
AI translation · View original & related papers at
chinaxiv.org/items/chinaxiv-202309.00189

Advances in the Development of Quality Evaluation Systems for General Practice Faculty: Post-print

Authors: Zhao Wenwen, Wang Rongying, Zhang Jinjia, Zhang Yali, Zhang Min, Wang Rongying

Date: 2023-09-22T00:00:00+00:00

Abstract

Ensuring the quality of general practice teachers is not only a crucial foundation for training qualified general practitioners, but also concerns the relationship between general practice and other professional disciplines, serving as an important guarantee for elevating the status and promoting the development of general practice. Through reviewing relevant websites and literature on general practitioner training and general practice teacher training both domestically and internationally, this article summarizes the roles and functions, admission criteria, quality evaluation standards, and certification standards of general practice teachers, and provides prospects for the development of quality evaluation and certification indicator systems for general practice teachers in China. It suggests that future efforts should focus on constructing quality evaluation and certification indicator systems adapted to China's national conditions, establishing an authoritative professional committee for general practice teachers, formulating standards for admission, evaluation, and assessment of general practice teachers, establishing a systematic and comprehensive management system for general practice teacher training, selecting 1-2 outstanding general practice teacher training bases in each province, and building a relatively stable and high-quality general practice teaching faculty, which will provide a beneficial reference for continuous quality improvement in general practice teacher cultivation in China.

Full Text

Advances in the Construction of Quality Evaluation System for General Practice Faculty

ZHAO Wenwen, WANG Rongying*, ZHANG Jinjia, ZHANG Yali, ZHANG Min

General Practice Department, the Second Hospital of Hebei Medical University, Shijiazhuang 050000, China

*Corresponding author: WANG Rongying, Chief physician/Professor; E-mail: wangrongyingjz@163.com

Abstract

Ensuring the quality of general practice faculty is not only fundamental to training qualified general practitioners but also crucial for establishing the relationship between general practice and other medical specialties. It serves as an important guarantee for elevating the status of general practice and promoting its development. This article reviews domestic and international literature and official websites related to general practitioner training and general practice faculty development, summarizing the roles and functions, admission criteria, quality evaluation standards, and certification standards for general practice faculty. Looking forward, China should construct a quality evaluation and certification indicator system adapted to its national conditions, establish an authoritative professional committee for general practice faculty, formulate standards for faculty admission, evaluation, and assessment, and create a systematic and comprehensive training management system. The article proposes selecting 1-2 outstanding general practice faculty training bases in each province to establish a relatively stable, high-quality faculty team, which will provide valuable reference for continuous quality improvement in general practice faculty development in China.

Keywords: General practitioners; Teacher training; General practice faculty; Quality assessment; System construction

Introduction

In July 2011, the State Council's "Guiding Opinions on Establishing a General Practitioner System" outlined a vision to initially establish a vibrant general practitioner system in China by 2020, with a unified training model and a "first-contact care at the grassroots level" service pattern. After nearly a decade of development, China has met the quantitative requirements for general practitioners, but significant quality variations persist, leaving them unable to fully meet the demands of primary healthcare. Consequently, cultivating excellent general practitioners has become an urgent priority. This endeavor fundamentally depends on high-quality general practice faculty. The United Kingdom, Australia, and the United States have developed comprehensive and applicable quality systems for general practice faculty, featuring strict admission standards, rigorous training and assessment processes, and robust career development and support systems. In contrast, China still lacks a well-developed training system and quality evaluation framework for general practice faculty. This article

examines domestic and international literature and official resources to summarize the roles, admission criteria, quality evaluation standards, and certification standards for general practice faculty, and proposes directions for developing China's quality evaluation and certification indicator system.

