



"China National Plan for NCD Prevention and Treatment (2012-2015)" issued by the Ministry of Health and 14 other ministries and state administrations on May 8, 2012

2012-07-25

## China National Plan for NCD Prevention and Treatment (2012-2015)

In order to fulfill the "Recommendations of the CPC Central Committee and the State Council on Deepening the Medical and Healthcare System Reform", and actively conduct Non-communicable and chronic disease (NCD) prevention and control to curb the trend of rapidly growing prevalence of NCDs in China, and protect and promote the health of the people, and facilitate sustainable economic and social development, based on the prevalence and prevention and treatment of NCDs in China, we hereby formulated the "China National Plan for NCD Prevention and Treatment (2012-2015)".

### I. Background

Cardiovascular and cerebrovascular diseases, diabetes, cancers and chronic respiratory diseases are the major NCDs that have been affecting people's health in China. The prevalence of NCDs is closely linked to socio-economic conditions, ecological environment, culture, customs, lifestyle and other factors. Along with the fast industrialization, urbanization, and aging, the number of Chinese living with NCDs has been increasing dramatically, and the number of persons with diagnosed NCD is 260 million, making them a major public health threat. NCDs are characterized by life time duration after onset, high prevalence, costly health care expenditures as well as high disability and premature mortality rates. NCDs account for 85% of all deaths in China, and 70% of the total disease burden. NCDs can impoverish people, leading to serious socio-economic problems if they are not timely and effectively controlled.

Domestic and foreign experience finds that NCDs can be effectively prevented and controlled. Over the past 30 years, with China's rapid economic and social development, the living standards and health awareness of the people have continuous improvement, which has laid the foundation for effective NCD prevention and treatment. A great deal of successful experience has been accumulated in NCD prevention and control carried out in local areas and demonstration areas over the years, and Chinese NCD prevention and control strategies and networks have been preliminarily established. However, NCD prevention and treatment

still faces serious challenges: the weak social NCDs awareness; lack of the working mechanism featuring government taking the lead with multi-sector cooperation and whole society participation; lack of sound NCD prevention and treatment networks; inappropriate allocation of health resources and the urgent need for qualified health personnel. The strengthening of NCD prevention and treatment is of vital importance to the "12th Five-Year Plan" period, and shall become the key constituent of improving people's livelihood and promoting healthcare reform. Strong and effective measures shall be taken as soon as possible to curb the trend of high prevalence of NCDs.

## II. Basic principles

(A) **Adhere to government leadership, inter-sector cooperation and social participation.** Guided by the policies of advancing medical and healthcare system reform, an inter-sector NCD prevention and treatment coordination mechanism, featuring leadership from government at all levels and the close cooperation of related departments, shall be gradually established, and a comprehensive NCD prevention and treatment system that incorporates the CDCs, primary healthcare institutions and hospitals shall be improved, and all social forces and the people shall be mobilized for extensive participation to create a social environment conducive to the prevention and treatment of NCDs.

(B) **Adhere to focusing on priorities, classified guidance based on various conditions, and results-oriented principles.** Taking account of the socio-economic development levels and the prevalence of NCDs and their risk factors in different areas, develop specific prevention objectives and control strategies; lay emphasis on social vulnerable groups and floating populations, and improve the accessibility, equity and effectiveness of NCD prevention and treatment.

(C) **Adhere to the principle of prevention first, integrating prevention with treatment, and emphasizing primary healthcare.** Target all urban and rural residents, with NCD risk factors control as intervention focus, and health education, health promotion and patient management as the main approaches, and give full play to the primary healthcare institutions' role for providing prevention and treatment so as to promote the organic integration of prevention, intervention and treatment.

## III. The objectives

To further improve the NCD prevention and treatment service network and comprehensive prevention and treatment mechanism with national coverage; To establish NCD surveillance and information management system; To enhance NCD prevention capacity; To make efforts to enable a social supportive environment, and to implement the functions of the departments to reduce the level of NCD risk factors in all population; To reduce premature death and disability, and to control the level of socio-

economic burden caused by NCDs. By 2015, the following specific objectives shall be achieved:

