Advanced Medical Research

Global Science Publishing

Number 5 (2026), pp. 01–06

Article

Exploration of Improving the Teaching Quality of off Campus Internship Bases: A Reform Path of "Five in One" Based on Medical Education Collaboration

Lan Ma and Yu Liu *

Science and Education Department, Teaching Base of Huludao Central Hospital, Affiliated with Jinzhou Medical University, Huludao 125000, China

* Corresponding author: ywk2138216@163.com

Received: September 9, 2026; Revised: September 16, 2026; Accepted: September 23, 2026; Published: November 3, 2026

Abstract: Clinical internship is a key link for medical education to move from theory to practice, and off campus internship bases are important platforms for cultivating medical students' clinical abilities, professional qualities, and job competencies. At present, some off campus internship bases still suffer from structural shortages of teaching staff, emphasis on theory over practice in assessment and evaluation, loose control of internship processes, insufficient communication between doctors and patients, and inadequate cultivation of humanistic literacy, which hinders the further improvement of the quality of practical teaching. This article takes the internship base of a medical university affiliated hospital as the practical object, and constructs a "five in one" reform framework around five dimensions: teaching management, faculty team, teaching system, competition mechanism, and humanistic education. Through the construction of a student community that integrates teaching and life, the establishment of a student work department under the leadership of the Party committee, the improvement of teacher admission and incentive guarantee mechanisms, the establishment of a clinical case library and case discussion system, the construction of a teaching system that promotes learning, teaching, and improvement through competition, and the strengthening of medical humanities and psychological counseling, we aim to explore a systematic path for improving the teaching quality of off campus internship bases. Practice has shown that multi-dimensional collaborative promotion can help enhance students' clinical practice ability, professional competence, and comprehensive competitiveness, but it still needs to be continuously deepened in areas such as real data accumulation, multi base collaboration, and long-term tracking and evaluation.

Keywords: off campus internship base; medical education; teaching quality; practical teaching; medical education collaboration; integration of industry and education

1. Introduction

Medicine is a highly practical discipline. Medical students not only need a solid theoretical foundation, but also need to develop clinical thinking, master clinical skills, and cultivate professional ethics in a real medical environment [1]. Clinical internship, as a crucial stage for medical education to move from theory to practice, is a necessary step for medical students to grow into qualified medical workers [2]. Off campus internship bases undertake multiple tasks such as clinical teaching, practical training, and student management, and their teaching quality directly affects the effectiveness of medical talent cultivation.

However, currently most internship bases still rely on traditional teaching models, which lack the cultivation of students' clinical thinking, self-learning, and problem-solving abilities. Internship management also has problems such as lack of standardization and single evaluation methods [3–5]. Clinical physicians generally undertake heavy diagnosis and treatment tasks, lack systematic teaching and training, and the phenomenon of "emphasizing clinical practice over teaching" is prominent; Internship assessments mainly focus on written tests

©by the author(s) Licensed under Creative Commons Attribution 4.0 License

and skill operation proficiency tests, neglecting comprehensive abilities such as clinical thinking, emergency response, and teamwork [6–8]; The internship rotation plan lacks personalized design, and attendance and task tracking rely on manual recording; Excessive emphasis is placed on the transmission of diagnostic and therapeutic techniques in teaching, with relatively weak content in medical ethics, professional ethics, and humanistic care. These issues are intertwined, constraining the improvement of students' practical abilities and making it difficult to fully meet the demand for innovative and applied talents in modern medical education.

From the trend of medical education reform, improving the teaching quality of off campus internship bases is an important measure to break the traditional model of "emphasizing theory over practice" and promote the deep integration of theory and clinical practice [9–11]. Foreign medical education has accumulated rich experience in early clinical exposure, problem-based learning, simulation training, and standardized patient care. However, due to the influence of social culture, education system, and medical system, there are certain limitations in its application in China [12,13]. Although domestic research focuses on the evaluation system of teaching quality, innovation of teaching methods, and construction of teaching staff, the evaluation standards have not been unified yet, and innovation of teaching methods mostly remains in theoretical exploration [14]. The construction of teaching staff lacks a long-term mechanism. Based on this, this project takes the internship base of a medical university affiliated hospital as the practical object, and attempts to explore a more suitable teaching quality improvement model for medical education internship bases from five dimensions: management, faculty, teaching, competition, and humanities.

