disorders such as poverty, inequality and violence by integrating mental health in other sectors, through policy at national and district levels.

5. Empowerment of persons with MNS Disorders through psycho and human rights education, implementation of recovery and peer support models, and the establishment of advocacy groups – to be included in mental health policy and service delivery at national and district levels in all countries.

6. Each Country to have a national policies for child development and child mental health such that child development and child mental health are placed on the political agenda and implementing the policy becomes the centre of campaigns for political office. The content of the policy could consist of the following:
(Universal Interventions) The same way immunization cards record anthropometry in primary care settings for infants and children for the first 5 years of life, these cards should also record vital indices for child development and child mental health. This involves the training of all health providers in the assessment of child development and child mental health. Topics of child development and child mental health should be incorporated into school curricula at nursery, primary, secondary and tertiary levels of education so that all will learn about and understand.

(Selective Intervention): Providing early childhood supports for children at risk for developmental and mental health problems based on adverse or toxic factors in their environment.

(Indicated intervention): Schools for very young children to provide a school development and mental health service... Involves including child development and child mental health curriculum into all training schools for teachers and new teachers be seen to be competent in the fundamentals of child development and mental health before they are allowed to handle children and old teachers should go pass through the programme before licenses are renewed.

7. Develop a strategy of engagement of the private sector in changing the food system including:
   (a) **government regulations to reduce impact of food marketing**, to empower consumers to make the right choices, to manage demand through **public procurements** (e.g. through advance market commitments for healthy school food), to regulate retail through **zoning policies**, etc.; (b) **protecting from corporate strategies to influence public policies**: WHO approach to protect from Conflict of Interest; (c) generating **SMART commitments in key private sector entities** (e.g. food reformulation) with adequate accountability; (d) shaping **private sector investments**: monitoring health impact of investments (linking e.g. to fiscal incentives and disincentives), encourage **health related ethical investment stock market indexes** (e.g. FTSI4good, ATNI).

8. A rich body of evidence, drawn from both the mental health and NCD literature, points to synergies in the approaches to the prevention, treatment and care for both groups of conditions. These can be broadly summarized into four key recommendations, the first two which are particularly relevant for prevention and the latter two for treatment and care.

**Protect communities from harm**

Policy interventions must protect populations from harmful products and environments which are clearly associated with the risk for mental disorders and NCDs. The stringent measures to dissuade the smoking of cigarettes on the incidence of NCDs is testimony to the public health impact of such policy interventions. Such interventions must be extended to other harmful...
substances, notably the marketing of alcoholic beverages (especially to young people) through taxation and strong regulation of the irrational use of prescription opiates (which have led to the tide of opioid overdose deaths in the USA). Other examples of policy interventions which can prevent mortality and morbidity associated with these conditions are a ban on class 1 pesticides (a leading cause of suicide mortality in many countries), enforcement of laws related to gender-based and inter-personal violence, and taxation of food products which have been associated with NCDs. Finally, the provision of targeted interventions to populations affected by risk factors, a notable example of which is humanitarian crises related to conflicts and disasters, will greatly reduce the burden of suffering.

**Act early to promote the development of children and youth**

Deprivation, neglect and disadvantage in early life, a period which extends from conception through to late adolescence and which takes a range of forms (from adverse family circumstances and the effects of poverty to exposure to abuse and violence) is a strong risk factor for mental disorders and risk behaviours associated with NCDs. Advances in neuroscience have illuminated the pathways through which these social adversities in the lives of young people lead to these adverse health outcomes. Importantly, these pathways can be influenced through interventions which modify the environments in childhood and adolescence. These include parenting interventions which combine strategies to promote physical well-being and emotional attachment, interventions to promote early childhood development and education, the detection and prevention of childhood maltreatment and neglect, and the mitigation of toxic stress in the context of catastrophic events (such as sexual abuse and parental loss). In adolescence, given the widening social worlds (compared with children), the social determinants, and thus the interventions, which influence mental health and NCD risk behaviours span several ecological levels. At the level of the individual, building skills for emotional regulation and inter-personal communication, typically through class-room based life skills curricula, and providing guided self-help for emotional distress, enjoy the strongest support. Whole-school interventions to promote agency and participation of young people, prohibit bullying and promote quality education, help retain adolescents in school and promote health. In the neighbourhood, interventions (in particular, those led by youth) which address violence, build social networks, address restrictive social norms related to sexuality and reproductive health, and stop the availability of drugs and harmful substances, are effective. Access to brief, empirically supported, psychological therapies delivered in school, primary health care or youth friendly centre settings, by competent counsellors are key for secondary prevention.
Make Mental Health an essential component of Universal Health Coverage
Mental health care has been a pioneer in the development of person-centred approaches for the health care. These innovations include: the community orientation for long-term care; the integration of medication with psychological and social interventions; the engagement of family members, where culturally appropriate and agreed with the patient, in supporting recovery and addressing the needs of care-givers; addressing social and functional impairments in daily life, beyond the specific symptoms associated with the disorder; supporting adherence and management of side-effects of medications; the deployment of non-specialists, including peers, to enhance the coverage and quality of care; digital technologies to support guided self-care and network patients; and collaborative care with case managers to manage multiple morbidities. Based on these innovations, there are five guiding principles for achieving not just universal mental health coverage, but the coverage of care for the full range of chronic conditions, which I refer to as the 5C approach: a Continuing or long-term plan, recognizing that ‘cures’ are rare and the goal of care is to optimise the quality of life and health; person-Centred care, focusing on what matters to the patient, rather than what is the matter with the patient; Community orientation to be the primary platform for delivery of interventions, in particular those related to continuing care, engagement with families and the broader community; Collaborative care with seamless coordination enabled by community health workers or case managers with primary care and specialist care providers to ensure quality and early ‘stepping up’ of the intensity of care when needed; and a Compassionate stance which instils hope, which is key to the biological mechanism of healing and a motivator for health promoting behaviours.