Current Status of General Practice Faculty Quality System Development

2.1 The UK General Practice Faculty Quality System

In the UK, registered general practitioners may apply for faculty qualification after two years of practice, though some regions require clinical supervisory experience. Applicants must complete a five-day faculty training program, submit three teaching papers, and develop one teaching project. The application process involves multiple observations of experienced faculty teaching, both live and through recorded videos, followed by submission of reflective materials. Additionally, applicants must develop clear teaching plans and strategies for improving their teaching capabilities. The entire assessment process typically takes 1-2 years. After fulfilling requirements for training materials, video recordings, and teaching plan documentation, candidates can apply for assessment through local medical schools.

Admission Criteria: (1) Minimum five years of general practice teaching experience; (2) Voluntary commitment to teaching with sufficient time and energy; (3) Dedication to continuous learning and teaching skill improvement; (4) Competence in evaluation and feedback.

Assessment Methods: Primarily through on-site evaluation, including assessment of the clinical environment, teaching facilities, and teaching competence. Multi-source feedback is obtained through interviews with the candidate, clinic directors, colleagues, and trainees to ensure comprehensive and objective evaluation. Interview content covers professionalism, communication skills, and theoretical and practical teaching abilities.

Quality Evaluation Standards: (1) Assessment and feedback capacity: Ability to clearly identify trainee learning issues, guide problem-solving, and provide constructive feedback. (2) Professional competence: Familiarity with general practice theory and learner-centered educational principles, with career planning skills and ability to adjust teaching pace according to trainee capabilities. (3) Teaching ability: Mastery of professional theory and common issues, understanding of training requirements, emphasis on teamwork, and ability to complete teaching evaluations and documentation. (4) Teaching effectiveness and personal development: Timely and dynamic understanding of trainee progress, teaching evaluation skills, and self-regulated practice abilities.

Certification Standards: Initial faculty qualification is valid for 2-3 years, after which re-certification is required. Registration must be renewed every five years, with certification standards aligned with quality evaluation criteria.

2.2 The Australian General Practice Faculty Quality System

The Royal Australian College of General Practitioners (RACGP) requires faculty candidates to be passionate about general practice, excellent practitioners, and possess at least four years of training experience. Applicants must be members of the state medical board with no history of membership cancellation.

Admission Criteria: Established by RACGP in 2005, requirements include: (1) Qualified physician; (2) Excellent general practitioner; (3) Passion for general practice; (4) Teaching qualifications; (5) Teaching competence with mastery of instructional techniques and guaranteed time for student supervision. The criteria emphasize candidates' dedication to general practice and teaching, focusing on clinical competence and teaching experience.

Assessment Methods: Objective Structured Teaching Evaluation (OSTE) is used to assess teaching competence.

Quality Evaluation Standards: (1) Teaching attitude: Assessment of passion for general practice, active dedication, and commitment to continuous improvement. (2) Teaching methods: Flexible application of general practice thinking, problem-based learning (PBL), role-playing, case teaching, group discussion, and heuristic teaching, with emphasis on trainee interaction. (3) Teaching content: Focus on rotation guidelines with prominent general practice concepts. (4) Teaching planning: Measurable processes and outcomes, achievable goals and activities, strong relevance to general practice, and effective time management.

Certification Standards: Initial certification is valid for one year, after which re-certification is required, followed by renewal every three years.

2.3 The US General Practice Faculty Quality System

Managed by the American Board of Family Medicine, US faculty must be members of the Accreditation Council for Graduate Medical Education (ACGME). The system emphasizes team-based teaching, with faculty teams comprising general practice educators, specialists, pharmacists, behavioral therapists, social workers, and nutritionists. At least one team member must be a dedicated teaching faculty with sufficient teaching time.

Admission Criteria: Few specific requirements: (1) ACGME certification; (2) Emphasis on team-based teaching with at least one dedicated faculty member per six residents; (3) All team members must have extensive work experience; (4) Assessment every six years with passing scores. Notably, no explicit requirements for academic degrees or professional titles exist.

Assessment Methods: OSTE is also employed to evaluate teaching competence.

