

## A Qualitative Study on Differences in Role Expectations for Family Doctors in Functional Communities from Both Supply and Demand Perspectives (Postprint)

**Authors:** Glebin, Zhai Jiayi, Yuan Jing, Tang Yanwen, Qin Li, Dong Ming, Qin Li

**Date:** 2025-10-29T12:06:33+00:00

### Abstract

**Background:** Through years of practice, family doctor services have achieved certain effectiveness in health management for key populations such as the elderly, pregnant women, children, and patients with chronic diseases, but the service model for functional community populations represented by working-age adults remains to be improved. **Objective:** Framed within role theory, this study conducts a qualitative investigation into role expectations of family doctors from both supply (family doctors) and demand (service recipients) perspectives, aiming to help refine the role image and functions of family doctors to meet service demands. **Methods:** From September to November 2023, employing snowball sampling methodology, semi-structured interviews were conducted with 8 family doctors and 16 contracted residents from 4 community health service centers in Shanghai's Jiading District that had implemented functional community family doctor services, and directed content analysis was performed on the interview results. **Results:** Using the four key components of role expectation theory—“quality expectations, image expectations, obligation expectations, and behavioral expectations”—as themes, 14 sub-themes were extracted: clinical competence, professional quality, cultural and scientific education, medical ethics and professionalism, communication efficiency, work spirit, emotional expectations, treatment services, consultation services, consultation coordination, cost-control obligations, service effectiveness, service accessibility, and service standardization. The study found that both supply and demand sides had consistent expectations regarding medical ethics and professionalism, good communication, healing the wounded and rescuing the dying, service effectiveness, and service standardization, but inconsistent expectations regarding cost-control obligations, with other expectations showing various similarities

and differences. Conclusion: The consistent expectations between supply and demand sides originate from the traditional ideal image of general practitioners, while the divergent expectations stem from cognitive mismatch regarding the role and functions of family doctors between both parties. Strategies are proposed to resolve the contradictions between functional community populations' cognitive mismatch about family doctors and the actual services provided by family doctors in reality.

## Full Text

### A Qualitative Study on Differences in Role Expectations for Family Doctors in Functional Communities from Supply and Demand Perspectives

\*\*GE Libin<sup>1</sup>, ZHAI Jiayi<sup>2</sup>, YUAN Jing<sup>3</sup>, TANG Yanwen<sup>4</sup>, QIN Li<sup>2\*</sup>, DONG Ming<sup>5\*\*</sup>

<sup>1</sup>Community Health Service Center of Huangdu Anting Town in Jiading District, Shanghai 201804, China

<sup>2</sup>Community Health Service Center of Jiading Town in Jiading District, Shanghai 201899, China

<sup>3</sup>Community Health Service Center of Huating Town in Jiading District, Shanghai 201816, China

<sup>4</sup>Community Health Service Center of Malu Town in Jiading District, Shanghai 201801, China

<sup>5</sup>Shanghai Jiading District Health Commission, Shanghai 201899, China

*Corresponding author: QIN Li; E-mail: 445409749@qq.com*

---

## Abstract

**Background:** After years of practice, family doctor services have achieved certain results in health management for key populations such as the elderly, pregnant women, children, and patients with chronic diseases. However, service models for functional community populations represented by young and middle-aged working individuals still need improvement. **Objective:** Using role theory as a framework, this study conducts qualitative research on role expectations for family doctors from both supply and demand perspectives to help improve the role image and functions of family doctors and better meet service demands. **Methods:** From September to November 2023, using snowball sampling, we conducted semi-structured interviews with 8 family doctors and 16 contracted residents from four community health service centers in Shanghai's Jiading District that had launched functional community family doctor services. Directed content analysis was performed on interview results. **Results:** Using the four key components of role expectation theory—quality expectation, image expectation, obligation expectation, and behavior expectation—as

themes, we extracted 14 sub-themes: clinical competence, work quality, cultural and scientific education, medical ethics, communication efficiency, work spirit, emotional expectation, treatment services, consultation services, consultation coordination, cost-control obligations, service effectiveness, service accessibility, and service standardization. Both parties shared consistent expectations regarding medical ethics, good communication, healing the wounded and rescuing the dying, service effectiveness, and service standardization. They had inconsistent expectations regarding cost-control obligations, while other expectations showed both similarities and differences. **Conclusion:** Consistent expectations between supply and demand sides stem from the traditional ideal image of general practitioners, while divergent expectations arise from misaligned cognition of family doctors' role functions between both parties. Strategies are proposed to resolve contradictions between functional community populations' cognitive misalignment about family doctors and the actual services provided.

