

# **Exploration of Competency for Clinical Department Director in Class-A Tertiary Hospitals of China**

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## **Abstract**

Competency-oriented human resource management has become a fundamental issue in the human resource management of the public health field in China. Since there is no consensus on the post-competency dimensions of clinical department directors in class-A tertiary hospitals, this paper explored the determinants of this position's competency to clarify the influence factors. In this qualitative study, we adopted in-depth interviews with 10 Chinese clinical department directors from class-A tertiary hospitals. In our research, professional skills, administrative ability, personal traits, and interpersonal relationships are the main categories for the competency of this position. The critical factors of each category are as follows: 1) medical expertise and skills, learning ability, and innovation ability critical to professional skills; 2) decision-making ability, team construction, personnel training, guidance and supervision critical to administrative ability; 3) responsibility, medical humanity, achievement orientation, and personal influence critical to personal traits; 4) relationship building, interpersonal insight, and relationship maintenance critical to interpersonal relationships. The four dimensions of competency that influence the position developed in this paper would contribute to reaching a consensus on the determinants of department director competency research. Meanwhile, this paper has revealed the core factors that qualify for the position. And the results would provide HR of class-A tertiary hospitals in China with principles to select and train the candidates in charge of departments.

**Keywords:** Competency, Clinical Department Director, Class-A Tertiary Hospitals in China

## **Introduction**

Human resource management is the priority issue for each enterprise or organization to earn a place in the fierce market competition. Cultivating qualified personnel also becomes the academic focus in China and abroad (Wang, 2017). Competency refers to the individual's

potential and implicit and profound personal characteristics, including motivation, personal traits, self-awareness, knowledge, and skills (McClelland, 1973). It generally includes several aspects, i.e., knowledge, skills, self-concept, personal values, traits, and motivation (Rothwell et al., 2012). Nowadays, competency-oriented human resource management has become a fundamental issue in the human resource management of the public health field in China (Liu, 2018).

According to the Measures for the *Grading Administration of Hospitals*, hospitals in China are divided into three and nine levels based on the organization's size, medical technology, medical staff capacity, and medical equipment condition. Hence, the nine levels from lowest to highest are class-C primary, class-B primary, class-A primary, class-C secondary, class-B secondary, class-A secondary, class-C tertiary, class-B tertiary, and class-A tertiary. According to the rating criteria, class-A tertiary hospitals are the highest-grade general hospitals in mainland China except for designated specialized hospitals (Zhang et al., 2016). Thus class-A tertiary hospitals are the leading force of medical and health institutions in China (Wang et al., 2019).

The clinical department director refers to the principal responsible for the medical service and divisional management (Hong & Sun, 2011). Being the clinical department director, the person should perform as a manager and be responsible for the scientific research construction of the department (Wang et al., 2015). Their daily work mainly involves diagnosis and treatment, clinical teaching, department management, and instruction and their comprehensive ability is crucial to the department's development (Oates, 2012). However, the research on clinical department leaders in class-A tertiary hospitals in China is in its infancy (Ma et al., 2021). Moreover, there is still no consensus on the determinants of competency in the position of clinical department director (Xu et al., 2018). Thus, this paper mainly focuses on the influencing factors of the competency of clinical department directors in class-A tertiary hospitals in China. The contribution of this paper is to provide a reference for cultivating and developing the competency of department directors in hospitals and also to help potential candidates for the department principal to qualify for becoming a capable head.

## **Theoretical background**

It was a relatively late start on competency research in the health field of China. In 2004, the Talent Exchange Centre in the Ministry of Health of China conducted "Research on the Competency of Managers in Health institutions," introducing competency study into China's health field for the first time. It took the managers in health institutions as the unit of analysis and provided the reference for human resource management in the health field in China. And the competency models have been widely applied gradually (Tang & Cheng, 2017). With the deep reform of the medical system in China, competency research has increasingly focused on various positions. The observation unit was subdivided into the clinical department

director, the non-medical department director, and the head nurses. As a result, other competency models were built in succession according to the characteristics of positions (Fang et al., 2018). Wang et al. (2015) established the competency evaluation index system for clinical department directors, including management decisions, innovation and competition, personal characteristics, knowledge and skills, interpersonal development, department construction and development, and satisfaction evaluation. Xu et al. (2018) conducted the study with 285 clinical department directors of class-A tertiary hospitals. The empirical results indicated that professional skills and management ability impacted the department director's performance. Li and Zhu (2019) researched class-A tertiary hospitals in affiliated universities. Creativity, medical ethics accomplishment, teamwork ability, and decision-making ability were stressed as the core elements of competency for the clinical department directors. However, there was still no consensus on the determinants of director competency (Xu et al., 2018). This paper sought to bridge this gap and explore determinants of clinical department directors' competency for their position in class-A tertiary hospitals in China.