Engage and empower communities
This final recommendation is to ensure that communities are engaged and empowered to demand the right to be protected from adverse influences on their health and to receive care embedded in a UHC paradigm. “Nothing about us without us” is the motto of the disability movement. This is equally true for mental disorders and should be the case for all NCDs, not least as these are often associated with varying degrees of disability. Thus, actions must specifically empower persons with the lived experience of mental disorders and NCDs, to design, deliver and hold programs accountable (in particular to ensure that their rights to person-centred care are realized), to combat the stigma associated with these conditions, and to ensure that the human rights abuses which continue to be perpetrated against people with mental disorders (through the systematic denial of the fundamental rights to liberty and dignity), is forever relegated to memory.
9. Policy interventions must protect populations from harmful products and environments which are clearly associated with the risk for mental disorders and NCDs. Such interventions must include the marketing of alcoholic beverages (especially to young people) through taxation and strong regulation of the irrational use of prescription opiates (which have led to the tide of opioid overdose deaths in the USA). Other examples of policy interventions which can prevent mortality and morbidity associated with these conditions are a ban on class 1 pesticides (a leading cause of suicide mortality in many countries), enforcement of laws related to gender-based and inter-personal violence, and taxation of food products which have been associated with NCDs. Finally, the provision of targeted interventions to populations affected by risk factors, a notable example of which is humanitarian crises related to conflicts and disasters, will greatly reduce the burden of suffering.

10. Universalize interventions which promote the healthy development of children and young people, for example: parenting interventions which combine strategies to promote physical well-being and emotional attachment, interventions to promote early childhood development and education, the detection and prevention of childhood maltreatment and neglect, and the mitigation of toxic stress in the context of catastrophic events (such as sexual abuse and parental loss). At the level of the individual, building skills for emotional regulation and interpersonal communication, typically through class-room based life skills curricula, and providing guided self-help for emotional distress, enjoy the strongest support. Whole-school interventions to promote agency and participation of young people, prohibit bullying and promote quality education, help retain children in school and promote health. In the neighbourhood, interventions (in particular, those led by youth) which address violence, build social networks, address restrictive social norms related to sexuality and reproductive health, and stop the availability of drugs and harmful substances, are effective. Access to brief, empirically supported, psychological therapies delivered in school, primary health care or youth friendly centre settings, by competent counsellors are key for secondary prevention.

11. Make Mental Health an essential component of Universal Health Coverage: there are five guiding principles for achieving not just universal mental health coverage, but the coverage of care for the full range of chronic conditions, which I refer to as the 5C approach: a Continuing or long-term plan, recognizing that ‘cures’ are rare and the goal of care is to optimise the quality of life and health; person-Centred care, focusing on what matters to the patient, rather than what is the matter with the patient; Community orientation to be the primary platform for delivery of interventions, in particular those related to continuing care, engagement with families and the broader community; Collaborative care with seamless coordination enabled by community health workers or case managers with primary care and specialist care providers.
to ensure quality and early ‘stepping up’ of the intensity of care when needed; and a Compassionate stance which instils hope, which is key to the biological mechanism of healing and a motivator for health promoting behaviours.

12. Countries should develop and implement comprehensive strategies for promoting mental health across the life course ensuring that health, employment, education and social care sectors and others work closely together.