**Keywords:** General practice; Family doctor; Functional community; Role expectation; Qualitative research; Supply-demand relationship

---

Family doctors (hereinafter referred to as GPs) serve as “gatekeepers” of residents' health, providing contracted residents with comprehensive, whole-life-cycle, convenient, continuous, and basic health management services [1-2]. After years of practice, GP services have achieved certain results in health management for key populations such as the elderly, pregnant women, children, people with disabilities, and patients with chronic diseases like hypertension and diabetes, as well as those with severe mental disorders [2]. In terms of service coverage, services for populations represented by young and middle-aged working individuals constitute the “final piece of the puzzle” in whole-population health management. To this end, Shanghai, targeting this population, issued the “Guiding Opinions on Promoting Community Health Services in Functional Communities in Shanghai” in 2021, exploring a health management model for “functional community populations” to improve the whole-population, whole-life-cycle health management system [3]. Functional community is a concept relative to residential community, composed of groups with similar functions and circumstances. This population has strong productivity and creativity, with diverse health needs [4-9]. Different scholars have explored GP services for different functional community populations, mostly adopting service packages to provide contracted residents with basic medical care, traditional Chinese medicine health care, health examinations, health consultation, and other personalized services [1,4-8]. Meanwhile, from the supply-side perspective, studies have found that residents' willingness to contract, service demand, and satisfaction are influenced by various factors including residents' personal circumstances, service content and methods, and GP quality [2,4-8]. Today, GP contract services have entered a new stage of high-quality development, with new requirements for functional community services [10]. Previous research findings have certain differences from current realities and cannot precisely solve present problems. Moreover, previous stud-

ies have mostly been conducted from the supply-side perspective [2,4-8], yet in preliminary practice, our research team found that functional community populations have unclear medical needs and diverse channels for independently seeking health knowledge, leading to certain biases in their perception of the GP role. Role expectation theory includes four aspects: quality expectation, image expectation, obligation expectation, and behavior expectation [11], which can help analyze cognitive differences between supply and demand sides regarding functional community GPs. Based on this theoretical framework [11], this study conducts qualitative research on role expectations of GPs from the perspectives of both GPs and service recipients, aiming to understand differences in role expectations between both parties, analyze reasons, and propose improvement strategies to resolve contradictions between functional community populations' cognitive misalignment about GPs and the actual services provided.

### 1.1 Study Participants

From September to November 2023, using snowball sampling, we selected GPs and contracted residents from four community health service centers in Jiading District, Shanghai, representing different areas: new urban area (marked as a), old urban area (b), peri-urban fringe area (c), and outer suburban rural area (d). All four centers had already launched functional community GP services. Inclusion criteria: (1) For GPs: having served as a GP for at least one year; having actual experience providing services to functional communities; having \$50 contracted residents in functional communities. For residents: having been contracted with a GP for at least three months; having actually received GP services. (2) Informed consent and voluntary participation. Exclusion criteria: (1) For GPs: having served as a GP for less than one year; lacking functional community service experience. (2) For residents: not contracted with a functional community GP or not having received functional community GP services. This study obtained ethical exemption approval from the Ethics Committee of Jiading Town Community Health Service Center in Shanghai's Jiading District.

Based on the principle of information saturation, this study included 24 participants, comprising 8 GPs and 16 contracted residents. GPs were numbered A1-A8, and residents B1-B16. According to interview results, we annotated the daily interaction level and service satisfaction of contracted residents. Satisfaction was derived from residents' service satisfaction evaluations in the interviews (satisfied, neutral, dissatisfied). Interaction level was derived from residents' daily communication frequency with GPs in the interviews (>4 times/month = high, 1-4 times/month = medium, <1 time/month = low). Basic information about participants is shown in Table 1 and Table 2 .

### 1.2 Research Methods

This study employed directed content analysis using role theory as the framework. The theoretical dimensions of quality, image, obligation, and behavior expectations served as themes for the qualitative research. The research team

conducted semi-structured interviews with functional community GPs and contracted residents regarding role expectations of GPs. The implementation process included interview guide development, data collection, transcription, coding analysis, category formation, and results presentation.

**1.2.1 Interview Guide** The interview guide was developed based on role theory [11] and formulated through discussion among all research team members. To obtain sufficient information during interviews, the guide employed relatively open-ended questions. After initial development, two respondents were selected for pilot interviews. The guide was revised based on results and approved by the team before formal interviews began. The interview guide applied to both GPs and contracted residents, with specific content: (1) What qualities do you think a GP should possess? What level do you expect them (or yourself) to achieve? (2) What is your image of an ideal family doctor? Where is the gap between your current GP (or yourself) and this image? (3) What responsibilities and obligations should a functional community GP undertake? Are they (or you) fulfilling them now? (4) What role do you hope a GP (or yourself) will play in functional communities?

**1.2.2 Data Collection** Before interviews began, team members received interview technique training. Interviewers were selected from team members with no conflict of interest with respondents. Interviewers scheduled appointments with respondents and conducted semi-structured interviews in quiet, private settings, with each interview lasting 20-30 minutes. After full disclosure, interviewers recorded interviews following informed consent principles, maintained neutrality, listened patiently, and probed when necessary.