Quality Evaluation Standards: (1) Professionalism: Passion for teaching, strong clinical competence, continuous self-improvement in teaching and medical practice centered on general practice thinking. (2) Teaching methods: Exten-

sive use of PBL, outcome-based education (OBE), case discussions, and other flexible approaches, with trainee-centered development of active participation and independent thinking. (3) Evaluation and feedback capacity: Regular assessment of trainee progress and teaching effectiveness, using trainee feedback to identify teaching deficiencies and improve quality.

Certification Standards: Faculty must re-register every six years, with certification standards aligned with quality evaluation criteria.

2.4 China's General Practice Faculty Quality System

China's general practice faculty primarily comprises three categories: theoretical instructors, clinical practice instructors, and community practice trainers. The "Implementation Opinions on General Practice Faculty Training (Trial)" specifies admission criteria for clinical and community practice instructors based on educational background and clinical experience, but lacks clear standards for theoretical instructors. Theoretical instructors mainly come from general practice departments in medical universities and preventive medicine programs, responsible for teaching general practice principles and preventive care. Clinical practice instructors consist of hospital specialists and general practitioners teaching clinical knowledge and skills. Community practice instructors are community-based general practitioners responsible for community health services and management training.

Current Challenges: Despite progress, China's general practice faculty quality evaluation system faces several issues. First, there is no authoritative management body or systematic quality evaluation framework. Second, training lacks components on communication skills, teaching methods, and evaluation tools, with no unified textbooks or systematic training plans. Furthermore, quality evaluation standards and certification bodies are lacking. Finally, most community practice instructors have transitioned from other roles, clinical instructors primarily rely on hospital specialists, and dedicated, high-quality general practice faculty are scarce. Research shows only 26% of provinces have faculty who have received systematic general practice training.

Recommendations for Improving China's General Practice Faculty Quality Evaluation System

Faculty admission, quality evaluation, and certification are three critical components of faculty development. High-quality faculty directly influences future general practitioners' competence, and strengthening faculty development is essential for ensuring both quantity and quality of general practitioners.

3.1 Establish Authoritative Management to Ensure Faculty Quality

An authoritative professional committee for general practice faculty should be established to develop admission, evaluation, and certification standards and

create systematic training management systems. Under this committee' s supervision, each province should select 1-2 outstanding training bases and optimize admission standards. Drawing on international experience and adapting to China' s context, admission criteria should prioritize general practice concepts and clinical reasoning abilities. Candidates should hold university teaching qualification certificates and general practice faculty training certificates, embodying dual roles as physicians and educators. This will create a relatively stable, high-quality faculty team. Additionally, medical schools meeting training requirements should establish independent general practice departments, introduce general practice courses in early undergraduate years, and develop graduate education to attract excellent medical students and enhance faculty teaching and research capabilities.

3.2 Establish Training Systems and Programs

Experts from various fields should collaborate to compile unified training textbooks and standardize training systems. Training should combine centralized and online methods, with four weeks of annual theoretical and skills training at base institutions covering clinical teaching techniques, communication skills, general practice thinking, and teaching skills. Following centralized training, seven weeks of self-study are recommended, plus participation in 4-6 annual online teaching conferences focusing on teaching methods, plans, periodic assessments, and challenges. Internet and team teaching advantages should be leveraged by establishing teaching groups led by systematically trained core faculty who organize collaborative lesson preparation. Faculty should be encouraged to pursue advanced training domestically and internationally, while inviting experts to teach pedagogy, psychology, and instructional techniques. Regular teaching competitions and ward round demonstrations can comprehensively improve faculty capabilities and motivation, with teaching performance integrated into performance evaluations and professional promotion to recognize faculty contributions.