13. Heads of State should oversee the implementation of National NCD strategies given that most drivers of NCDs are situated in sectors outside the health sector. As such, policy packages to prevent NCDs need to be co-ordinated between the health, trade, education, commercial, and other sectors).

### D. National capacity & Governance

1. Issuance of nationwide school regulation (Department of Education Order No. 13, series 2017) restricting the sale and marketing of food products high in sugar, salt, and fat, setting food standards, and increasing the availability and accessibility of healthy options covering all government schools, learning centers and offices of the Department of Education. Specific to the Department Order is the strict regulation that schools and school activities where children gather shall not be used in the marketing (advertising, sponsorship and promotion) of unhealthy foods and beverages to children.

2. Issuance of nationwide school regulation (Department of Education Order No. 13, series 2017) restricting the sale and marketing of food products high in sugar, salt, and fat, setting food standards, and increasing the availability and accessibility of healthy options covering all government schools, learning centers and offices of the Department of Education. Specific to the Department Order is the strict regulation that schools and school activities where children gather shall not be used in the marketing (advertising, sponsorship and promotion) of unhealthy foods and beverages to children.

3. What needs to happen to start and accelerate the implementation of these interventions at a scale that is sufficient to reach SDG target 3.4 on NDCs and mental health?
   - Integrate PPP frameworks, skills and case studies to reduce project risk.
   - Embrace the public as a partner in NCD related PPPs.
   - Make expectations clear up front for each partner – if correct, public sector should appreciate the private sector’s willingness to get involved as much for reputational benefit as profit motive.
   - Combine prevention and treatment programs and methods to address the supply/demand
imbalances in healthcare.
- Strengthen national, regional and local PPP capacity and competence, including oversight, monitoring capability to insure delivery by the various sectors.
- Identify public liabilities that, by using PPP, can be converted into valuable public assets (eg. outdated facilities, abandoned parks, disengaged seniors).

Which bold ideas will address capacity gaps to support the implementation at country level?
- Confront obesity and accompanying NCDs (Diabetes, CVD) – none of which can be addressed in isolation.
- Plan for elder care 20 years in advance. Start screening at age 40.
- Move away from symptom-based healthcare delivery to longitudinal, multidisciplinary care models. Seek to replicate prevention model exemplified by Singapore’s Health Promotion Board.
- Conduct multi-sector PPP training to reduce bias among partners. Too many private sector executives assigned to multi-sector issues have little experience in government and are not aware of the pressures and constraints faced by governments. Too few government officials have any detailed idea about the consequences of regulatory change, the accounting for profits and the length of investment returns.
- Retain public sector health professionals and managers by recognizing, compensating and motivating performance and service.
- Negotiate with private sector healthcare, food and beverage companies.
- Focus on the motivation to lessen consumption of foods that are linked to NCDs. Create a policy to make healthy food alternatives available so as to replace unhealthy products.
- Negotiate the allocation of risks and opportunities among partners.
- Expand urban park networks for exercise and stress reduction (eg. NYC).
- Technology, combined with people (professionals and family members) have the potential to increase capacity and reach of NCD prevention and treatment. The challenge will be to combine technology and practitioner experience, especially with rural populations.
There is a need for better alignment and coordination. A key challenge with tackling NCDs is the multiplicity of actors, messages, initiatives. This creates fragmentation, resulting in huge inefficiencies and waste of resources. Better coordination and alignment is needed at the global, regional and national levels. Furthermore, there is a need for stronger partnership with demand-side actors (CBO, CSOs) to help reinforce sensitization, advocacy, and implementation at the community-level.

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<tr>
<th>E. Initiatives</th>
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<tbody>
<tr>
<td>1. Artificial Intelligence / big data for NCDs and Global Campaign on Mental Health (GCMH).</td>
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<tr>
<td>2. Global program on scaling up effective alcohol control measures based on WHO package of cost-effective interventions (with tentative acronym – SAFER).</td>
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<tr>
<td>3. Develop Artificial intelligence to compensate for the critical gap in human resources. Laboratory investigations and cytology, radiology, pathology etc. to be operated by AI-start with Pathology.</td>
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<tr>
<td>4. All universities in high income countries to offer 5 scholarships for MPH with NCDs as the major for candidates from developing countries-500 graduates by 2025. Massive open learning portals to equip a broad set of providers.</td>
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<tr>
<td>5. Develop innovations in medicine formulations including combination pills, packaging to facilitate long term compliance and ease of administration. 10 new formulations by 2020</td>
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<td>6. A global public health treaty on obesity in the lines of FCTC</td>
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<td>7. Global initiative to eliminate cervical cancer by 2050</td>
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<td>8. Annual Prize for Innovation in NCDs</td>
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<td>9. The prize will encourage and reward innovation by presenting an annual award at a high level international platform, such as the WEF at Davos, or the WHA, to celebrate exceptional innovation by multiple stakeholders in the field of NCDs.</td>
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<td>10. Harnessing Big Data for NCDs</td>
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<tr>
<td>11. To bring the power of big data and advanced analytics to bear on the challenge of addressing the NCD burden, to inform decision making, prioritize interventions and improve impact, by exploring novel big data sources and apply complex analytical techniques to enhance NCD monitoring in support of coherent policy implementation for NCD prevention and control. Provide an evidence base for policy development at city, municipality, community level.</td>
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<td>12. Global initiatives for cervical cancer elimination, childhood cancer- improving outcomes, elimination of artificial transfats from the food chain, hypertension control</td>
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<tr>
<td>13. Establish a global initiative on digital and artificial intelligence for NCDs</td>
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14. WHO/ITU could create a global digital scaling fund. Every 6-12 months it could invite applications from around the world for the best digital solutions for NCDs and their risk factors. Criteria would be set by WHO and participating governments to ensure that applications are evidence-based and appropriate for scaling within national health systems. The model would be similar to Grand Challenges Canada but focused on supporting governments.

