

Suggestions on Training Health Service and Management Professionals from the Perspective of “New Liberal Arts”

Haiyan Wang^{1,2}, A Jisaihan¹, Weiwei Ji^{1,3}, Xi Chen^{1,3}, Xinyu Liu², Dan Han², Xi Chen², Zhixiong Wang^{1,3*}, Masayuki Endo^{1*}

¹Graduate School of Medicine, Division of Health Sciences, Osaka University, 1-7 Yamadaoka, Suita 565-0871, Japan

²Ma'anshan University, Ma'anshan 243000, Anhui, China

³College of Health Management, Shanghai Jian Qiao University, Shanghai 201306, China

** Authors to whom correspondence should be addressed.*

Copyright: © 2026 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: This article focuses on the strategic background of “Healthy China 2030,” analyzes the development status, difficulties, and causes of health service and management majors in my country, and proposes future development ideas based on the concept of “New Liberal Arts.” Since its establishment in 2016, the scale of this major has expanded rapidly, but there are systemic problems such as vague strategic positioning, insufficient cross-border capabilities of teachers, and severe homogeneity of courses, resulting in talent training being out of touch with industry needs. In order to break through the dilemma, the article proposes that the “new liberal arts” should be used as a guide to promote the in-depth integration of disciplines, build an interdisciplinary integrated curriculum system, and realize the transformation from knowledge teaching to ability cultivation through outcome-based education (OBE). Ultimately, professional construction requires top-level design, teacher development, and school-enterprise collaboration to cultivate health service talents with cross-border integration capabilities to respond to national strategies and industry needs.

Keywords: Health service and management major; New liberal arts; OBE

Online publication: August 31, 2026

1. Introduction

With the proposal of the “Healthy China 2030” strategy, taking big health as the center, focusing on health management and health promotion, and improving the health level of the entire population and the entire life cycle of the people is the main development direction of China’s health management services ^[1]. It is imperative to cultivate professional health service and management talents that meet social needs in the context of big health.

2. Current status of development of health service and management majors

The Health Service and Management major was added at the end of 2015 and began to enter undergraduate colleges as an independent major. The first batch of five universities was approved to set up the undergraduate major of “Health Service and Management” and was awarded the “Management” degree. The study period was “four years,” and the first enrollment was in 2016 ^[2]. In order to continuously meet the needs of the country’s health service industry for health service and management talents, the Ministry of Education has gradually expanded the scale of professional settings ^[3]. As of May 2025, there have been 138 undergraduate colleges and universities offering health service and management majors across the country.

3. Analysis of the difficulties and causes in the development of health service and management professions

Although the scale of health service and management majors has achieved rapid expansion, its connotation construction lags behind the development of form, and a series of structural dilemmas are restricting the quality of professional training and sustainable development capabilities ^[3]. These dilemmas are not superficial resource or technical issues, but are rooted in deep challenges such as strategic ambiguity, capability gaps, and system imbalances that the profession faces in the process of transforming from traditional disciplinary frameworks to emerging cross-paradigms.

Firstly, at the strategic level, there is a dual problem of “vision suspension” and “demand disconnection” in professional positioning. At present, the response of the Health Services and Management major to macro strategies such as the “New Liberal Arts” is still mostly superficial, and has not been effectively transformed into differentiated training characteristics, which has led to structural deviations between the curriculum system and rapidly changing industry demands ^[3-4]. At the same time, the disconnect between teaching and practice and the shortage of cross-disciplinary faculty further exacerbate the dilemma of talent cultivation ^[5-6]. Ultimately, many universities have fallen into homogeneous competition, and the path of characteristic development is still unclear ^[7]. This leads to path dependence in the construction of the curriculum system, often simply transplanting mature professional course modules such as public service management, business management, or preventive medicine, and combining them in a “patchwork” manner, rather than reconstructing knowledge around the core issue of “health services and management.” As a result, there is a significant deviation between the training program and the actual demand for composite abilities such as data analysis, process optimization, technology integration, and personalized intervention under the rapid development of the health industry. This systemic deviation is the core crux of the urgent need to reform the current professional talent training system. The knowledge structure of graduates presents a “broad and scattered” characteristic, making it difficult to quickly meet the core job requirements of diversified employers such as health management institutions, smart elderly care communities, and commercial health insurance companies, resulting in a mismatch between supply and demand sides.