## **Method and Participants**

The grounded theory was adopted in this paper, a design of inquiry from sociology. The theory assumes that human actions are purposeful and based on their interpretation of their situation (Strauss & Corbin, 2014). According to the grounded theory, the researcher derived a general and abstract theory of a process, action, or interaction grounded in participants' views (Creswell, 2014). This ground-breaking research method proposed that the first step of the research was to collect data. Furthermore, the next step was analyzing the data and generating the theory. In our study, the unit of observation was the clinical practitioner, and the unit of analysis was the clinical department directors in class-A tertiary hospitals.

Purposive sampling was adopted. As for sampling, the main framework of grounded theory included theoretical sampling (Strübing, 2014) and the constant comparative method (Boeije, 2002). When new information does not emerge anymore, the sampling ends. It reflected the unique features of qualitative research; namely, the collection and analysis were carried out simultaneously (Boeije, 2010). The standard for sampling referred to the criteria of previous relevant studies. The criteria were as follows: clinical department directors 1) who had more than ten years of experience in clinical department administration; 2) who could clearly state the responsibilities of their current position; 3) who were easy to contact.

We contacted the Health Committee of Taiyuan city, Shanxi province, and explained the purpose of the study to the staff. With the help of the staff, we got a list of potential candidates who met the criteria. According to the list of candidates provided, we asked them personally whether they would like to get involved. The in-depth interviews were conducted after selecting the candidates in Taiyuan city. The semi-structured interview was adopted as the data collection instrument, which could effectively capture interviewees' detailed

comprehension of a phenomenon (Langley & Klag, 2017). We detailed the research purpose to each participant, and after informed consent was obtained, we recorded the interviews using an electronic pen. Then the record of the interview was transcribed into words. Meanwhile, we used the memo to record keywords during interviews and data analysis. The questions were as follows:

1. Please describe your hospital. Have you known the criteria for selecting the clinical department director in class-A tertiary hospitals?
2. According to your personal experience, what abilities and qualities do you think the clinical department director in class-A tertiary hospitals should have? Furthermore, what do you think are the core competencies?
3. In your opinion, what kind of personal characteristics affect your development of a career?
4. Considering the particularity of the health field, what qualities should be present in daily working relationships?

Finally, we obtained the interview records of 10 participants. The demographic characteristics of the 10 participants are presented in **Table 1**.

**Table 1:** *Demographic information of Participants*

Name	Gender	Age	Occupation / Position	Education
A	Male	55	Neurosurgery Department Director	Master degree level
B	Female	56	Endocrinology Department Director	Bachelor's degree
C	Male	50	Integrated Traditional Chinese and Western Medicine Department Director	Ph.D.
D	Male	57	Gastroenterology Department Director	Master degree level
E	Female	59	Obstetric Department Director	Master degree level
F	Female	53	Gynecology Department Director	Ph.D.
G	Male	59	Respiratory Department Director	Master degree level
H	Female	51	Hematology Department Director	Master degree level
I	Female	57	Orthopedic Department Director	Master degree level
J	Male	53	Stomatology Department Director	Ph.D.

**Note.** *Name is the code name with the actual name concealed.*

Among them, the overall gender ratio was equal. All respondents came from different clinical departments, and all of them were aged 50 and above. They all had a bachelor's degree at least: 10% of the participants were on a degree of bachelor, 60% of them owned a degree of master, and 30% of them held a Ph.D. degree.