15. WHO to develop toolkits to help Member States use digital to support a range of NCD conditions and risk factors. This includes looking at how to create programs which address co-morbidities both within NCDs and with communicable diseases (e.g. HIV/AIDS and diabetes) to strengthen health systems and move away from vertical programs.

16. Put women in the community in the centre on NCD and mental health movement: Rationale: the power of women’s influence has not been harnessed.

17. Levering scalable technology for acute emergency hospital care (e.g. levering the power of the smartphone) and training providers. Rationale: people die unnecessarily because of poor diagnostic practices; quality/quantity of care can substantially be increased with help of technology.

18. Focus on delivering care for NCDs including mental health conditions in midst of humanitarian crises. Rationale: (a) more people die in emergencies/crises due to NCDs unaddressed by disrupted health care systems than by arms and (b) focus on humanitarian crisis will lead to innovation as humanitarian crisis force innovative solutions because of restricted access, overwhelming need and broken-down systems.

19. To establish a molecular laboratory in every country where personalized medicine could be provided to patients not responding to drugs treatment.

20. Leverage the use of innovative technologies to help expand coverage and access to screening services as well as cost-effective treatment options.

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<tr>
<th>2. Financing</th>
<th>A. Domestic financing</th>
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<tbody>
<tr>
<td>1. Reduce intervention costs and develop Innovative financing instruments that bring in additional investment at national and subnational levels</td>
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<tr>
<td>2. Agreement between member countries to source drugs and equipment at lowest cost for poor countries. Countries with facilities to manage NCDs offer fellowships to countries which do not have sufficient HR and hand hold them during their initial periods of management of such diseases in their home country. An international fund to support the cost of the drugs, equipment and consumables to manage NCD treatment.</td>
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3. Collaborate with government, international development agencies and financial institutions to **design innovative financing mechanisms** that enable bold, holistic and national initiatives to ensure equitable interventions that reach the entire population, especially those who are most vulnerable and disadvantaged.

4. NCDs are much more than a health issue, making the financial and economic case for action should involve non-health sectors. The full economic cost of NCDs (labor market, trade, impact on GDP), should be used to help drive whole-society approaches to curbing this epidemic. Policy packages, rather than single interventions, represent a first step towards this solution.

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<th>B. International financing</th>
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<tr>
<td>1. Global Solidarity Fund for Chronic Diseases</td>
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<tr>
<td>2. Establish Global Fund (or Regional) for NCD Prevention and Control</td>
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<tr>
<td>3. Gaps in equitable financing for NCDs and mental health can be addressed, in part, through the following approaches:</td>
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<tr>
<td>- Working with the World Bank, the Partnership for Maternal, Newborn, and Child Health, and national Ministries of Health to integrate interventions for NCDs, mental health, and injuries into investment cases and health financing plans tied to Global Financing Facility funding in eligible countries.</td>
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<td>- Working with Organization of Economic Cooperation and Development (OECD) and other entities to more systematically track what portion of international funding sources for NCDs, mental health, and injuries is targeted to the world’s poorest children and young adults within countries, and encourage more equitable development assistance for NCDs and injuries.</td>
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<th>3. Accountability</th>
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<tr>
<td>A. Accountability</td>
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<tr>
<td>1. Expand use of standard health questionnaires and biometric screening in donor-funded health programs (as appropriate) to help monitor and assess broader health of participants; published anonymized results.</td>
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<td>2. Consider Framework Convention or similar legal arrangement to strengthen accountability (could be regional/sub-regional). Pacific SIDS are exploring a legal instrument for accountability in Member States who are willing.</td>
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<tr>
<td>3. Develop and enforce population level policies, regulation, standard setting and fiscal policies that can bring changes in behavior and reduce exposure to NCD risk. Coordinate action across sectors, including non-health sectors to create a healthy and enabling environment that promotes healthy behaviors. Establish measures and monitoring system to strengthen the contribution and accountability of the non-health and private sectors.</td>
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4. Create a global observatory for essential medicines pricing, availability and quality. Create a tool to measure, map and monitor essential medicine pricing and availability data. An initiative to measure, map and monitor pricing and availability data in a tool that uses mobile technologies to create a global observatory for drug pricing across nations.

