

## Perspectives

## Strengthening the Construction of the Talent Team and Promoting the High-Quality Development of Disease Prevention and Control

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Talent is essential for development, and career development strategies should prioritize talent cultivation (1–2). China's CDC workforce comprises a diverse, multidisciplinary team of disease prevention and control experts. This workforce includes personnel from various CDC agencies, public medical institutions, township health centers, and community health service centers. Strengthening the development of this pool of talent is crucial for enhancing the quality of disease prevention and control systems and forms the foundation of a robust public health infrastructure (3). On December 25, 2023, the State Council released the Guideline on Promoting the High-Quality Development of Disease Prevention and Control, outlining a comprehensive strategy for strengthening the CDC's talent base. This paper analyzes this policy to clarify the historical context, principal actions, and future trajectory of workforce development within China's CDC.

### Strengthening the CDC Career Talent Team

The Chinese government has prioritized the development of professional disease control and prevention teams. The “Outline of the 14th Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Long-Range Objectives through the Year 2035,” published in March 2021, outlines strategies for strengthening public health schools and professional teams. Subsequently, the central government and associated departments released numerous policy documents (Table 1) focused on bolstering public health school and workforce capacity, advancing the medical and health service system, safeguarding population health, and fostering medical and health workforce development. These initiatives constitute a comprehensive strategic framework for developing the talent pool essential for disease control.

This series of proposed policies focuses on key enhancements within the public health sector, including increasing the proportion of professional and technical personnel and strengthening the public health and health engineering workforce through enhanced training and incentives (4). The establishment of new training paradigms for public health personnel has also been suggested (5). Efforts to strengthen core disease control teams include improving competencies in epidemiological investigations, proposing systems that reduce emphasis on publication requirements, and piloting new representative systems (6). Furthermore, the proposed policies support the strategic development of public health roles, the restructuring of positions within health institutions, and enhanced collaboration between public health and medical institutions. This collaboration would facilitate personnel exchanges, promote standardized training for public health physicians, and initiate the “Grassroots Disease Control Backbone Talent Capacity Improvement Project.” Proposed enhancements to investment and remuneration frameworks would foster research and community service, with improved treatment guaranteed for personnel. Dynamic adjustment of staffing levels in public health institutions is planned, along with the rational setting of performance-based pay scales and the introduction of benefits such as health and epidemic prevention allowances and temporary work subsidies (7). Finally, the proposals would augment the public health physician system by potentially granting prescribing rights and enhancing staffing norms across specialized public health entities to bolster team capacity and operational efficacy in disease prevention and control (8).

### The New Policy Has Been Developed Carefully

The updated guidelines implement a comprehensive

TABLE 1. Since the 14th Five-Year Plan, documents on the construction of disease control talent team have been released.

Released time	Issued institution	Policy name
Jun 2021	The National Development and Reform Commission	The 14th Five-Year Plan for the Construction of a High-quality Medical and Health Service System
Dec 2021	The Ministry of Education, the National Development and Reform Commission, the National Health Commission, and the National Bureau of Disease Control and Prevention	Notice on the Construction of High-Level Public Health Schools
Apr 2022	The General Office of the State Council	The “14th Five-Year Plan” for national health
Aug 2022	The National Health Commission	The “14th Five-Year Plan” for health talent development
Mar 2023	The General Office of the Central Committee of the Communist Party of China and the General Office of the State Council	On Further Improving the Medical and Health Service System

strategy encompassing various aspects.

**Public health talent cultivation necessitates a structured training system:** At the collegiate level, this involves developing high-quality public health schools and integrating public health and preventive medicine disciplines into the “National Strategic Talent Reserve Enrollment Plan for Key Fields.” Postgraduate education should be promoted, standardized training for public health physicians should be actively supported, and public health personnel should receive enhanced clinical knowledge training. Continuing education is also crucial for training professional and technical staff at or above the intermediate level within disease control institutions.

**Talent utilization should be optimized by establishing a comprehensive management system:** This system should foster trust to better integrate independently sourced talent into structured research programs. An emergency research protocol should be developed to enable the strategic deployment of experts during public health crises. Additionally, an exchange and training framework should be created to facilitate reciprocal movement of public health professionals and clinicians between medical and health institutions. Finally, comprehensive strategies, including short-term training programs, doctoral service groups, and targeted assistance, should be implemented to encourage the deployment of talent to underserved and remote areas, as well as to frontline, grassroots locations.

**Talent evaluation should prioritize the development of a system that aligns with disease control principles:** This system should emphasize enhanced work performance and refined professional title evaluation standards. A structured and categorized assessment method, particularly focused on grassroots-level orientations, should be implemented. Senior professional and technical positions should be allocated to grassroots disease control institutions, with separate quota allocations. Additionally, clear promotional

pathways within health engineering, inspection, and testing technology disciplines should be established to improve professional categorization.

**To foster talent, it is essential to prioritize incentivization and cultivate enthusiasm:** This can be achieved through robust personnel training, comprehensive support programs, and the strategic appointment of leading experts across diverse domains. Furthermore, increasing the proportion of middle- and senior-level professional and technical positions within disease control institutions is recommended. A scientifically and rationally designed performance-based salary structure should be implemented to enhance the remuneration of disease control professionals. Additionally, establishing an awards and recognition mechanism can increase the visibility of exemplary figures and foster a culture of appreciation (9–10).

## DISCUSSION

A key strategy for enhancing China’s disease prevention and control system is strengthening its talent base. This approach leverages China’s extensive experience in managing disease incidence and prevalence while fortifying the public health protection network to safeguard future public health. However, challenges remain, including a disconnect between public health training and future public health system needs, a shortage and uneven distribution of skilled personnel, and a pressing need for capacity building (11). During the 13th Five-Year Plan, CDC organizations experienced staffing reductions, and the percentage of graduates with advanced public health degrees entering CDC employment remained below 5%. Modernizing training approaches and aligning talent incentives with human resource management within CDCs are crucial for promoting workforce engagement (12). Furthermore, the workforce

demographic within many CDC agencies, largely composed of individuals nearing retirement age (over 50), underscores a significant generational gap. To address these challenges, the guidelines emphasize a problem-oriented, application-focused approach, advocating for evidence-based decision-making in developing a comprehensive CDC career development plan. This plan encompasses all aspects of talent management, from training and utilization to evaluation and incentivization, with the goal of establishing a work and evaluation system tailored to the specific functions of CDCs. Implementing these guidelines, along with incentives for scientific research, is expected to optimize talent team structure, bolster morale, and cultivate a high-quality CDC workforce. This initiative is essential for advancing CDCs and contributes to the broader goals of promoting a healthy China and contributing to global health (13–15).

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