Data analysis included the phases of "open coding" and "axial coding." Data were fractured, conceptualized, and integrated during this simultaneous coding process to form a theory (Holton, 2010). Open coding was a process of data decomposing, testing, comparing, conceptualizing, and generalizing. The transcripts were scanned word by word, and keywords were extracted from the text data. Subsequently, similar codes were grouped into one category (Moghaddam, 2006). Axial coding started by comparing various categories and identifying subcategories (Strauss & Corbin, 2014). We collected the approximate codes together by constant comparison. We integrated the open codes to form a network between the two levels of codes, and the relationship between the concept genera was found and built.

### ***Trustworthiness***

Some more strategies were used to eliminate the inherent bias in using a single method. One of the strategies was spending adequate time on data collection and analysis, and we also checked the findings with participants during the data collection and analysis. Meanwhile, triangulation was adopted. As Mathison (1988) emphasized:

Triangulation has risen an important methodological issue in naturalistic and qualitative approaches to evaluation [in order to] control bias and establishing valid propositions because traditional scientific techniques are incompatible with this alternate epistemology. (p. 13)

After each participant's interview, we talked with the participants' colleagues. In addition, we searched some files such as the appointment documents, the assessment and management rules, and the commendation and reward documents of respondents in hospitals, which aimed to confirm the integrity of information obtained from respondents.

### ***Findings***

This paper has distilled four categories: professional skills, administrative ability, personal traits, and interpersonal relationships. In each category, key factors would lead to the position's competency (**Table 2**). Thus, we presented data from the respondents to show how the researcher reached each element from the coding.

**Table 2:** *Categories and Subcategories of determinants of Competency for Clinical Department Directors in Class-A Tertiary Hospitals*

Subcategories	Categories
Medical expertise and skills	Professional skills
Learning ability	
Innovation ability	
Decision-making ability	Administrative ability
Team Construction	
Personnel training	
Guidance and supervision	
Responsibility	Personal traits
Medical Humanity	
Achievement orientation	
Personal influence	
Relationship building	Interpersonal relationship
Interpersonal insight	
Relationship maintenance	

### ***Medical Expertise and Skills***

"Medical skill," "professional competence," and "cure rate" were repeatedly mentioned. As the entire section in hospitals, clinical medical technology represents the overall level of the hospital. Most clinical department directors in China were directly selected from clinical professionals. The evaluation scope focuses on morality, ability, diligence, performance, and politics, representing the critical evaluation of professional quality and capacity. It determined that most candidates selected from clinical department directors are "experts" with excellent experienced doctors. A, C, and F all mentioned that "the basic responsibility is to relieve the pain," and B said that "the professional level of the department director also represents the academic and technical level of the hospital. We should be in a leading position in professional knowledge, scientific research achievements,". Medical knowledge is the premise to complete clinical diagnosis and treatment. Meanwhile, department directors with rich knowledge can make the department complete scientific research and teaching tasks efficiently.

### ***Learning Ability***

New situations were constantly emerging in clinical work, and continuous learning was required to be competent for the position. In addition to the basic knowledge of pathology, physiology, and immunology, the department director should also understand other relevant disciplines, such as evidence-based medicine and medical ethics. As mentioned by B, "self-continuous learning is a cyclic process. New problems and situations encountered during the treatment push me to explore knowledge constantly". Besides, they should be proficient in clinical practices, F mentioned, "to help department members to establish good learning habits to use reflection, discussion, and other means to learn and progress and to achieve professional breakthroughs " Continuous learning enables clinical department directors to promote the improvement of medical professional knowledge.

### ***Innovation Ability***

"To explore," "renew," and "work creatively" were mentioned many times. As the discipline leader in the department, the clinical department director needed to possess a fund of professional knowledge. Furthermore, they should always maintain an innovative consciousness. J emphasized that "the transmission of cutting-edge theoretical understanding enables us to innovate in clinical work, to help us complete clinical work better and promote the steady improvement of the medical technology " Innovation keeps clinical knowledge constantly updated and enables directors to promote medical professional skills.

As clinical practitioners, clinical department directors need to have professional knowledge of the discipline to complete medical treatment tasks. Thus, learning ability is an important indicator to measure the professional ability of department leaders. Besides, innovation is another critical indicator of their post-competence. As the results of the study, we consider the category of professional skills of clinical department directors that consists of medical expertise and skills, learning ability, and innovation ability as the dimension of post competency.