**1.2.3 Data Analysis** After interviews, two team members independently analyzed transcribed texts from audio recordings using Nvivo 12.0 software for coding. This study conducted directed content analysis using role theory as the framework, with specific steps: (1) Using sentences related to role expectations of GPs from both supply and demand sides as the smallest analysis units. (2) Repeatedly reading textual materials. (3) Using the four content areas from role expectation theory— “quality expectation, image expectation, obligation expectation, and behavior expectation”—as themes. (4) Through repeated comparison of textual materials, summarizing both parties’ viewpoints to form sub-themes and sorting out consistencies or differences within sub-themes. (5) Elaborating on differences in role expectations between supply and demand sides under each theme, finding representative original statements for support.

### 2.1.1 Theme 1: Quality Expectations

Theme 1: Quality Expectations. This theme extracted four sub-themes: clinical competence, work quality, cultural and scientific education, and medical ethics. Both parties had consistent expectations regarding medical ethics, while expectations differed under other sub-themes (Table 3).

### 2.1.2 Theme 2: Image Expectations

Theme 2: Image Expectations. This theme extracted three sub-themes: communication efficiency, work spirit, and emotional expectations. Both parties agreed on good communication and the healing spirit, while regarding professional competence, they shared expectations for positive image but differed on functional image expectations (Table 4).

### 2.1.3 Theme 3: Obligation Expectations

Theme 3: Obligation Expectations. This theme extracted four sub-themes: diagnostic and treatment services, consultation services, resource coordination, and cost-control obligations. Both parties had divergent expectations regarding cost-control obligations, while expectations differed under other sub-themes (Table 5).

### 2.1.4 Theme 4: Behavioral Expectations

Theme 4: Behavioral Expectations. This theme extracted three sub-themes: service effectiveness, service accessibility, and service standardization. Both parties had consistent expectations regarding service effectiveness and service standardization, but differed in their expectations for accessibility pathways (Table 6).

## 3.1 Consistent Expectations Stem from Traditional Ideal GP Image

The consistent expectations between supply and demand sides in this study included: possessing medical ethics, correct attitude, high education, and meeting minimum competence thresholds; conforming to an image of efficient communication, sense of mission, and patient-centered care; undertaking obligations of disease diagnosis and treatment, health consultation, and medical resource coordination; and achieving effects of compliant diagnosis and treatment, convenient medical access, and maintaining residents' and family health. Both parties' consistent expectations for functional community GPs essentially approximate the traditional ideal image of doctors. In addition to being influenced by traditional cultural education and various social news media reports, the supply side is also influenced by internal insights gained through long-term practice, while the demand side's perceptions are updated through communication and contact with GPs, ultimately forming an image similar to the ideal doctor in the public's traditional mindset—possessing superb medical skills, strong medical humanities literacy, non-heroic traits, and good narrative competence [12]. Both parties' quality expectations basically align with relevant dimensions and competencies of GP post competency [13], which is the core capability of GPs. After years of development in general practice, with most experts familiar with demand-side needs, and given that this study's participants all had intermediate-level or higher professional titles and over five years of work experience with deep understanding of general practice, both supply and demand sides recognized the

minimum threshold requirement for GP diagnostic and treatment competence—the ability to diagnose and treat common, frequent, and chronic diseases in the community—thus views basically resemble other scholars’ research findings. From obligation and behavior expectation perspectives, primary care GPs are practitioners of the “six-in-one” functions of community health service centers, among which first-contact care and referral, health consultation, and other services are the most utilized by demand sides, similar to basic service content in service packages explored by other scholars [4-8]. Meanwhile, GP services are a special form of medical service possessing certain advantages in accessibility dimensions including availability, reachability, adaptability, economic accessibility, and acceptability [14].