3.3 Implement Multi-Dimensional, Multi-Channel, Multi-Perspective Evaluation

The professional committee should emphasize process management through regular quality evaluations assessing not only individual faculty but also training base conditions and incentive mechanisms. Evaluation should examine faculty in their dual roles as physicians and teachers, covering professional competence, professionalism, contemporary teaching concepts, teaching ability, evaluation and feedback capacity, and continuing education. Multi-source feedback should be obtained from supervisors, trainees, colleagues, academic affairs offices, and self-assessments.

3.4 Establish Faculty Certification Systems

Training and certification should be strengthened with exit mechanisms. Regular assessments should review faculty qualifications for continued teaching. Standardized quality evaluation and certification criteria should measure teaching competence, with renewal every five years. Those failing assessment must retake it the following year to maintain teaching eligibility.

Conclusion

The UK, Australia, and US have established strict admission standards, training and assessment processes, and comprehensive career development support systems for general practice faculty. In contrast, China lacks a unified, authoritative quality evaluation system. To improve general practitioner training quality and ensure general practice development, China should establish authoritative bodies with top-level training system design, create admission, evaluation, and certification standards adapted to national conditions, conduct comprehensive evaluations of teaching quality and effectiveness, implement regular assessments with timely feedback, and emphasize process management. This “evaluation-promoting-construction” approach will enhance faculty quality and teaching effectiveness, establishing a long-term quality evaluation system to support stable and rapid development of general practice education in China.

Author Contributions: ZHAO Wenwen collected and organized materials and drafted the manuscript. ZHANG Jinjia, ZHANG Yali, and ZHANG Min performed quality control and revision. WANG Rongying was responsible for final revision and overall accountability.

Conflict of Interest: The authors declare no conflicts of interest.

References: [1] State Council. Guiding Opinions of the State Council on Establishing a General Practitioner System[A/OL]. (2011-07-01)[2023-07-22]. https://www.gov.cn/zwggk/2011-07/07/content_{1901099}.htm. [2] BLOUNT E, KIRBY-BLOUNT H, MOULTON L. The Complete MRCGP Casebook[M]. London: CRC Press, 2021. [3] The Royal Australian College of General Practitioners. General practice: connecting the dots for students and junior doctors[EB/OL]. (2012-06-22)[2023-04-26]. <http://www.Racgp.Org.au/download/Documents/Membership/connect1hedots.pdf>. [4] The Royal Australian College of General Practitioners. The RACGP Curriculum for Australian General Practice[EB/OL]. (2011-02-07)[2023-04-26]. <http://curriculum.racgp.org.au/media/13228/racgp2011curriculum.pdf>. [5] YANG Hui, Shane Thomas, Colette Browning, et al. Research on faculty standards for general practice education: inspiration from apprenticeship training[J]. Chinese General Practice, 2007, 10(13): 1046-1051. DOI:10.3969/j.issn.1007-9572.2007.13.002. [6] General Office of the Ministry of Health, General Office of the Ministry of Education, General Office of the Ministry of Finance, et al. Notice on Issuing the “Implementation Opinions on General Practice Faculty Training (Trial)” [A/OL]. (2012-07-30)[2023-07-22]. https://www.gov.cn/gzdt/2012-07-30/content_{1901099}.htm.