2. Problem Review: The Practical Dilemma of Improving the Teaching Quality of off Campus Internship Bases

To improve the teaching quality of off campus internship bases, it is necessary to first address the prominent problems in current practical teaching. The structural shortage of teaching staff is the most critical limiting factor. Clinical physicians generally undertake heavy diagnosis and treatment tasks, lack systematic teaching and training, and the proportion of time spent by highly qualified and educated teachers participating in internships and teaching is relatively low. Although young physicians have high clinical enthusiasm, they lack teaching experience and teaching methods, making it difficult to effectively guide students in clinical thinking training. Some teaching staff have long been accustomed to lecture based teaching, and are not proficient enough in using interactive, exploratory, and case-based teaching methods, resulting in a slow change in teaching concepts. At the same time, the teaching incentive mechanism is not sound enough, and the weight of teaching work in professional title promotion and performance allocation is limited, which affects the enthusiasm of teachers to participate in teaching.

The emphasis on theory over practice in assessment and evaluation is another prominent issue. The current internship assessment mainly focuses on written tests and skill operation proficiency tests, emphasizing basic theoretical knowledge and standardized operations, while neglecting the evaluation of comprehensive abilities such as clinical thinking, emergency response, teamwork, and doctor-patient communication. There is a disconnect between the assessment content and the actual clinical work, which makes it difficult to truly reflect the clinical diagnosis and treatment level of interns. Some students are accustomed to exam oriented learning and still lack the ability to independently analyze problems and develop treatment plans when facing real patients. The evaluation subject is relatively single, and student evaluation, peer evaluation, expert evaluation, and teaching supervision evaluation have not yet formed a systematic synergy. The objectivity and impartiality of the evaluation results need to be improved.

Loose control over the internship process also affects the quality of teaching. The internship rotation plan lacks personalized design and fails to make targeted arrangements based on students' professional direction and career planning; The attendance management and task completion tracking during the internship process rely on manual recording, lacking an information management platform, which can easily lead to problems such as "shrinking" internship content and "discounting" rotation time. The separation of teaching and living areas also makes students lack a stable learning community and sense of belonging, which is not conducive to the cultivation of teamwork spirit and communication skills. In addition, the lack of communication between doctors and patients and the cultivation of humanistic literacy is becoming increasingly prominent. In teaching, there is an excessive emphasis on imparting diagnostic and treatment techniques, while neglecting communication skills, medical ethics, professional ethics, and other aspects between doctors and patients. Interns are prone to problems such as rigid communication styles and insufficient humanistic care when facing patients, making it difficult for them to adapt to the requirements of modern medicine for the "biological psychological social" medical model. The internship stage is a crucial transitional stage for medical talents to transition from campus to clinical practice, and it is also

a golden period for cultivating humanistic literacy. If the shortcomings of humanistic education cannot be filled in a timely manner, it will affect the overall quality of medical talent cultivation.

3. Reform Approach: Building a "Five in One" Framework with Medical Education Collaboration as the Main Line

In response to the above issues, this project establishes the reform concept of "student centeredness, ability orientation, medical education collaboration, and industry education integration", with medical education collaboration as the main line, and constructs a five in one reform framework of "management optimization, teacher strengthening, teaching innovation, competition to promote learning, and humanistic infiltration". Management is the foundation, faculty is the key, teaching is the core, competition is the lever, and humanities is the soul. The five dimensions support each other and work together to avoid individual breakthroughs and fragmented reforms.