5. In order to increase the transparency of the implementation status of the best buys and other recommendations, an open, interactive online service which shows the status of the implementation by countries is developed and set up. The online service will allow the user to compare the status between countries and also regions. Through the service its easier for the Member States to have a dialogue with the politicians and other decision makers in order to prioritize the interventions needed and to get the resources (expertise, funds) needed. Since the Member states have committed to the implementation of the NCD action plan, the online service will also serve as an “accountability platform”.


7. Each country that signs on to a jointly sponsored global Fellowship program that would select one rising professional to participate. The selected trainee would be mentored by a member of the WHO NCD Commission in one of the following tracks based on trainee interest, experience, and area need:
   a. Community Workforce Development Track
   Need: Healthcare champions, intimately knowledgeable about their communities, to develop evidence-based models to train and deploy Community Health Workers/Coaches for NCD prevention and management.
   Fellowship: Gather best practices and brainstorm solutions to address gaps in established and experimental models.
   Action: Develop and implement Community Health Worker programs and adjunctive tools (e.g., Health Passports), as well as improve existing programs to address NCDs.
   b. Public Health Law Track
   Need: Stronger taxes and regulatory frameworks, as well as legal defense to countries involved in health-focused litigation with tobacco, beverage, and food companies.
   Fellowship: Train in health policy, international litigation, and health-focused law.
   Action: Assist implementation of Framework Convention on Tobacco Control and sin taxes in countries; provide legal aid to countries and cities engaged in defensive litigation with companies whose comestible products contribute to chronic disease.
   b. Urban Health Planner Track
   Need: As a larger proportion of the world’s population relocates to urban spaces, built...
environment grows ever more important in influencing population health. Fellowship: Learn and practice urban planning, sustainable development, efficient energy, and green spaces to foster prohealth built environment design. Action: Assist developing regions in incorporating healthy planning into the infrastructure of urban growth.

Additional Track Considerations
- Public Health Leadership Track
  Need: Health and medical trainees lack skills and knowledge to take global leadership in developing and launching public health interventions.
  Fellowship: Equip Fellows with skill sets in public health operations, management, evaluation, policy, and strategic communication.
  Action: Create, implement, and evaluate novel public health interventions combating NCDs.
- Health Innovation and Technology Track
  Need: The ability to develop and scale technological advances appropriate for global implementation
  Fellowship: Educate data scientists and engineers on current global NCD trends and tech-interventions targeted at the intersection of individual behavior and health.
  Action: Integrate readily available technology with evidence-based health interventions to promote population health and improve NCD outcomes.

8. Integrate promotion of health and well-being better into educational system with knowledge, practical skills and supporting environment, using well-evaluated best practices when applicable. This should be done in different levels of education from preschools and schools but also when educating professionals like medical doctors

9. Establish national multi-stakeholder platforms for NCD prevention and control. While this is not a new recommendation (see e.g. Report of WHO Childhood Obesity Commission), few countries have implemented it. Under government leadership, bring together all relevant non-State actors around shared objectives, to mobilise resources and commit all those who can make a difference to specific, measurable actions addressing the key determinants of NCDs. Government needs to set the overall policy objectives and agenda, act as a convenor, challenge all relevant non-State actors and direct their efforts towards the attainment of the agreed objectives. Non-State actors need to take responsibility and foster change in line with government objectives, towards realistic but ambitious outcome-oriented goals. A strong accountability mechanism and measurement framework, provided by government, are essential for success.
To take one example of the WHO Best Buys – reducing salt intake – a whole of society approach might include the following illustrative elements:

- Realistic, progressive and ambitious national targets for salt reduction in processed foods category-by-category
- Standards/guidelines/agreements on salt content in food provided in public institutions through public procurement
- Engagement of and commitments by the broader out-of-home catering and hospitality sectors
- Public education, through all relevant multipliers, of the risks of hypertension and the link between salt intake and hypertension.
- Ensuring that every visit to the physician includes a routine blood pressure test. Making blood pressure testing facilities more widely and freely available and accessible.
- Agreements with health insurance providers that individuals could benefit from premium discounts if they provide annual blood pressure measurements from a qualified physician.