Secondly, at the organizational and capability level, the teacher structure and teaching system face a prominent “cross-border capability deficit.” Health services and management essentially require teachers to have the ability to “translate knowledge” and “integrate teaching” across medicine, management, information science, and even social science. However, most of the current teachers come from a single disciplinary background or hold concurrent posts, and generally lack systematic practical experience and interdisciplinary research accumulation in real health service scenarios. This dual lack of “composite knowledge” and “cross-

border practical experience” makes it difficult to combine classroom teaching with practice. Research shows that health service and management-related skills courses generally have problems such as a disconnect between teaching content and actual needs and a single teaching method ^[5]. They are unable to effectively carry out in-depth teaching based on real cases and complex problems, and are even less able to guide students in interdisciplinary knowledge practice and application. In addition, the practical teaching system is often a mere formality due to the unstable construction of off-campus internship bases, shallow school-enterprise cooperation, and imperfect practical teaching evaluation mechanisms, resulting in insufficient training of students’ ability to solve practical problems and failure to bridge the “last mile” from theory to practice.

Furthermore, in terms of the overall development model, professional construction shows a significant tendency of “homogeneous competition,” and niche differentiation based on comparative advantages has not yet been formed. Internal surveys of some colleges and universities have clearly pointed out that management majors need to solve the problem of positioning convergence and explore distinctive development paths ^[7]. In the process of rapid expansion, many institutions have failed to deeply examine their own discipline accumulation and regional health industry resources, and carry out misaligned development and characteristic cultivation. Regardless of whether they are schools with a medical background, an engineering background, or a liberal arts background, their training objectives, core curriculum settings, and even practical links are highly similar. This “one-size-fits-all” development model not only results in duplicative investment and inefficient allocation of resources, but also makes it difficult for majors to form unique core competitiveness and cannot accurately meet the needs of specialized talents in subdivided areas of the health service market (such as health technology product management, community chronic disease intervention management, health data governance, etc.), limiting the long-term differentiated development potential and industry influence of majors.

In summary, the current dilemma in professional development is a systemic problem that reveals multiple gaps between macro strategic positioning and micro teaching implementation. To solve these difficulties, it is necessary to go beyond local course additions, deletions, or teacher supplements, and instead reconstruct from the systemic level of professional overall strategic design, cross-border organizational capacity building, and characteristic development path selection. This is precisely the area where the concept of “new liberal arts” can provide key inspiration, that is, how to transform external strategic opportunities into internal sustainable core competencies through deep disciplinary integration and mechanism innovation.

4. Thoughts on the development of the major in health services and management from the perspective of the “New Liberal Arts”

The rise of the “New Liberal Arts” is essentially a systematic response to the limitations of traditional disciplinary classifications in solving complex real-world problems. Its core is not simply to apply technological tools to the fields of humanities and social sciences, but to advocate for a deep knowledge paradigm revolution — by breaking down inherent disciplinary boundaries and promoting the creative integration of heterogeneous knowledge systems, in order to cultivate versatile talents who can cope with future social challenges. For the Health Service and Management major, the “New Liberal Arts” provides a theoretical perspective and action framework that goes beyond the simple superposition of “medicine+management,” pointing towards a professional reconstruction path centered on deep cross-border

integration. This path aims to fundamentally address the strategic disconnect, capability gaps, and system imbalances revealed in the previous chapter.

4.1. From “boundary crossing” to “system reconstruction”: Building a new ecology of integrated curriculum and teaching

The primary task of professional development from the perspective of “new liberal arts” is to achieve a transformation from superficial “multidisciplinary coexistence” to deep “interdisciplinary integration.” This requires that professional construction must actively engage in “boundary work,” that is, intentionally dissolve, bridge, or reconstruct the knowledge boundaries between medical, engineering, humanities, and social sciences disciplines.