In terms of overall design, the project adheres to a combination of problem oriented and goal oriented approaches, focusing on both the current practical challenges faced by the internship base and the long-term needs for high-quality development of medical education. Reform does not pursue short-term improvement of a single quantitative indicator, but emphasizes the overall transformation of teaching philosophy, teaching system, teaching methods, and teaching culture. On the implementation path, the project adopts the action research approach of "problem diagnosis scheme design phased implementation effect evaluation", taking the internship base as the practical field, clinical internship students and teaching staff as the main objects, and gradually forming a sustainable mechanism for improving teaching quality through institutional construction, team construction, curriculum construction, platform construction, and cultural construction. In terms of evaluation methods, emphasis is placed on the combination of process evaluation and summative evaluation, as well as student evaluation, peer evaluation, expert evaluation, and teaching supervision evaluation, in order to comprehensively and objectively reflect the effectiveness of the reform.

4. Practical Measures: Multi Dimensional Collaborative Promotion of Teaching Quality Improvement

Optimize the teaching management system and build a student community that integrates teaching and daily life. Traditional teaching activities are often limited to classrooms and laboratories, and students lack a close connection with real life and clinical environments, making it difficult to effectively combine theoretical knowledge with practical applications. To address this challenge, the project proposes to build a student community that integrates teaching and life, breaking down the boundaries between teaching and life. Further optimize the hospital's teaching management committee, clarify that the main leaders of the hospital are responsible for the construction of the teaching system, and establish a scientific management system for collaborative cooperation among various departments. Establish an independent enclosed teaching college area, with the learning area divided into theoretical learning area and practical learning area, and the living area including accommodation area, dining area, and leisure and entertainment area. The campus management team is composed of professional management personnel, dormitory management personnel, and student volunteers, responsible for daily management and services. At the same time, establish a student work department under the leadership of the Party committee, responsible for daily behavior and ideological management of students, establish student self-governing organizations, and enable students to independently manage community affairs. This model not only helps to improve teaching management efficiency, but also cultivates students' teamwork spirit and communication skills.

Strengthen the construction of the teaching staff, improve the admission, training, and incentive mechanisms. Clinical teaching is the core link of medical talent cultivation, and the professional competence and guidance ability of the teaching staff directly determine the quality of teaching and the effectiveness of talent cultivation. The project proposes to strictly implement the teacher admission and selection mechanism, formulate hospital teacher admission management measures, optimize the selection process, and ensure that the selected teachers are both knowledgeable in clinical practice and good at teaching; Establish a reserve teacher pool, select outstanding young doctors and graduates of standardized training to enter the reserve teacher pool, conduct targeted training, and inject fresh blood into the teaching team. Establish a training model for backbone teachers and subject leaders, select backbone teachers with strong teaching ability and great research potential, and focus on cultivating their teaching innovation ability, curriculum construction ability, and teaching research ability; Focusing on cultivating the ability of subject leaders to coordinate and plan the development of subject teaching, lead subject teaching reforms, and cultivate a team of young teachers. Establish a sound incentive and guarantee mechanism, commend and reward outstanding teachers, and give priority consideration in professional title promotion and job

appointment, increasing performance allocation quotas; Establish a special fund for hospital teaching reform research, encourage teachers to carry out research on teaching reform projects, innovate teaching methods, and optimize curriculum systems, and reward the teaching research results obtained. Through the above measures, efforts will be made to form a benign development pattern of "promoting medicine through education, assisting with research, and promoting collaboration between medicine and education".

Improve the internship teaching system and promote the integration of case teaching and simulation teaching. For medical students, clinical internship is the process of closely integrating basic medical knowledge learned in the classroom with practical clinical operations. However, the phenomenon of disconnection between teaching content and clinical practical needs is quite common, and new diagnostic and treatment technologies and concepts emerge constantly, but the internship teaching content has not been followed up in a timely manner. The project proposes that teaching and research departments at all levels establish a rich clinical case library to collect and organize typical cases of common diseases, difficult diseases, and rare diseases. Each teaching and research department regularly conducts teaching case discussion courses. Teachers select appropriate cases to organize students' analysis and discussion based on the teaching content and objectives, guide students to use theoretical knowledge to diagnose the condition, develop treatment plans, and analyze possible problems and solutions. For courses such as clinical skills and surgical skills, simulation teaching combined with case teaching is adopted. Firstly, skill operation training is carried out through simulation equipment, and then case analysis and discussion are conducted based on actual cases to improve students' skill operation level and ability to deal with practical problems. At the same time, strengthen the connection and integration between courses, avoid content repetition and disconnection, and form an organic whole.