- To increase awareness of NCD information on prevention and control to more than 50%, and increase awareness of blood pressure and blood glucose in those 35 years and older to 70% and 50%, respectively.
- To increase the National Campaign on Healthy Lifestyle for All to cover 50% of the counties (cities, districts) of China, and the National Demonstration Areas for Integrated NCD Prevention and Control of NCDs to cover more than 10% of the counties (cities, districts).
- To lower the national average per capita daily salt intake to less than 9 g and lower the adult smoking rate to under 25%; and to increase the proportion of population with regular exercise to more than 32%; and lower the obesity rate in adults to 12% and in children and teenagers to 8%.
- To increase the standard management rate of hypertension and diabetes to 40%, and the blood pressure and blood glucose control rate in managed population to 60%; and to limit the growth rate of stroke incidence to under 5%, with decreased stroke-related mortality by 5%;
- To conduct early detection and treatment of key cancers in 30% of cancer-prone areas.
- To lower the chronic obstructive pulmonary disease prevalence rate in 40+ populations to under 8%.
- To increase the pit and fissure sealant coverage to more than 20% of the targeted age group of children and to reduced the prevalence of dental caries in 12-year-old children to less than 25%.
- To conduct surveillance of all-cause mortality, NCDs and their risk factors, and of nutritional status in 90%, 50% and 15% of the counties (cities, districts) respectively.
- To increase NCD prevention and control professionals to more than 5% of the professionals in disease control institutions at all levels.

#### **IV. Strategies and measures**

##### **(A). Prioritize prevention, and further promote healthy lifestyle for all.**

Fully resort to the mass media to give wide publicity on NCD prevention and treatment knowledge and that will help incorporate NCD prevention in people's daily lives and encourage citizens to consciously develop good and healthy behaviors and lifestyles. The health departments shall establish national and provincial-level NCD information and knowledge release platforms that regularly publish core health information, and cooperate with the departments of radio, film and television, and the departments of press and publication to organize major medias to establish special health columns and disseminate scientific knowledge of NCD prevention; all levels of trade unions, communist youth leagues, women's

federations, science associations, industry and commerce federations, committees on aging and various social academic communities shall play their respective advantages in accordance with standard information, and carry out public advocacy and social mobilization activities in an organized manner.

Provide scientific guidance for healthy diets, and actively develop and promote healthy foods with low-salt, low fat, low sugar and low calories. The agricultural departments shall adjust and improve the structure of food production, and guide the production of safe, nutritious, convenient and diversified agricultural products. The industry and information technology departments shall guide and support the food processing enterprises to improve production processes, and promote the implementation of the General Principles for Nutrition Labeling of Prepackaged Foods, and promote healthy food development and production. The commerce departments shall promote and encourage food sales enterprises to establish healthy food special counters, and guide consumers to choose healthy foods. Food enterprises, collective canteens and catering suppliers shall organize key personnel to study and master reasonable nutritional and dietary knowledge and know the risks associated with unhealthy diets, and they should progressively promote Nutrition Facts Labels, so as to provide healthy foods and catering.

Actively create a sports and fitness environment. The sports departments shall strengthen scientific guidance on mass sports activities, and gradually increase the accessibility and utilization of various public sports facilities. The education departments shall ensure that primary and secondary students participate in at least one hour of physical exercise activities during the school day. The environmental protection departments shall enhance environment quality monitoring and evaluation, and strengthen the comprehensive management of environmental pollution. The government agencies, enterprises and institutions shall establish work-break exercise systems. The communities shall actively promote the working model of healthy lifestyle instructors and social sports instructors.

Strengthen the tobacco-control efforts to fulfill the WHO Framework Convention on Tobacco Control (FCTC). Urge local governments to accelerate the anti-smoking legislation process in public places, and speed up the introduction of national-level laws and regulations. Continue to reinforce tobacco control publicity and education efforts. Fully implement smoking ban in public places; government agencies, health organizations, and educational institutions should take the lead in being smoke-free. Encourage medical institutions to establish standard smoking cessation clinics and provide clinical smoking cessation services, and strengthen skills of medical personnel that will improve the capacity and level of smoking cessation services. Increase awareness of the hazards of excessive drinking; conduct mental health education, and provide universal access to mental health knowledge.

**(B) Expand services for timely detection and management of high-risk populations.** Expand the content and the coverage of basic public health services, and strengthen the detection and management of NCD high-risk groups (those with high blood pressure, high blood sugar, high blood lipids and who smoke, drink excessively, are obesity/overweight, etc.). Primary healthcare institutions shall fully implement health education, prevention, healthcare, rehabilitation and other comprehensive service functions, establish standardized resident electronic health records for accessing community levels of NCDs and other major problems, conduct purpose-specific health education, and provide free health counseling on common NCDs. All kinds of medical service institutions at all levels should observe the rules of taking blood pressure for those aged above 35 at their first medical service seeking or consultation. More than 80% of township hospitals shall carry out blood glucose monitoring; over 30% of township hospitals shall carry out simple pulmonary function test; 40% of community health service centers and 20% of township hospitals shall carry out preventive oral health services. Government agencies, enterprises and institutions shall actively promote the health check-up system that incorporates core indicators of NCDs and oral examination as compulsory items, and also create a dynamic health records management system to strengthen guidance and management. Government agencies and institutions shall establish self-detection points for health indicators, if appropriate, and provide simple physical measurement equipments. Pharmacies shall play an active role in the public education of NCD prevention and control.