### ***Decision-making Ability***

As the primary administrator of the hospital, the clinical department directors should always play a role in making decisions on department issues. G proposed " to allocate resources rationally, translate hospital decisions into actual work plans, and to implement promptly." Moreover, they are not only the decision-makers within the department but also the bridge between the t senior executive and the staff. C mentioned that "...we are the department manager, ... must be able to convey the intention effectively, ...it is necessary to accurately and timely convey to all the department members."

### ***Team Construction***

Medicine was a complex work that emphasized teamwork. Both clinical work and scientific research require sincere cooperation. F and I both had mentioned, "team building is crucial to department management, that means not only for technical cooperation but also for the cultivation of shared values." The clinical department director needed to lead the members to cooperate actively and implement strategic decisions well. Moreover, effective team building could give full play to individual abilities and improve work efficiency. C mentioned, " team members can give full play to their talents, and brought into full play to mobilize the enthusiasm of the staff effectively." Effective team building would guide team members to abide by norms and regulations, thus forming shared values and promoting the overall team construction.

### ***Personnel Training***

The comprehensive development of people was the embodiment of "people-oriented" management. Staff cultivation and training are one of the responsibilities of the clinical department director. "Cultivation," "mentoring," and "guidance" was repeatedly mentioned. As

F proposed, "...should give my co-worker comprehensive guidance and help them form professional ethics."

### ***Guidance and Supervision***

Without supervision, there could be no effective organizational management. "Guidance," "supervision," and "effective monitoring" were repeatedly mentioned. As mentioned by A and D, "we are the prime principal of the department," and "ensuring the quality of clinical work," clinical supervision was to supervise the work behaviors of department staff and ensure the medical quality of the department; mentioned by G, "Our responsibility is not limited to professional guidance, but also to supervise department members to standardize their practice and ensure the quality of medical therapy."

As a primary administrator of the hospital, the job of the clinical department director is endowed with a wide range of responsibilities. Coordination is essential to the post, and harmonious team building is vital for leading departments. In addition, personnel training is an effective way to promote the acquisition of knowledge and skills for the employees, and the training is an integral part of department administration. Adequate supervision ensures smooth and efficient operation. As a result of the study, we regard the category of administrative ability factor that consists of decision-making ability, team construction, personnel training, guidance, and supervision as the dimension of post-competency.

### ***Responsibility***

"The benevolence of doctors" is the motto medical practitioners always inherit. Almost all the participants put "the sense of responsibility" in the first place of their minds. Public hospitals always put the needs of patients first, and the cognition of "patient first" was always the primary indicator to measure one practitioner. That meant they were more committed to medical service and humanistic care. D mentioned they "... a high sense of responsibility." At the same time, F said, "responsibility reflected in service excellence, ...being very serious on diagnosis, devote energies to the planning of department development" A and B mentioned, "responsibility is the universal quality of a competent clinical director."

### ***Medical Humanity***

Hospitals are not only medical services but also places of humanitarian expression. That requires medical workers to have noble medical ethics and selfless dedication. "Medical ethics," "empathy," "transposition consideration," and "be considerate" were repeatedly mentioned. Medical services value social benefits, not just economic ones, unlike other industries. Since class-A tertiary hospitals in China are mainly public hospitals, the characteristics of general welfare in these hospitals were more prominent. H mentioned, "sometimes patients have a vague understanding of the disease. This situation puts health workers in the driver's seat. However, this situation often leads to the possibility of overtreatment. When prescribing, the patient's physical and economic condition should be



considered comprehensively, and an appropriate and suitable individual diagnosis and treatment plan should be proposed".

### ***Achievement Orientation***

"Enterprise," "endeavor," and "morale" was repeated, which also confirmed that achievement orientation was the critically important element for personal traits to be competent for the position. B, H, and J mentioned, "dare to seek solutions when encountering difficulties persistently," and I mentioned that they "react positively to difficulties." Medicine is a human struggle against disease, which requires a continuous enterprising spirit. As the team leader, the department director's enterprising spirit influences and promotes the department members to complete the medical tasks with high quality.