4.1.1. Deepening the integration of medicine and engineering: an integrated learning design with problems as the link

The integration of medicine and engineering is not a mechanical combination of medical knowledge and engineering technology knowledge, but rather a knowledge reproduction centered around the core issue of “technical solutions to health problems.” The specific path includes:

Firstly, develop integrated courses: abandon the traditional model of separately offering “Medical Fundamentals” and “Data Science Fundamentals,” and instead design courses such as “Health Data Science and Decision Making.” This course is driven by the data analysis needs in real health management scenarios, and organically connects knowledge modules such as epidemiology, statistics, machine learning, and health policy evaluation to cultivate students’ ability to use computational tools to solve clinical or public health problems.

Secondly, establish a “trading zone” project: draw on the theory of “trading zones” and establish an interdisciplinary project platform. For example, teachers and students from the School of Medicine and the School of Engineering jointly conducted a semester-long project-based learning program on “Intelligent Monitoring and Intervention of Elderly Chronic Diseases in Communities.” In this process, medical students contribute knowledge of pathology and health assessment, engineering students contribute sensors and algorithm models, management students contribute project operations and cost-benefit analysis, and achieve natural integration and innovation of knowledge in the practice of jointly solving complex problems.

4.1.2. The sublimation of “integration of arts and sciences”: The guidance of value rationality on instrumental rationality

The ultimate target of health services is people, which determines that professional education cannot stop at technical and management efficiency, and must deeply integrate the care and critical thinking of humanities and social sciences. The integration of arts and sciences aims to cultivate “complete” health practitioners who possess both scientific literacy and humanistic spirit.

Embedded Ethics and Critical Course Module: In the course of “Application of Health Information Technology,” ethical discussion modules such as data privacy, algorithmic bias, and health equity are introduced; In “Health Project Management,” the analysis of the impact of social determinants on health is strengthened. This makes students realize that technology and management solutions must be considered within social, cultural, and ethical contexts.

Developing communication and exchange skills: By offering courses such as “Health Management

and Service Communication,” students are trained to understand patient stories, provide effective health education, and communicate across professional teams. This transforms humanistic care into actionable professional qualities, ensuring that technical services have a “human warmth.”

4.2. Using OBE as an engine: Driving the systematic transformation of the curriculum system towards “ability output”

The Outcome-Based Education (OBE) concept provides an actionable engineering implementation framework for the integration vision of the “New Liberal Arts.” It requires professional development to shift its focus from “what to teach” (teacher input) to “what students can do” (learning output), in order to align the curriculum system with market demand.

4.2.1. Anchor interdisciplinary core competencies based on the principle of “reverse design”

Firstly, a detailed needs analysis must be conducted to clarify the high-level interdisciplinary abilities that graduates should possess after 5 years, such as the ability to design and evaluate a community health intervention plan that integrates multiple sources of data, and the ability to lead a cross-disciplinary team to implement health promotion projects. These ability statements should be specific, measurable, and directly respond to the cutting-edge needs of the health industry development. Subsequently, these ultimate achievements will be decomposed into a series of phased graduation requirements that can be achieved year by year.

4.2.2. Build a “competency curriculum” mapping matrix to visualize the supporting relationships

According to graduation requirements, systematically restructure all courses to form a clear “course map.” Each course needs to clarify which specific competency indicators it aims to support, and design corresponding teaching activities and evaluation criteria. For example, the course “Health Economics” not only teaches theory, but its homework can be set as “analyzing the cost-effectiveness of a chronic disease management project and proposing optimization strategies based on insurance payments” to support “health resource allocation and financial management capabilities.” This design ensures that every link in the curriculum system makes a clear contribution to the final ability output, eliminating isolation and redundancy between courses.

4.2.3. Implement diversified dynamic evaluation and establish a continuous improvement loop

The evaluation system that matches OBE must be diversified and focused on capabilities. It should comprehensively use evaluation methods such as project reports, case analysis, simulation exercises, internship portfolios, and interdisciplinary portfolios to collect evidence of students’ ability achievement in all aspects. More importantly, these evaluation data should be systematically used to analyze the effectiveness of the curriculum system, forming a continuous quality improvement cycle of “evaluation feedback improvement,” ensuring that professional construction can dynamically adapt to changes in the external environment.