Primary healthcare institutions and clinics affiliated with institutions shall perform regular monitoring and follow-ups on high-risk groups detected during physical examinations and screening, and implement targeted interventions and reduce morbidity risks. All levels of CDCs and health education institutions shall develop and promote appropriate technologies to detect high-risk groups, strengthen lifestyle intervention, and provide supervision and conduct evaluations.

Develop appropriate technologies to screen for key cancers in areas with high cancer prevalence, and carry out early screening and treatment. In accordance with the policy of national immunization programs, strengthen the vaccination of hepatitis B and human papillomavirus among high risk population for cancers. Conditions permitting, efforts to detect and make intervention of high risk populations for chronic obstructive pulmonary disease and stroke shall be made.

**(C) Regulate prevention and treatment, and improve the effect of NCD diagnosis, treatment and rehabilitation.** Specialized disease prevention and treatment institutions for cardiovascular diseases, cancer, diabetes and other diseases shall promote appropriate technologies for the treatment and prevention of NCDs, timely conduct training for diagnosis and treatment for specialists at all levels, and gradually achieve

standardized diagnosis, treatment and rehabilitation of NCDs. Hospitals at all levels and categories shall strictly comply with the technical standards and guidelines for clinics set by administrative health departments, improve the professional training system for specialists, and lay emphasis on early delivery of rehabilitation services. While providing standardized diagnosis, treatment and rehabilitation, they shall also provide more counseling and medical science information to patients and their families.

Primary healthcare institutions shall strengthen management and services for patients with hypertension, diabetes, chronic obstructive pulmonary disease and other NCDs, and oral health, provide follow-up and rehabilitation guidance for cancer patients, and actively promote pit and fissure sealant and other appropriate technologies for oral disease prevention in children. With increased investment for the equalization of basic public health services, we will expand the scope of services, enrich service contents, actively promote self-management models for the patients with NCDs, and strive to improve standardized patient management rate and control rate. In addition, the general practitioner family-service models will be actively explored.

In NCD prevention and treatment, we will adhere to and hold equal importance to traditional Chinese medicine and Western medicine to make full use of the simplicity, accessibility, validity, affordability and "preventive treatment of diseases" that traditional Chinese medicine provides. The health departments shall further consolidate and improve the essential drug system, appropriately increase the types of drugs for NCDs on the essential drug list, establish a coordination system to process monitoring information of the essential drug shortages, and improve the national essential drug reserve system to ensure appropriate therapy for patients with NCDs. Food and drug administration departments shall perform strict examination and approval for NCD prevention and treatment drugs, and strengthen supervision and inspection to ensure drug safety.

**(D) Clarify responsibilities to achieve effective synergies for NCD prevention and treatment.** Improve the NCD prevention and control network, optimize work patterns, integrate the functions of specialized public health institutions, hospitals and primary healthcare institutions, so as to create a Responsibility Community that connects all levels of medical institutions and coordinates their respective capacities to promote integration of NCD prevention and treatment. Health administrative departments shall be innovative with their work patterns and improve the management level; all levels of disease prevention and control institutions and public hospitals in all provinces, cities and counties shall set up specialized departments and designate personnel to conduct NCD prevention and treatment. Primary healthcare institutions shall strengthen NCD prevention and control functions, and improve their service capabilities.

Establish a mechanism for division of labor and classified management to prevent and treat NCDs in NCD prevention and control institutions, hospitals, specialized disease prevention institutions, and primary healthcare institutions, and clarify their respective responsibilities and tasks. Disease prevention and control institutions and specialized disease prevention and treatment institutions shall assist the health administrations to develop and implement disease prevention and control plan and program for NCDs and related diseases, and provide operational guidance and technical management. Hospitals shall carry out registries for chronic disease related information, provide diagnosis, treatment and rehabilitation services for patients with critical and acute NCDs, and provide technical guidance to primary healthcare institutions for NCD diagnosis, treatment and rehabilitation. Hospitals shall also establish two-way referral mechanisms between the hospitals and primary healthcare institutions. Primary healthcare institutions are responsible for the execution and implementation of NCD prevention and control measures.