Establish a mechanism for promoting learning through competition and align with the standards for practicing physician exams. Through competition driven teaching reform, we aim to strengthen the clinical practice ability, teamwork ability, and professional ethics of medical students, and cultivate high-quality medical talents that meet the needs of the industry. Based on the national vocational qualification examination standards, skills competition requirements, and clinical job competency needs, construct a teaching system that promotes learning, teaching, and improvement through competition. The hospital has launched a clinical medicine professional practicing physician skills competition, with the aim of "strengthening practical abilities and aligning with professional standards". It is divided into two parts: theoretical examination and skill operation, comprehensively benchmarking the national practicing physician qualification examination outline, focusing on students' theoretical knowledge in basic medicine, clinical medicine, medical humanities, as well as core skill operation abilities such as cardiopulmonary resuscitation, suture dressing, and internal and external physical examination. Through competitions, effectively improve the clinical skills of medical students and promote the deep integration of clinical teaching with the requirements of practicing physician exams. In the future, the hospital will continue to hold clinical skills competitions and gradually expand to disciplines such as dentistry and nursing, promoting the integration of teaching curriculum content with competition standards, and forming an overall teaching model of "learning competition feedback improvement".

5. Characteristics and Innovation

The characteristics and innovations of this project are mainly reflected in three aspects. One is to take the lead in establishing an independent campus for teaching purposes in off campus teaching bases, and establish a student work department under the leadership of the Party committee to optimize teaching and enhance management capabilities. This student community model that integrates teaching and life helps to break down the boundaries between teaching and life, creating a more comprehensive and rich learning and living environment for students. The second is to initially establish a teaching system that promotes learning, teaching, and improvement through competitions, carry out clinical medical skills competitions, continuously improve the quality of practical teaching, and promote the alignment of teaching content and evaluation standards with the requirements of the practicing physician examination. The third is to innovate the humanistic education model, add mental health courses, establish a good sense of social responsibility, and lay a solid foundation for improving the enrollment rate and employment rate. The cooperation of the three parties has expanded the improvement of teaching quality in the internship base from a single teaching reform to a systematic project that promotes management, faculty, teaching, competition, and humanities collaboration.

6. Reflection and Prospect

This project has achieved certain results in practical exploration, but there are also issues that need further reflection. Firstly, the study focuses on a single internship base with a limited sample size, and caution should be

exercised in generalizing the conclusions. There are differences in the teacher structure, teaching resources, management level, and student characteristics among different internship bases, and reform measures need to be adjusted according to the actual situation. Secondly, the project cycle is relatively short, and some indicators such as the pass rate of practicing physician exams, enrollment rates, and changes in students' long-term career development abilities require longer tracking periods. Again, the evaluation tools are still mainly based on assessment scores and satisfaction questionnaires, and the objective measurement of clinical thinking, teamwork, and humanistic literacy needs further improvement. In the future, multi base collaborative research can be considered, introducing control groups and longitudinal tracking designs, building an information-based teaching management platform, and continuously optimizing the evaluation index system. At the same time, it is necessary to further strengthen the collaboration between schools and internship bases, promote teacher recruitment, curriculum co construction, resource sharing, and evaluation consultation, and form a closer medical education collaborative education mechanism.

7. Conclusions

Improving the teaching quality of off campus internship bases is a systematic and long-term project. It involves not only the optimization of the teaching management system, but also the collaborative reform of the teaching staff, teaching methods, assessment and evaluation, and humanistic education. This project is problem oriented, student-centered, and follows the path of medical education collaboration. It promotes collaboration from five aspects: management, faculty, teaching, competition, and humanities, striving to form a replicable and promotable teaching quality improvement model for off campus internship bases. Through continuous reform and practice, it is expected to further improve the clinical practice ability, professional ethics, and comprehensive competitiveness of medical students, providing strong support for cultivating high-quality medical talents and promoting the high-quality development of medical education.