### ***Personal Influence***

Influence is a crucial aspect of leadership. And "to be an example," "demonstration," and "preached" was repeatedly mentioned. Personal influence comes from patients' satisfaction with the department director's medical services. Furthermore, the personal influence of an excellent department director sets an example for department members. F mentioned, "... good reputation among patients," G said, "to practice what one practices and establishing authority with professional and ethics." H mentioned, "...help my fellow to form occupational understanding."

With high responsibility, clinical department directors could fulfill tasks. Medical ethics and skill are equally important, and good medical ethics is an essential embodiment of professional values in doctors; moreover, the achievement orientation gives them tenacity, while personal influence optimizes the organizational climate. As the study results, we view the category of personal traits factor that consists of responsibility, medical humanities, achievement orientation, and personal influence as the dimension of post-competency.

### ***Relationship Building***

Medical work is not a one-dimensional relationship between doctors and patients but a multi-directional relationship between clinical departments and medical institutions. "Constantly dealing with various relationships" and "interactive working relationships" has been mentioned many times. G. I stressed, "Everyone may require health services and be a potential service target" in addition, F mentioned, "during the process of receiving consultation and directing referrals, the establishment of working relationships with other departments occurs all the time." A clear awareness of each relationship can facilitate the smooth running of their work.

### ***Interpersonal Insight***

Terms such as "career sensitivity" and "relationship awareness" were frequently mentioned. The interpersonal insight could enable department leaders to deal with complex interpersonal relationships timely and efficiently. As D, F, and E said, "The complexity of the disease and the uncertainty of the change of the condition will lead to the multiplication of

medical risks." We need to have an accurate judgment of the treatment of the disease. We must have a sensitive treatment of various relationships." Moreover, B emphasized that "such perceptual ability enables me to determine priorities in complex relationships and ensure maximum efficiency, which is the basic personal quality of an excellent department leader."

### ***Relationship Maintenance***

The maintenance of interpersonal relationships tests the competency of the clinical department director. "Continuous care for patients" and "timely communication and sharing with others" were mentioned many times. "Harmonious doctor-patient relationship" and "harmonious department atmosphere," as B, D, and F said, "...should play the role of the bridge on the maintenance of interpersonal relationship". In addition, I emphasized that "the maintenance of interpersonal relationships is the reflection of the ability of the department leader," J mentioned that "can properly maintain and develop the interpersonal relationship in work." Good interpersonal relationship promotes the harmony of various relationships within the department and between doctors and patients.

Since class-A tertiary hospitals provide various medical services, the director has to emphasize multi-party interpersonal relationships. A positive relationship depends on proper maintenance, and good department heads could be aware of this and manage interpersonal communication effectively. As the result of the study, we view the category of interpersonal relationships that consists of relationship building, interpersonal insight, and connection maintenance as the dimension of post-competency.

## **Discussion**

This paper explored the determinants of competency for clinical department directors in class-A tertiary hospitals in China. According to the qualitative research analysis, the clinical department director's competency in the class-A tertiary hospital was associated with professional skills, administrative ability, personal traits, and interpersonal relationships. Professional skills and administrative ability were studied as explicit characteristics in these four categories. Personality traits were related to individual and internal qualities. The results supported the opinion that "the consideration of job competence should fully combine the internal quality and the explicit ability" (Wei et al., 2021). Moreover, the interpersonal relationship was indeed proved to be related to the interaction environment in our research. Situational interaction factors should be included in the evaluation system to consider the competency of the clinical department director (Wang et al., 2022).

The findings of this research indicate that clinical department directors need professional knowledge of the discipline, such as human anatomy, physiology, pathology, immunology, and other essential medical knowledge. In addition, they should have a thorough understanding of other related disciplines (Zhang et al., 2019). It is consistent with what participants A, C, and F all mentioned that "...the basic responsibility is to relieve the pain of

more inpatients. And also, participant B mentioned the "continuous self-learning" and "... new problems and situations encountered during the treatment prompt me to explore new knowledge constantly." Furthermore, some participants justified that innovation could keep clinical knowledge constantly updated and enable them to improve their medical professional understanding effectively.

