

# Practice and Analysis of Teacher Management and Development in Standardized Training for Resident Physicians

Ying Liu<sup>1,2</sup>, Yao Yao<sup>1\*</sup>

1. Continuing Education Section of The Third Affiliated Hospital, Sun Yat-sen University, Guangzhou 510630, China

2. Department of Infectious Diseases, The Third Affiliated Hospital, Sun Yat-sen University, Guangzhou 510630, China

**Abstract:** Standardized training for resident physicians (residency training) is a key link in medical education, which is crucial for improving the quality of medical services and cultivating medical talents. As the core of ensuring the quality of residential training, the effectiveness of teacher management directly affects the effectiveness of training. This study focuses on the practice of teacher management in the residential training base of the Third Affiliated Hospital of Sun Yat sen University. By analyzing its management process and development strategies, the aim is to provide reference and inspiration for similar residential training bases. The research results show that the base has implemented a full chain of teacher management, including application, selection, training, employment, evaluation, and incentive (exit), forming a dynamic management system with clear levels. By clarifying the path of teacher development, optimizing the teacher growth system, constructing a 5G teacher development platform, and conducting data analysis on teacher management, the base has significantly improved its teacher structure and teaching quality. This study provides an empirical research basis for the management of teachers in residential training bases and proposes suggestions for future development strategies.

**Keywords:** Standardized training for resident physicians; Teacher management; Teacher development; Teacher development; Teaching quality

Standardized training for resident physicians is the key to improving the quality of medical services and talent cultivation, and teacher management is the core to ensuring the quality of training. The residential training base of the Third Affiliated Hospital of Sun Yat sen University is managed through a full chain, from application to withdrawal, ensuring clear and dynamic levels of teaching staff. The base has implemented a management process that includes application, selection, training, employment, evaluation, motivation, and exit. Through regular evaluation and assessment, an incentive mechanism has been established to encourage teachers to improve their teaching abilities. At the same time, the base has also established personal development files for teachers, recording teaching, scientific research, and training situations to support teacher career planning and development. Dynamic management enables the teaching staff to adapt to educational development and improve teaching quality.

## 1. Established teacher development strategies and optimized teacher growth system

In order to further optimize the teacher growth system, the base has taken a series of measures, established teacher development strategies and optimized the teacher growth system, including clarifying job responsibilities, refining regulatory systems, and implementing incentive evaluation mechanisms. These measures aim to ensure the quality of the teaching staff, enhance their teaching motivation, and promote their professional development.

1.1 Establishing a path for teacher development: In this research base, teacher development is seen as a systematic process aimed at promoting the professional growth of clinical physicians from ordinary teachers to core experts. The characteristics of the teaching staff structure of the base are reflected in its clear hierarchical division. Teachers are divided into different levels, including ordinary teachers, backbone teachers, supervisory experts, and core experts, each with clear responsibilities, requirements, and promotion paths. Ordinary teachers are mainly responsible for basic teaching work, while backbone teachers play a greater role in teaching and research. Supervisory experts and core experts play a key role in teaching guidance, curriculum construction, and teacher training. This hierarchical division not only helps to clarify the career development path of teachers, but also provides a solid foundation for the construction of the teaching staff in the base. Each stage has specific development goals and requirements. This structured development system not only provides physicians with a clear career advancement roadmap, but also ensures the overall quality of the teaching staff and the continuous improvement of teaching quality.

1.2 Clarify the job responsibilities of teachers: The base has clearly defined the job responsibilities of teachers at different levels. Ordinary teachers are responsible for basic teaching tasks, backbone teachers undertake more teaching and research work, supervisory experts are responsible for guiding and supervising teaching quality, and core experts play a leading role in teaching reform, curriculum development, and teacher training. This clear division of responsibilities helps teachers understand their responsibilities and obligations, and receive corresponding training and assessment.

1.3 Refine the three-layer regulatory system: In order to ensure the effectiveness of teacher management and high standards of teaching quality, the base has established a three-layer regulatory system. The first level professional base is responsible for daily teaching management and teacher evaluation; The second level Continuing Education Department is responsible for teacher training and teaching supervision; The management of the third level hospital is responsible for comprehensively evaluating the performance of the teaching staff and adjusting the teaching staff as needed. This hierarchical regulatory system ensures the comprehensiveness and systematicity of teacher

management.

1.4 Implementation of incentive evaluation mechanism: The base has implemented a series of incentive measures to stimulate the teaching enthusiasm and innovative spirit of teachers. These measures include providing subsidies and rewards based on the workload and ratings of teachers, using teaching performance as an important basis for professional title promotion, and establishing an annual system for selecting outstanding teachers and teaching masters. These incentive measures aim to recognize and reward outstanding teachers, while encouraging all teachers to pursue higher teaching achievements.

This platform integrates recording, training, assessment, management, planning, and guidance functions, providing teachers with a comprehensive personal development support system. 1.5 Construction of 5G Teacher Development Platform: In order to better support the personal development of teachers, the base has built an information-based and intelligent 5G teacher development platform. Through this platform, teachers can better plan their career development path and obtain necessary resources and guidance.