Altogether, this approach consists of a balance of supply-side and demand-side measures. This kind of approach is rarely implemented. Instead, we mostly see a relatively narrow focus on supply side, which is necessary but insufficient to engender societal change.

10. Encourage Member States to establish a central coordinating mechanism in country to ensure policy coherence across all agencies, private sector, civil society

11. Develop credible standards systems, including certification, for products, services, value chains that support SDG 3.4 and wider NCD prevention and management goals and targets. Using existing frameworks mainly focused on accrediting environmental sustainability of products and services such as ISEAL Alliance sustainability standards for the environment and the Gold Standard for the Global Goals for the SDGs, incorporate certification of practices and products that support realization of SDG 3.4. Consider revenue model to support health system.
   a. Define specific criteria for an SDG 3.4 enabling product, service, organization and value chain, including measurable impact on premature mortality due to CVD, diabetes, cancer and other main NCDs by reducing risk factors, promoting health-enabling behaviours and systems, or otherwise deliberately addressing the health of customers and employees.
   b. Determine which existing sustainability standards already meet some or all of these criteria or can be modified to incorporate them.
   c. Pilot and implement
12. Legislative advocacy to enact a bill scaling up nutrition on the first 1000 days of life (Senate Bill No. 1537 An Act Providing for the Scaling up of Nutrition for the First One Thousand Days of Life, through a Strengthened Integrated Strategy for Maternal, Child Health and Nutrition, Appropriating Funds therefore and for other purposes)
One of the main targets of the bill is to address the high prevalence of stunting among Filipinos. The period of the first 1000 days of life was proven to be an effective window of opportunity to enable a child to reach its full growth potential. Thus, the bill on the First 1000 Days aims to scale up nutrition program by developing a comprehensive and sustainable strategy for the first 1000 days of life to address health and nutrition, and developmental problems affecting infants, young children, adolescent females and pregnant and lactating women. Capacity building of all key health and nutrition workers from national to community-based level.
Alongside with the passing of legislation on F1000 days, the National Nutrition Council conducts trainings for those involved in early childhood care and development services (health, nutrition, early learning and social services). Some of the featured activities of the training are administration of the ECCD checklist on developmental milestones, conduct of recipe trials (on complementary food), home visits, one-to-one and group counselling on Infant and Young Child Feeding.

13. Encourage countries to select a very small number of ‘best buys’ and implement them well before becoming more ambitious. I suggest at most 3-4 best buys, particularly those requiring fiscal interventions, eg, tobacco, alcohol and sugary drink taxes. Encourage the use of fixed dose combination pills for people at high risk of CVD, either based on age or an assessment of absolute risk in the context of UHC. Establish an independent accountability mechanism for assessing progress towards the agreed 2025 and 2030 NCD targets.

14. Promote and support systematic use of health impact assessments and conduct more studies on cost-effectiveness. Health impact assessments should be used in key decision making processes at all levels (from global to local) in sectors that are related to NCD risk factors like trade, finance, agriculture, transportation, education etc.

15. International organizations develop and implement a shared code of conduct for partnerships with non-state actors to manage health-related conflicts of interest.
16. We now have much more information about the effect of agricultural, trade, social protection policies. It would be important to look at the impact of public investments in certain sectors that are not conducive to public health improvement. One of them is agricultural subsidies. Another one is how public investment can leverage private investment.

17. Community assessments of environmental pollutants using innovative, rapid assessments for environmental pollutants.

18. Apply a rigorous monitoring framework.
Monitoring and evaluation are essential to measure progress. Member states should invest in, utilize, and track their implementation of existing frameworks, such as the Framework Convention on Tobacco Control, and the WHO HEARTS technical package. Furthermore, by committing to making their data public, each country can and should be held accountable for implementing proven policies that would prevent heart attacks, strokes, cancer, and diabetes in their populations.

19. Implement a systematic needs assessment to identify and prioritize adolescent NCD-related health needs, with attention to issues of data disaggregation (often not done for children) and inequality (e.g., gender, economic status, disability, geography, etc.) within the broader context of national child and adolescent health plans, programmes, and legislation.

3.2 Increase sustainability reporting on child rights related to health and nutrition across the most influential global corporate reporting frameworks and Environmental, Social and Governance (ESG) analysis systems (e.g., the UN Guiding Principles Reporting Framework, the Global Reporting Initiative, the Sustainability Accounting Standards Board, the Dow Jones Sustainability Indices, FTSE4GOOD, MSCI, etc.), and establishing common standards for children’s rights risk management and reporting.