5. Conclusion

In summary, the perspective of “new liberal arts” provides a fundamental idea for the development of health services and management majors to overcome difficulties. It advocates not only the construction of an emerging profession, but also the transformation of a complex professional education paradigm. In terms of goals, it is necessary to shift from cultivating “knowledge repositories” to cultivating “boundary crossers” and “system integrators”; In terms of content, the goal is to shift from providing a “knowledge deck of disciplines” to designing “problem oriented knowledge fusion projects”; From a methodological perspective, shifting from relying on “one-way transmission” to relying on “reverse design and iterative improvement guided by OBE”; Ecologically speaking, the shift from “departments working independently” to building a “collaborative education network with diverse participation from schools, enterprises, and social governance.”

However, the successful implementation of this paradigm cannot be accomplished by a single teaching unit. It strongly relies on universities to carry out top-level design at the strategic management level, breaking down the barriers of disciplinary organization; Innovate incentive systems at the resource allocation level to encourage teachers to engage in interdisciplinary teaching and research; Establish a deeply integrated partnership at the level of school-enterprise cooperation, jointly define competency standards, and provide practical fields. Therefore, the maturity of the health service and management profession will be a key touchstone for whether the organizational resilience, innovation ability, and adaptability of China’s higher education system can truly be improved under the banner of “new liberal arts.” Future research and practice should focus more deeply on how institutional innovation, teacher development, and learning science can evolve in synergy during this transformation process, in order to ultimately achieve a fundamental leap in the quality of talent cultivation.

Funding

2024 Anhui Province Quality Engineering Project: AI+ Education Course: “Principles of Management” (Project number: 2024aijy500);

2023 Anhui Province Quality Engineering Key Education and Teaching Project: Exploratory Research on Integrating “National Culture” into the Teaching of Health Service and Management Professional Courses (Project number: 2023jyxm0930);

2026 National Quality Engineering Project College Student Innovation and Entrepreneurship Training Project: Fuyao Yinling — Starlight Station - a leader in early precision intervention and talent recognition for children with autism based on the double helix support model (Project number: 202613614055);

2026 Provincial Quality Engineering Project College Student Innovation and Entrepreneurship Training Project: Real time fall risk warning wearable system for elderly people based on sEMG, IMU, flexible pressure and ultrasound multimodal fusion and deep learning (Project number :S202613614185).

Disclosure statement

The authors declare no conflict of interest.

References

- [1] The State Council of the People's Republic of China, 2016, "Healthy China 2030" Planning Outline. Retrieved February 2, 2026, from http://www.gov.cn/zhengce/2016-10/25/content_5124174.htm
- [2] Ministry of Education of the People's Republic of China, 2016, Reply letter on proposal No. 1632 (Education Category No. 166) of the Fourth Session of the 12th National Committee of the Chinese People's Political Consultative Conference. Retrieved February 6, 2026, from http://www.moe.gov.cn/jyb_xxgk/xxgk_jyta/jyta_xwb/201611/t20161129_290408.html
- [3] Si JP, Wang XJ, Guo Q, 2022, Analysis of the Current Status and Development Trends of Undergraduate Health Service and Management Major Construction. *Chinese Journal of Health Management*, 16(2): 111–116.
- [4] Yuan Y, Qu SJ, Guo YS, et al., 2024, Research on the Path of Curriculum Construction in Health Service and Management under the Background of "Four New". *Journal of Traditional Chinese Medicine Management*, 32(17): 12–14.
- [5] Yang F, Zhang YJ, Chang M, et al., 2024, Construction and Practice of Talent Training System for Health Service and Management. *Chinese Journal of Health Management*, 18(3): 217–221.
- [6] Ban Y, Liang BZ, Zhai FM, et al., 2025, Exploration of Teaching Reform Path for Health Service and Management Skills Course: Theoretical Framework and Practical Innovation. *Education Progress*, 15(3): 721–725.
- [7] School of Health Management, Xi'an Medical University Deep Research, 2025, Promoting Development — Discipline and Professional Research Conference Held. <http://wsglx.xiyi.edu.cn/info/1031/3144.htm>

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.