07/30/content_{2194873}.htm. [7] SVAB I, ALLEN J, ZEBIENE E, et al. Training experts in family medicine teaching[J]. Eur J Gen Pract, 2016, 22(1): 58-63. DOI:10.3109/13814788.2015.1118456. [8] The Royal Australian College of General Practitioners. Guidance for deaneries/letbs on the standards for gp specialty training[EB/OL]. (2019-09-28)[2023-04-26]. [https://gp-training.hee.nhs.uk/bucks/wp-content/uploads/sites/95/2021/09/Guidance_{for}_{Deaneries}-on_{the}_{Standards}_{for}_{GP}_{Training}-FINAL-Jan_{2014}](https://gp-training.hee.nhs.uk/bucks/wp-content/uploads/sites/95/2021/09/Guidance_{for}_{Deaneries}-on_{the}_{Standards}_{for}_{GP}_{Training}-FINAL-Jan_{2014}.). [9] LIU Yanling, XIE Miaorong, CHEN Jianjun. Research on general practice faculty development at home and abroad[J]. Chinese General Practice, 2017, 20(4): 388-393, 398. DOI:10.3969/j.issn.1007-9572.2017.04.003. [10] SHACKLES D, WARD G, SKINNER L. Learning to train: developing the framework for a Scottish national general practice trainers' course[J]. Educ Prim Care, 2007, 18(5): 616-623. DOI:10.1080/14739879.2007.11493595. [11] CHARLTON R. Career lifetime advances-changes in general practice in the last 25 years[J]. Clin Med, 2010, 10(6): 567-570. DOI:10.7861/clinmedicine.10-6-567. [12] MCCULLOCH G L. Cum scientia caritas[J]. J R Coll Gen Pract, 1969, 18(89): 315-320. [13] NHS England South West. Patient Group Directions (PGDs)[EB/OL]. (2017-03-27)[2023-04-26]. <https://www.england.nhs.uk/south/info-professional/pgd/>. [14] HM Government. Disability Discrimination Act (DDA)[EB/OL]. (1995-11-08)[2023-04-26]. <https://www.rnib.org.uk/sight-loss-advice/equality-rights-and-employment/disability-discrimination-actdda>. [15] The Royal Australian College of General Practitioners. Standards for general practice education and training trainers and training posts[EB/OL].[2023-04-26]. <https://www.racgp.org.au/education/education-providers/regional-training/standards-for-general-practice>. [16] The Royal Australian College of General Practitioners. The five domains of general practice[EB/OL].[2023-04-26]. <https://www.racgp.org.au/education/education-providers/curriculum/understanding-the-curriculum/the-five-domains-of-general-practice>. [17] The Royal Australian College of General Practitioners. Becoming a GP in Australia[EB/OL]. (2012-09-01)[2023-04-26]. <http://www.racgp.org.au/becomingagp/what-is-a-gp/why-fellowship/>. [18] The Royal Australian College of General Practitioners. Definitions[EB/OL]. (2012-09-01)[2023-04-26]. <http://www.racgp.org.au/becomingagp/imgaus/pep>. [19] The Royal Australian College of General Practitioners. Specialist Pathway Program (SPP)[EB/OL].(2012-09-01)[2023-04-26]. <http://www.racgp.org.au/becomingagp/imgos/specialist-pathway>. [20] The Royal Australian College of General Practitioners. Vocational Training Pathway[EB/OL].(2012-09-01)[2023-04-26]. <http://www.racgp.org.au/becomingagp/students/vocational-training-pathway>. [21] The Royal Australian College of General Practitioners. Practice Based Assessment Handbook for Candidates[EB/OL]. (2011-01-01)[2023-04-26]. <http://www.racgp.org.au/download/documents/Policies/Assessment/201103pbahandbook.pdf>. [22] The Royal Australian College of General Practitioners. Exam Handbook for Candidates[EB/OL].(2012-09-01)[2023-04-26]. <http://www.racgp.org.au/download/Documents/Policies/Asses>. [23] Dene Egglestone. Standard Setting for Fellowship Exam[EB/OL]. (2013-05-01)[2023-04-26]. <http://www.gp10.com.au/slides/thursday/slide25.pdf>. [24] ZHAO Xinxin, SUN Xiaoting, PAN Zhigang, et al. Comparative study of