20. How do we improve the governance and oversight of progress by Member states?
- Governments must recognize their stewardship role, be continually engaged and emphasize respect, credibility and trust in their partners.
- Transparency in process and agreements
- Stabilize government health prevention strategies, adapt tactics to local conditions. Clear policy priorities must be in place (including willingness to make trade-offs (eg. breast cancer is #1 among women) *, as well as clear guidelines.
- Employ advanced negotiation training for dispute resolution
- Recognize the reality of long-term assets and short-term political cycles.
*To provide care for breast cancer, requires proper diagnostic facilities, as well as access to care. This is not easy to put in place, and is resource consuming. Overall – countries may be better off focusing resources on a cancer type that represents 25% of all cancer cases than trying to provide mediocre care for 200+ types.

21. To ensure every family has at least one member trained in Cardio Pulmonary Resuscitation and first aid. This can be achieved by training every school going child on first aid and CPR. And also ensuring those who provide transport to patients with a life threatening condition are well trained in cardio pulmonary resuscitation. This can be linked to annual licencing system for public transport vehicles.

22. Engage and empower communities: This final recommendation is to ensure that communities are engaged and empowered to demand the right to be protected from adverse influences on their health and to receive care embedded in a UHC paradigm.

23. There is a need for homegrown solutions, that are driven by national realities and unique circumstances. While there exists significant data and analysis at the global level, there is a paucity of data at the national level (especially in the economies most at risk) – to drive evidence-based policy reform and health system re-orientation (where necessary). Countries and development partners need to make available resources to support the generation of national-level data to guide informed discourse and debate on policy options that are tailored to country needs.

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<th>B. Policy coherence</th>
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<td>1. To be sustainable and effective, health system strengthening efforts must include engagement across local/regional/national AND include interdisciplinary advisory boards (i.e. patients, frontline, MOH, policy, provider.)</td>
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<td>2. WHO has adopted a life-cycle approach to issues such as obesity, and this needs to be extended to other NCDs</td>
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<td>3. The political mandate and research agenda needs to be broadened from a focus on treatment of individuals with disease to include a complex systems approach to prevention of NCDs and promotion of mental health. These multi-causal conditions arise from a multitude of interdependent elements acting within an interconnected whole. Only by taking a complex systems approach can those responsible for implementing effective prevention strategies understand how best to reshape environments we live in to improve health. Some of the ‘best buys for NCDs’ have already identified important system levers (such as taxation). Taking a systems approach to the design and evaluation of these policies will provide a much more sophisticated understanding of the impacts (both intended and unintended) of action, and will also identify additional levers and...</td>
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co-benefits. Acting early for prevention also means acting early in the life-course by focussing prevention activities on different levels of the system that directly affect the health of children. For mental health, these include, but are not limited to:

- **Individual** – build resilience skills (emotional regulation, inter-personal communication, guided self-help for distress), lifestyle skills and knowledge on diet and physical activity behaviour often through class-based interventions or through digitally delivered programmes.
- **Home** – parenting programmes for behavioral and emotional problems, reject violence and respect growing independence of adolescents. Programmes combining physical health (such as nutrition programmes) with ensuing strong emotional attachment (through structured play and promoting responsive non punitive parenting practices)
- **Schools** – whole school interventions to promote trust, prevent bullying, ensure quality education. School environments promote healthy diets and physical activity.
- **Neighbourhoods** – access to health promoting recreational activities which allow teenagers to take risks safely, reduce access to drugs, alcohol and unhealthy foods, reduce violence and promote physical activity
- **Healthcare** – rapid access to brief evidence based psychological therapies delivered in non-stigmatising community based settings (such as Headspace Centres)
- **Economic** – welfare interventions reduce poverty and fiscal interventions target unhealthy commodities including tobacco and sugar-sweetened beverages
- **Policy** – strong education systems, prevention of abuse and neglect through systems that detect and stop it, provision of early life settings (eg: crèches) that promote child development

4. In order to improve policy coherence between the Sustainable Development Goal target 3.8 (on universal health coverage), target 3.4 (on NCDs and mental well-being), and 3.6 (on road traffic injuries), WHO should broaden the definition of NCDs and incorporate equity in its selection of “best buys.”

Specifically, WHO should include those cause groups considered in Global Health Estimates for NCDs (hematologic and immune disorders, mental, neurological, and substance use disorders, sense organ diseases, digestive diseases, genitourinary diseases, congenital anomalies, and oral conditions).

In its global monitoring framework for NCDs, WHO should expand the age group for reductions in mortality to include those under age 30.