Health education institutions shall study health education strategies and methods for NCDs, and publicize core information for NCD prevention and treatment, and guide other institutions in delivering NCD health education activities. Maternal and child healthcare institutions are responsible for providing advisory guidance for NCD prevention related to women and children.

**(E) Strengthen demonstration areas to improve NCD prevention and control capabilities.** Actively create demonstration areas for integrated prevention and control of NCDs. These areas should focus on community screening and diagnosis, identify the major health problems and risk factors in local areas, apply appropriate technologies, and develop NCD prevention and control strategies, measures, and long-term management models commensurate with local conditions. All areas shall regularly summarize the experience establishing demonstration areas, and take the lead in moving forward work of integrated NCD prevention and control. By 2015, all provinces (autonomous regions and municipalities) and more than 50% of prefecture-level cities of the eastern provinces shall establish national NCD prevention and control demonstration areas.

Give full play to the role of the patriotic health campaign committees at all levels and the existing local health promotion work committees, to enrich and deepen the connotation of public health campaigns. These campaigns will be the platform to strengthen the organization and coordination of integrated NCD prevention and control and incorporate NCD prevention and control as an evaluation standard of healthy towns and an important content of healthy cities and regional health promotion actions. It is a requirement that regions applying for National Healthy City must establish one or more national NCD prevention and control demonstration areas. Policies shall be introduced to improve the quality of the environment, increase virescence area and fitness facilities to build a healthy

environment, and to promote balanced diet, regular exercise, as well as tobacco and alcohol consumption control and result in cultivating a healthy population.

Proceed with the comprehensive NCD prevention and control cooperative projects jointly carried out by the provincial governments and the Ministry of Health. Through the joint efforts of provinces and the Ministry of Health, in-depth cooperation shall be achieved with respect to the policy research, publicity and education, intervention and control, monitoring and evaluation, capacity building, scientific research, and international exchanges in NCD prevention and control, and the integrated NCD prevention and control capacities in provinces shall be jointly improved.

**(F) Share resources and improve the management of NCD monitoring information.** Coordinate the utilization of existing resources, to improve NCD monitoring and information management, establish monitoring databases for incidence, prevalence, mortality and risk factors for NCDs, and to improve information management, resource sharing, information dissemination and other management systems. Gradually build integrated NCD monitoring sites, regulate birth and death information management, organize and implement the registration of new strokes, acute myocardial infarctions and cancers as well as cause-of-death in local areas. Establish NCDs and health influencing factors survey system, and regularly organize special investigations on NCDs and risk factors, nutrition and health of the residents, etc. In alignment with the residents' health records and regional health information technology platform construction, strengthen NCD information collection, analysis and use, and access the prevalence of NCDs.

**(G) Strengthen scientific research, and promote technical cooperation and international communication.** Strengthen the basic research, applied research and translational medical research for NCDs. Science and technology departments shall enhance support for the research on the prevention and treatment of NCDs in relevant science and technology programs, and improve science and technology support capacity for NCD prevention and treatment. Strengthen the construction of NCD prevention and treatment research and transformation bases, focus on research of NCD prevention and treatment technologies and strategies, diagnostic and treatment instruments, new vaccines and innovative drugs, and develop health education and health promotion tools, enhance scientific research transformation and utilization, and promote appropriate technologies for NCD prevention, early detection, early treatment, early rehabilitation and standard treatment, etc.

Strengthen exchanges and cooperation domestically and abroad, actively participate in the global campaigns for NCD prevention and treatment, and cooperate with international organizations, academic research institutes and universities in terms of personnel training, technical cooperation and



research, etc. Strengthen exchanges with developing countries, and establish win-win international cooperation mechanisms.

## **V. The guarantee measures**

**(A) Strengthen organization and leadership to promote the implementation of the Plan.** All areas shall take the promotion of health for all as a new strategy to change development patterns and achieve scientific development, and integrate it into various public policies, and strengthen the organization and leadership of NCD prevention and treatment. Incorporate NCD prevention and treatment into the overall planning of local socioeconomic development, and a system to establish targets, designate responsibility, and conduct performance management should be developed. The Chinese Center for Disease Control and Prevention, the National Cancer Center, and the National Center of Cardiovascular Diseases shall develop special action plans to guide local areas to promote the implementation of the Plan. All areas should focus on the overall objectives and priorities, taking into account the practical situation, and develop local prevention and treatment plan and annual work plans, carefully research on policies and measures that will facilitate the achievement of the goals, and effectively solve the problems and difficulties in NCD prevention and treatment, and put into place policy guarantees, personnel staffing, capital investment, supervision and incentives and other measures, and vigorously strengthen social mobilization, and make efforts to form a prevention and treatment synergy among the government and the society.