Administrative ability is another critical element of competency for the position. Competent directors should actively wield their management expertise and be fully responsible for medical quality (Lu & Shi, 2020). It is consistent with that G has mentioned: "to implement the decisions of the senior leadership promptly." F and I said, "...team building is crucial to department management." Besides, some participants have mentioned that "... help my colleague to formwork pattern and professional ethics." Some participants have noted "ensuring the quality of clinical medical work."

Professional skills are critical factors in the selection standards for this position in public hospitals in China. Most participants emphasized that "technical expertise priority" was the essential requirement for this post. Inevitably, administrative complexity often interferes with professional matters for the executive. Hence, we also heard from participants about the "dilemma of balancing clinical tasks with management." To resolve this contradiction, we suggest hospital HR department that the department director should be provided with an administrative assistant who helps to fulfill the general administrative work. This suggestion is especially pertinent for those departments with more than twenty staff whose average outpatients and emergency visits exceed 5000 daily in the whole hospital.

The result showed that personal traits were relevant to the competency of clinical department directors in class-A tertiary hospitals. This result is congruent with the finding that "personal traits have a positive impact on competency clinical department leaders in class-A tertiary hospitals (Song et al., 2019). The assertion that individual factors are pivotal to job competency has been extensively discussed (Chen & Long, 2021; Reid & Dold, 2020; Xu et al., 2018). Besides the words "the sense of responsibility" and "medical ethics" mentioned by many participants, participant I also mentioned "react positively to difficulties" in terms of personal traits. Moreover, G has mentioned "leading by example and establishing authority through professionalism" Although implicit competency seems to be not closely related to knowledge and ability, it is often the key to determining individual job performance (Wei et al., 2021). The acquisition of implicit competency often requires long-term and continuous learning and training (Wang et al., 2020). Therefore, we suggest that HR executives adopt a motivational approach to improve the implicit competence of department directors. The hospital HR department should concentrate on cultivating explicit competence when planning a training program. During training, the HR could help clinical directors to improve their implicit competence through collective discussion, experience exchange, and scenario simulation. We further suggest that hospital HR create more targeted learning opportunities to improve department heads' overall competency for individual career development and practical

needs. Admittedly, clinical department directors should adjust their cognition of "only knowledge and skills first" and actively cultivate implicit ability characteristics by themselves. This study's findings help to understand the view of "to include interpersonal relationships in the competency assessment indicators of clinical department heads" (Lu & Lu, 2019). Guan (2021) emphasized that "in a specific situation, a good grasp of interpersonal relationships reflects the level of competency for a clinical department head." That view corresponded to the idea of "consultation, referral moment in this working relationship at any time to establish," mentioned by some participants.

Furthermore, the competency of this category also required the director "to determine priorities in complex relationships and ensure maximum efficiency," said J. J also mentioned that "we can properly maintain and develop the interpersonal relationship." Because hospital performance evaluation focuses on quantifiable indicators conventionally, the specific measurement of the interpersonal relationship of the department director is insufficient. Besides, harmonious interpersonal relationship contributes more and more to career competency, especially for doctors who have to meet different people, including colleagues and patients. We suggest that the communication and collaboration between departments should be improved so that the department director can get assistance timelier.

## **Conclusion**

This study explored the determinants of competency for clinical department directors in class-A tertiary hospitals in China. We used a semi-structured approach to interview ten directors of clinical departments in class-A tertiary hospitals to obtain raw data. Professional skill was reviewed as determinants, including medical expertise, learning, and innovation ability. Administrative ability was another factor, which comprised decision-making ability, team construction, personnel training, guidance and supervision. Personal traits were also identified as influencing factors, which included responsibility, medical humanity, achievement orientation, and personal influence. The interpersonal relationship was the last influencing factor which comprised relationship building, interpersonal insight, and relationship maintenance. The fourteen sub-factors constitute specific standards for candidates willing to serve as clinical department directors. This paper also provides HR of class-A tertiary hospitals references with the construction indexes of a competency model for clinical department directors. This study also has some limitations. For one thing, due to the prevention requirement of COVID-19 during the interviews, this research was only carried out in Taiyuan city, China. The limited geographical option might lead to the limitation of the results. For another, the effects of these factors have not been tested quantitatively. Thus, future research will focus on selecting quantitative or mixed methods until the best results are obtained.

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