Funding

Education and Teaching Research and Reform Project of Jinzhou Medical University in 2025.

Author Contributions

L.M. was responsible for drafting the manuscript. Y.L. was responsible for manuscript review. All authors have read and agreed to the published version of the manuscript.

Institutional Review Board Statement

Not applicable.

Informed Consent Statement

Not applicable.

Data Availability Statement

Not applicable.

Acknowledgments

Thank you to all the scholars dedicated to the research.

Conflicts of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

References

1. Kmita M, Jozefczak, J. Medical Memes: Humour Preferences among Medical Students. *Communication & Medicine* 2024; **19**: 256–270. https://doi.org/10.3138/cam-19.3-0002.
2. Householder S. Resident Clinic. *Journal of Graduate Medical Education* 2024; **16**: 86–87. https://doi.org/10.4300/jgme-d-23-00448.1.
3. Febbraro M, Kazemi G, Juergens R, *et al*. Trainee Evaluations of Preparedness for Clinical Trials in Medical Oncology-A National Questionnaire. *Current Oncology* 2023; **30**: 7627–7637. https://doi.org/10.3390/curroncol30080553.
4. Hewson MG. Clinical Teaching in the Ambulatory Setting. *Journal of General Internal Medicine* 1992; **7**: 76–82. https://doi.org/10.1007/bf02599107.
5. Chakyayil S, Rogers M, Demers, LB. An Innovative Clinic Model for Student Learning. *The Clinical Teacher* 2022, **19**, e13528. https://doi.org/10.1111/tct.13528.
6. Norcini JJ, Blank LL, Duffy FD, *et al*. The Mini-CEX: A Method for Assessing Clinical Skills. *Annals of Internal*

Medicine 2003; **138**: 476–481. https://doi.org/10.7326/0003-4819-138-6-200303180-00012.

7. Lee M, Vermillion M. Comparative Values of Medical School Assessments in the Prediction of Internship Performance. *Medical Teacher* 2018; **40**: 1287–1292. https://doi.org/10.1080/0142159x.2018.1430353.
8. Conroy LM, Slovacek H, Blum KA, *et al*. Current Landscape of Surgical Assessment Models in Urology Residency Training. *The Journal of urology* 2023; **209**: 474–484. https://doi.org/10.1097/ju.0000000000003079.
9. Tie H, Luo Y, Chen D. Thinkings on the Reform of Medical Education System in China. *Medical Education Online* 2024; **29**: 2302677. https://doi.org/10.1080/10872981.2024.2302677.
10. Lam TP, Lam YY. Medical Education Reform: The Asian experience. *Academic Medicine Journal of the Association of American Medical Colleges* 2009; **84**: 1313–1317. https://doi.org/10.1097/ACM.0b013e3181b18189.
11. Li H, Zhou X. Medical Education Reform in China. *Postgraduate Medical Journal* 2018; **94**: 673–674. https://doi.org/10.1136/postgradmedj-2018-136145.
12. Liu X, Feng J, Liu C, *et al*. Medical Education Systems in China: Development, Status, and Evaluation. *Academic Medicine Journal of the Association of American Medical Colleges* 2023; **98**: 43–49. https://doi.org/10.1097/acm.0000000000004919.
13. Wang W. Medical Education in China: Progress in the Past 70 Years and a Vision for the Future. *BMC Medical Education* 2021; **21**: 453. https://doi.org/10.1186/s12909-021-02875-6.
14. Hu X, Li J, Wang X, *et al*. Medical Education Challenges in Mainland China: An Analysis of the Application of Problem-Based Learning. *Medical Teacher* 2025; **47**: 713–728. https://doi.org/10.1080/0142159x.2024.2369238.