In its framework for evaluating health interventions, WHO should also consider equity in addition to cost-effectiveness and feasibility, consistent with the recommendations of the consultative group on Equity and Universal Health Coverage.
| 5. Others   | A. Civil Society                                                                 | 1. Greater involvement of civil society and activists in all aspects of NCD work.  
                                                                                     2. To expand PAFN’s collaboration with civil societies aiming to raise public awareness on NCDs and to apply pressure on decision makers to increase support and commitment on NCD prevention and control. |
|            | B. Political choices/economy                                                     | 1. Implementing the code of competencies.  
                                                                                     2. Invest in advocating with policy makers to raise the profile of NCD prevention and early intervention. This would include:  
                                                                                     a. Generating advocacy material linking the low profile early interventions with highly visible and dramatic down stream complications of NCDs such as strokes, MIs, dialysis and transplantation.  
                                                                                     b. Advocating that prevention interventions have broad payoffs in CVDs, Cancers, End organ damage from Diabetes Mellitus. Considering the cost of any and each of these consequences investing in prevention is highly cost effective.  
                                                                                     c. While the results of good interventions are non events (avoiding dramatic episodes such as stroke and MIs) and therefore not demonstrative enough for political parties, the interventions themselves can yield political dividends, such as mass exercise, interventions to reduce trans fats and salt in food, as they can be scripted to become spectacular events. If leaders are able to explain the link of these events to preventing adverse medical events that would be a bonus. |
|            | NCD Advocacy Roadshow                                                           | 1. NCD Advocacy Roadshow  
                                                                                     A 3-day capacity building workshop that focuses on communicating the topic of NCDs and Global Health to the next generation of leaders in low and middle income settings  
                                                                                     Key objectives include:  
                                                                                     - Communicating NCDs and Best Buy solutions;  
                                                                                     - Fostering multisectoral collaboration and innovation;  
                                                                                     - Championing home-grown implementation and scale up; and  
                                                                                     - Strengthening the local NCD community.  
                                                                                     Here 500-1000 participants from a range of health and non-health backgrounds are invited to attend the Roadshow which not only aims to inspire attendees on the NCD challenge through the Best Buys and SDG frameworks, but also provide the skills and connections to go forward and make change on a local level.  
                                                                                     Participants will be asked to complete a survey beforehand which aims to identify areas of the NCD challenge that they would like to focus on. Ultimately these findings will shape the workshop agenda and interactive exercises. |
The days will be divided into:
Day 1) Theoretical Framework on NCDs (AM). Parallel sessions on policy, domestic and international financing, health systems, national capacity, accountability and commercial determinants (PM).
Day 2) Skill Building Talks and Exercises on Advocacy, Innovation, Design Thinking and Leadership (AM and PM).
Day 3) Roadshow Challenge – Participants are introduced to the Best Buys, include success stories and associated challenges, and then divided into small groups. Working across a range of disciplines and skills, they are asked to come up with a number of innovative solutions, which they present to their peers and an expert panel. Ideally, this panel will consist, in part, policy makers and key stakeholders (AM and PM).
Each day will feature a range of international and local speakers tailored to the event’s participants and geographic location. The roadshow will aim to ensure there is an equal balance of age groups represented as speakers. Further, a minimum of 80% participants will be 18-35 years of age, and a target of at least 15% participation from individuals living with NCDs.
The workshop will be held in the capital of each country and facilities will be modern and robust with ample space for interaction.
Finally, throughout the three days there will be a pavilion space where there is the opportunity to highlight relevant career paths, connect with local and international actors, present the latest innovative research and engaging with NCDs through art. Solving NCD challenges can be fun and engaging. This event aims to showcase this.

NCD Advocacy Roadshow Communications Strategy
We would highly recommend that a full communications strategy would complement the NCD Advocacy Roadshow. This would include a full promotion/recruitment strategy and media engagement opportunities. Full utilisation of social media through host and partners is essential. Further opportunities to include celebrity ambassadors supporting and attending the NCD roadshow would be a significant ingredient for success.
- Short films that document case studies of Best Buy solutions would increase understanding of the Best Buys to a diverse audience through visual and emotive means. These films could be utilised as a key communications tool both within and beyond the workshop, catalysing increased attention and awareness of NCD solutions globally.
2. Quantify the economic cost of NCDs

   The WHO Commission On Social Determinants of Health provides a global framework for cross-government action on avoidable health inequalities.
   The Marmot Review in the UK, Fair Society Healthy Lives, shows how this can be put into action in one country with recommendations through the life-course:
   - Give every child the best start in life
   - Education and life-long learning
   - Employment and working conditions
   - Minimum income to lead a healthy life
   - Healthy and sustainable environments
   - Taking a social determinants approach to prevention
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