general practitioner training models in the UK, US, and China[J]. Chinese General Practice, 2018, 21(22): 2660-2663, 2667. DOI:10.12114/j.issn.1007-9572.2018.22.003. [25] Accreditation Council for Graduate Medical Education. The family medicine milestone project. Joint initiative of ACGME and the American Board of Family Medicine[EB/OL]. (2015-10-01)[2023-04-26]. <https://www.acgme.org/Portals/0/PDFs/Milestones/FamilyMedicineMilestones.pdf>. [26] ZHAO Rui, LIU Feng, ZHU Kun. Analysis of competency requirements and current status of general practitioners[J]. Chinese Journal of Social Medicine, 2020, 37(3): 261-264. DOI:10.3969/j.issn.1673-5625.2020.03.011. [27] LIANG Wannian. General Practice[M]. 4th ed. Beijing: People's Military Medical Press, 2012. [28] LU Yuan, WANG Chaoxin, WANG Minghong, et al. Construction of general practice clinical faculty standards based on analytic hierarchy process[J]. Chinese General Practice, 2016, 19(4): 442-446. DOI:10.3969/j.issn.1007-9572.2016.04.017. [29] LU Yuan, YU Dehua, PAN Ying, et al. Current status and construction proposals for general practice faculty standards at home and abroad[J]. Chinese General Practice, 2015, 18(21): 2493-2497. DOI:10.3969/j.issn.1007-9572.2015.21.001. [30] ZHAO Yiming, WANG Yongchen. Current status and prospects of general practice faculty standard construction[J]. Chinese General Practice, 2018, 21(31): 3855-3857, 3862. DOI:10.12114/j.issn.1007-9572.2018.31.016. [31] ZHU Wenhua, FANG Lizheng, DAI Honglei, et al. Construction of a four-element collaborative general practice faculty team[J]. Chinese General Practice, 2021, 24(22): 2866-2869. DOI:10.12114/j.issn.1007-9572.2021.00.214. [32] DAI Honglei, LU Chongrong, QIU Lifeng, et al. Exploration and practice of general practice faculty team construction[J]. China Higher Medical Education, 2019(8): 39-40. DOI:10.3969/j.issn.1002-1701.2019.08.020. [33] JIA Jianguo, XIE Miaorong. General Practice Faculty Training Guidance Manual[M]. 2nd ed. Beijing: People's Medical Publishing House, 2017. [34] YANG Hui, Shane Thomas, Colette Browning. Improving the quality of general practice educators[J]. Chinese General Practice, 2009, 12(17): 1567-1569. DOI:10.3969/j.issn.1007-9572.2009.17.002. [35] ZHU Qingshuang, JIA Jianguo, FAN Jie, et al. Practice and exploration of clinical faculty training for "5+3" standardized general practice residency training[J]. Medical Education Management, 2019, 5(3): 222-224. DOI:10.3969/j.issn.2096-045X.2019.03.006. [36] GUO Aimin. Current status and reflections on standardized training of general practice specialists in China[J]. Chinese General Practice, 2009, 12(7): 527-528. DOI:10.3969/j.issn.1007-9572.2009.07.001. [37] WANG Rongying, HE Zhenyin, ZHAO Wenwen, et al. Research progress on general practice faculty training[J]. Chinese General Practice, 2017, 20(25): 3144-3148. DOI:10.3969/j.issn.1007-9572.2017.25.017. [38] LIU Yanling, XIE Miaorong, CHEN Jianjun. Research on general practice faculty development at home and abroad[J]. Chinese General Practice, 2017, 20(4): 388-393, 398. DOI:10.3969/j.issn.1007-9572.2017.04.003. [39] WU Lihong, ZHU Wenhua, DAI Honglei, et al. Exploration of general practice faculty assessment model based on GP competency[J]. Chinese Journal of Hospital Administration, 2021(2): 81-84. [40] LI Na, MA Li, FANG Hongjuan, et al. Exploration of general practice faculty team construction in

general hospitals[J]. Chinese Journal of Hospital Administration, 2016, 32(9): 678-681. DOI:10.3760/cma.j.issn.1000-6672.2016.09.012.

Received Date: 2022-07-11; **Revised Date:** 2023-07-22

Editor: WANG Shiyue

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv –Machine translation. Verify with original.