**(B) Perform the functions of various departments and put comprehensive measures into effect.** Strengthen inter-sector coordination and communication, establish NCD prevention and treatment inter-ministerial joint conference system, improve the working mechanism with clear division of labors, clear-cut responsibilities, and effective oversight, to coordinate and resolve the major issues in NCD prevention and treatment, and implement various control measures.

The health departments shall develop NCD prevention and treatment programs that take NCD prevention and control as core elements for the equalization of basic public health services, and that effectively integrate the new rural cooperative medical system with public health services. This should achieve the valid integration of prevention and treatment. The health departments also need to study the establishment of key projects for integrated NCD prevention and control, and provide effective organization and coordination, technical guidance, health education and behavior intervention, prevention and treatment, and monitoring and evaluation. They also should evaluate the effects of prevention and treatment, and promote appropriate technologies to guide the community and the departments implementing NCD prevention.

The development and reform departments shall incorporate NCD

prevention and treatment into economic and social development plans that will strengthen NCD prevention and treatment capacity, and ensure the basic infrastructure need to provide NCD prevention and treatment.

The departments of education shall include nutrition, NCDs, and oral health knowledge into primary and secondary school health education courses and take supervision and management measures to assure adequate time and quality of the physical activity in primary and secondary schools.

The departments of civil affairs shall further improve the medical assistance policy for poverty-stricken patients with NCDs and their families, and gradually increase the relief efforts to include more patients and families into their scope of medical assistance among those who meet the local conditions for medical assistance.

The departments of finance shall, according to the level of economic and social development, the shift of the disease spectrum and changes in the burden of diseases, arrange necessary funds for NCD prevention and control.

The departments of human resources and social security shall actively improve the basic medical insurance policy, effectively link the basic medical insurance with the payment of public health services, and gradually increase the insurance reimbursement level to reduce the health expenditure of the insured.

The sports departments shall implement the "Regulation on National Fitness", and actively implement the "National Fitness Program (2011-2015)", guide and carry out mass sports activities.

The departments of science and technology, industry and information technology, environmental protection, agriculture, commerce, radio film and television, press and publication, food and drug administration, etc. shall closely cooperate in accordance with their functions, perform their respective duties and fulfill their responsibilities.

**(C) Increase public investment, and broaden the financing channels.**

Establish multi-channel social funding mechanism for NCD prevention and treatment. Give full play to the basic role of public financing for NCD prevention and treatment, and according to the level of economic and social development and NCD prevalence, continuously increase public financial investment, gradually expand the scope of services, improve service standards, and provide more support for NCD prevention and control in west China and poverty-stricken areas. Improve the investment models, evaluate the effectiveness of input, and enhance capital efficiency. Encourage community input and guide the international organizations, enterprises, institutions and individuals to participate actively in providing public supports for NCD prevention and control.

**(D) Strengthen personnel training and improve service capacity.**

Implement mid and long-term health personnel plans and build a team with

skills of medical specialty and social work addressing the demand for NCD prevention and treatment. Strengthen the cultivation of grassroots capacity for the prevention and treatment of NCDs and oral diseases, improve the service capacity of primary health care personnel, and effectively strengthen the policy support, so that primary health care personnel can be introduced, employed and retained. Strengthen the cultivation of interdisciplinary talents in NCD prevention and treatment, particularly focusing on those who know the ropes of both clinical medical skills and public health knowledge. Enrich the curriculum of NCD prevention and treatment in the standardized training of general practitioners, resident physicians, and public health physicians, so that it will improve their professional skills. Reinforce the training on rehabilitation personnel, and improve rehabilitation medical services for patients with NCDs to reduce the rate and the degree of disability caused by NCDs. Strengthen the cultivation of academic leaders and innovative talents so that the level of scientific prevention and treatment of NCDs will improve. Encourage and support social workers to participate in NCD prevention and treatment.

**(E) Strengthen supervision and monitoring, and implement inspection and evaluation.** Establish a monitoring and reporting system for implementation of the Plan, develop a monitoring index system, strengthen supervision and inspection, promptly identify problems, and continuously improve policies. Carry out an inspection and evaluation system on the implementation progress and effectiveness of the Plan. The Ministry of Health should establish an evaluation system jointly with relevant departments and organize and conduct inspection and evaluation on the implementation of the Plan. Finally, scientifically analyze the input-output efficiency, and comprehensively evaluate the effect of policy measures.