## 2. Survey on the Development of Base Teachers

To understand the feelings, confusion, and use of information technology among teachers in the standardized training base for resident physicians during their career development, in order to provide data support and improvement suggestions for teacher management and development. A total of 72 valid questionnaires were collected, and the statistical results are as follows:

**Table 1 Investigation Form on the Development of Teachers in Training Bases**

project	Number of people	proportion	project	Number of people	proportion
Number of years of residency and training teachers			Informatization enhances work efficiency		
1-3 years	twenty-four	33.30%	Very uncertain	sixteen	22.20%
4-6 years	twenty-one	29.20%	A bit uncertain	twenty-eight	38.90%
7-10 years	fifteen	20.80%	be unable to explain clearly	twelve	16.70%
Over 10 years	twelve	16.70%	Not very certain	fourteen	19.40%
Clarity of teacher development path			Satisfaction with information systems		
Very clear	six	8.30%	Very satisfied	eight	11.10%
Relatively clear	thirty-two	44.40%	Relatively satisfied	thirty-six	50%
commonly	twenty-eight	38.90%	commonly	twenty-four	33.30%
Not very clear	six	8.30%	Not very satisfied	four	5.60%
Very unclear	0	0	Very dissatisfied	0	0
The Confusion of Balancing Teaching and Research			Means believed to be beneficial for teacher development		
How to arrange time reasonably	forty-eight	66.70%	Teacher Development Planning Training	forty-four	61.10%
How to determine priority	thirty-six	50%	Teaching and Research Workshop	thirty-eight	52.80%
How to enhance research capabilities	thirty	41.70%	Teaching Skills Enhancement Course	forty-two	58.30%
How to improve teaching quality	twenty-two	30.60%	Expert guidance system	thirty	41.70%
other	eight	11.10%	Academic exchange platform	twenty-six	36.10%
			other	ten	13.90%

We found that teachers in standardized training bases for resident physicians generally have some feelings and confusion in their career development process. Most teachers feel clear about the clarity of their career development path. The specific confusion regarding how to balance teaching and research, apart from medical work, mainly lies in how to schedule and determine work priorities. Most teachers are satisfied with the information system and believe that it has improved work efficiency, but there are also many teachers who feel uncertain. In response to these issues, teachers generally believe that measures such as teacher development planning training, teaching and research workshops, and teaching skill enhancement courses can effectively help them solve the difficulties in teacher development. These results provide a basis for improving teacher management and development in the base, which helps to formulate more effective support policies and measures.

## 3. Discussion and analysis

This study provides an in-depth analysis of teacher management in resident physician training (residency training), with the aim of

improving training quality through management strategies. The residential training base has implemented a comprehensive management process, including the application, selection, training, employment, evaluation, motivation, and exit of teachers, forming a clear and dynamically adjusted management system. This not only ensures the quality of the teaching staff, but also provides guidance and support for the personal development of teachers.

The full chain management and dynamic adjustment of the base ensure the continuous improvement of the quality of the teaching staff and teaching quality. At the same time, clear division of responsibilities, hierarchical supervision system, and incentive evaluation mechanism provide teachers with a clear career development path and necessary support, thereby promoting the overall quality improvement of the teaching staff.

Research has found that teachers face confusion in their career development, confusion in balancing teaching and research, and uncertainty in improving their teaching skills. Suggest organizing development planning training, clarifying goals and paths, allocating workload reasonably, encouraging scientific research participation, and utilizing big data and AI technology to optimize management and improve efficiency.

In summary, this study emphasizes the core role of teacher management in residential training and proposes a series of targeted development strategies and suggestions. Through continuous practice and innovation, we hope to provide higher quality teacher support for standardized training of resident physicians, thereby further improving the quality of medical services and the effectiveness of medical talent cultivation.

## Reference:

- [1] Wu Wang. Research and Exploration on the Connotation Construction and Improvement of Teaching Quality of Experimental Teaching Teams [J]. *Experimental Technology and Management*, 2012, 29 (12): 4.
- [2] Yaxuan Xu, Huajun Sun, Yuxuan Bai, et al. Construction of Performance Evaluation Index System for Standardized Training Projects for Resident Physicians in Tianjin [J]. *Chinese Hospitals*, 2023 (12): 51-54.
- [3] Yunfang He, Jing Yang, Bo Xie, et al. Masno's hierarchy of needs theory and teacher growth laws: reflections on the construction of incentive mechanisms for housing and training teachers [J]. *Postgraduate Medical Education in China*, 2021, 5 (3): 4.
- [4] Fengli Ning, Hanlei Shen, Mingyu Lai, et al. Exploring the Application of Mentoring System in Standardized Training of Resident Physicians [J]. *China Continuing Medical Education*, 2023, 15 (12): 155-159.

**Author Introduction:** Ying Liu, 1988, female, Han ethnicity, Shaoyang, Hunan, holds a doctoral degree and is a master's supervisor. She is also the deputy chief physician of the Department of Infectious Diseases at the Third Affiliated Hospital of Sun Yat sen University.

Corresponding author: Yao Yao (1984-), female, Han ethnicity, Changzhou City, Jiangsu Province, doctoral degree, assistant researcher at the Third Affiliated Hospital of Sun Yat sen University, hospital management and medical education.

**Fund:** 1. 2023 Guanedong Province Undergraduate University Teaching Quality and Teaching Reform Engineering Construction Project  
 2. 2023 Guangdong Province Undergraduate University "New Medical Science" Teaching Reform Project: Application of Smart Information Platform in Undergraduate Teaching  
 3. The Higher Education Teaching Reform Project of Sun Yat sen University in 2023