

Foreword

Message from Deputy Editor-in-Chief Zijian Feng — Vaccine Policy as Evidence-Based Public Health Decision Making in Action

Public health is applying science to help people live safer, more productive, and healthier lives. Making evidence-based policy recommendations on the use of vaccines to prevent, control, and even eliminate vaccine-preventable infectious diseases serves as an example of public health in action.

Vaccines are one of the most important public health interventions ever developed as they have prevented suffering and death from infectious diseases with significant savings for the healthcare system, government, and society. But how vaccines are used has a strong impact on their efficacy, safety, and disease-prevention efficiency. Policy decisions on which vaccines to use, for whom they should be administered and not administered, and upon what schedule they should be given represent a public health “prescription” for all children, adolescents, and adults.

Effective vaccine policy-making requires a variety of expertises—medicine, vaccinology, public health, epidemiology, and economics—as well as an understanding how people for whom vaccines are recommended value various health outcomes. The focal point for evidence-based policy-making is a national immunization technical advisory group (NITAG) (1). The World Health Organization (WHO) recognizes the importance of evidence-based vaccine policy, and the WHO’s Global Vaccine Action Plan, endorsed by the World Health Assembly, has a goal that all countries should have a NITAG to make vaccine policy by 2020. Global progress in developing NITAGs has largely been successful in the Global Vaccine Action Plan, as most countries have developed or are well on their way to develop their NITAGs (2).

China has a long history of vaccine advisory committees going back to 1982. In 2017, the State Council requested formation of a NITAG that uses five lines of evidence to make vaccine recommendations: burden of the disease the vaccine addresses, the vaccine’s effectiveness, its safety, its cost-effectiveness, and its production capacity. In response to this request, the National Immunization Advisory Committee (NIAC) was conceived, developed, and approved in 2017. Importantly, the new vaccine law enacted this summer by the People’s Congress recognized the NIAC as the evidence-based vaccine policy lead for China, which made the NIAC a legal entity and fulfilled a key WHO criterion for an effective NITAG (3). Vaccines and vaccine-preventable diseases are complex, and to extend the knowledge base for NIAC, Technical Working Groups of scientists specializing in the relevant diseases and vaccines synthesize all available evidence and craft evidence-informed policy options for NIAC to consider, vote on, and provide recommendations to the National Health Commission (NHC) for decision making and implementation.

With 27 voting members, the NIAC has the breadth of expertise required of a NITAG. The NIAC includes experts from academic institutions, clinical medicine, and public health. Its chair is Professor Chen Wang, a distinguished academician of the Chinese Academy of Engineering, leader of both Peking Union Medical College and Chinese Academy of Medical Sciences, and an expert in respiratory diseases. In partnership with academic experts, China CDC leads the Technical Working Groups that provide the NIAC with its depth of knowledge in specific diseases and vaccines. Currently, there are 15 task-oriented Technical Working Groups supporting NIAC on specific vaccines and vaccine-preventable diseases. China CDC also leads three permanent working groups—a general best-practices working group, a vaccine-safety working group, and an evidence-based recommendations methods working group. Together, the NIAC and its supporting working groups are developing evidence-based recommendations that ensure that China’s use of vaccines is as safe and effective as possible.

A key role of the working groups is to ensure that vaccine policy is monitored carefully for emerging safety signals, changes in vaccine effectiveness, continued acceptability of recommendations, and changes in the impact of policy on disease. Evidence emerging from China CDC’s monitoring is presented to the NIAC for updating vaccine policy to ensure that the immunization program uses vaccines in the most effective, safe, equitable, and efficient manner.

The NIAC has already changed vaccine policy for tens of millions of children in China. Ensuring the safest

protection from polio, the NIAC recommended substituting a dose of live, attenuated poliovirus vaccine with a second dose of inactivated poliovirus vaccine into the routine schedule. The NIAC added a second dose of protection from mumps, changing the schedule to two doses of measles-mumps-rubella (MMR) vaccine from the previous one dose of measles-rubella vaccine followed by the MMR vaccine. The NIAC also recommended changes to emergency wound management to reduce the use of potentially allergenic immunoglobulins and increase the use of the much-less-allergenic tetanus vaccine. Finally, the NIAC updated the routine immunization schedule to reduce the number of false contraindications to vaccination so that certain vulnerable children can also receive the benefits of vaccines.

China CDC Weekly is “the voice of China CDC”, and will publish technical reports by the working groups and NHC-approved NIAC recommendations so that programs, clinicians and the public will be able to see and understand the scientific rationale for vaccine recommendations and policy. I believe that parents and the public will be pleased and reassured to see the care and thoughtfulness with which vaccine recommendations are made in China.

The future is bright for the NIAC and science-based vaccine policy. *China CDC Weekly* will document every step along the path to ensure that vaccination remains the safest, most effective way to protect children, adolescents, and adults from vaccine-preventable diseases in China.



Zijian Feng, MD
Deputy Editor-in-Chief, *China CDC Weekly*
Deputy Director-General, Chinese Center for Disease Control and Prevention

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