### 3.2 Divergent Expectations Stem from Misaligned Cognition of GP Role Functions

Differences in expectations between supply and demand sides mainly concerned: maximum competence requirements, collaborative competence, scientific and educational competence, image height deviation, psychological service functions, policy consultation functions, non-medical resource coordination functions, and GP cost-control obligations. The main reason for expectation differences lies in both parties’ misaligned cognition of GP role functions. Regarding the aforementioned minimum competence threshold for GPs, higher maximum competence better meets demand-side needs. However, from the perspective of tiered diagnosis and treatment, with first-contact care in the community, GPs are primarily responsible for diagnosing and treating common and frequent diseases, and should promptly refer when encountering unsolvable problems. Therefore, the competence maximum should not solely target individual GPs’ upper limits but should emphasize general-specialist collaboration. Since most health issues of functional community populations fall within the serviceable range of GP competence, demand-side objects have less perceptible need for collaboration, thus reflecting excessively high expectations for individual GP competence maximums while having minimal expectations for collaborative competence. This ultimately leads to functional community populations, despite often being family “pillars” bearing significant psychological pressure and having psychological counseling service needs [4-6], being unwilling to seek specialized psychological diagnosis and treatment from GPs. Regarding expectations for scientific and educational competence, some scholars also view this as part of post competency [13]. Scientific and educational competence can somewhat evaluate doctors’ comprehensive capabilities but functions to raise the competence maximum rather than the minimum. Demand-side expectations are demand-oriented, thus having low perceived relevance for this competence. In terms of image height, general practice has developed rapidly in recent years, with both quality and quantity of talent achieving certain results. More capable and highly educated “5+3” GPs have gradually become the new main force [15]. Although GP authority is weaker than specialists in general hospitals, they more easily grasp residents’ overall health status. Due to insufficient promotion and

understanding of the titles “general practitioner” and “family doctor,” primary care residents often confuse them with concepts of “omnipotent doctor” and “door-to-door doctor,” thus causing demand-side functional expectation deviations. Meanwhile, GP services are essentially a “medical-preventive integration” health management service. The demand-side perspective of having “medical” without “preventive” feedback reflects the current “separation of prevention and treatment” phenomenon in GPs regarding human resource coordination, work concepts, and organizational management [16], while also reflecting the public’s lack of cognition and sensitivity toward the strategic shift of medical services to a health-centered approach, with public health concepts still at a relatively low level of treatment without prevention. Demand-side lacks cognition of GPs’ non-medical functions related to their needs. On one hand, demand-side utilization of public health services is less than key populations. Community health service centers have public welfare attributes, with responsibilities for non-medical resource coordination mainly reflected in health management for various key populations [2]. GPs collaborate closely with public security, civil affairs, and aging departments, but functional community populations have higher health levels and less personal experience, also related to imperfect social resource coordination functions needed for functional populations. On the other hand, demand-side has urgent needs for policy management consultation. Although GP services involve multiple policies including medical care, medical insurance, and civil affairs, GPs are only policy implementers. Accurate interpretation of relevant policies requires professional training and management department support. From a macro perspective, high-quality GPs can improve residents’ health levels, thereby reducing health expenditure [15]. From a micro perspective, high-quality GPs more comprehensively understand contracted residents’ health status, thereby precisely adjusting rational medication. Shanghai’s GP services have reporting mechanisms for excessive diagnosis and treatment and medical insurance violations, capable of reducing individual medical expenses for contracted residents. However, from residents’ perspective, they are more concerned with individual rights and interests, with insufficient understanding of policy requirements’ original intentions, thus creating conflicts in cost-control expectations.

### **3.3 Improvement Strategies for Role Image and Functions of Functional Community GPs**

This study found that differences in image expectations for functional community GPs mainly stem from demand-side insufficient cognition of GPs, leading to expectation deviations regarding service content, forms, and obligations. Therefore, the primary task is to change demand-side cognition, reduce cognitive misalignment, and strengthen GP promotion to help residents accurately understand that GPs are not “omnipotent doctors” or “door-to-door doctors” but “health gatekeepers” maintaining individual, family, and population health. Regarding competence cognition, emphasis must be placed on highlighting that GP “minimum competence” can meet the diagnosis and treatment of common,

frequent, and chronic diseases. Raising GP “minimum competence” is a basic requirement. The situation of “referring away” when touching “maximum competence” requires correcting doctors’ psychology of avoiding risks and disputes while also strengthening cultivation of GPs’ specialist expertise, forming a situation in community health service centers where the GP team is “general with specialist.” This balances the “breadth” and “depth” of professional competence. Community health service centers must also emphasize referral and collaboration mechanisms after breaking through “maximum competence,” establishing and improving a “general-specialist collaboration” mechanism [10], fully utilizing regional medical consortium advantages, and establishing vertical linkage mechanisms with higher-level hospitals. Higher-level hospital specialists serve as support platforms for “maximum competence.” For patients referred down, GPs follow up on specialist treatment plans, coordinate considerations, conduct cost supervision, and achieve cost-control effects.

Previous non-medical services were weak points in GP services. Although functional community populations are similar within the same community, functional community types are complex, requiring continuous integration and improvement of service packages, simultaneously influenced by geography and individual service characteristics, with diverse non-medical service needs. Current functional community population service packages have some involvement but remain imperfect [4-8]. Functional community populations have strong health needs but underutilize community health services. We must both strengthen promotion and improve quality, improve service supply pathways, and develop appropriate service plans. By enhancing active health awareness to promote health, leveraging enterprise and institution platforms to create favorable environments [17]. GP services follow two-way selection, with contractual relationships formed on the basis of consensus being mutual recognition results. Specific pathways for service accessibility require both execution content constrained by existing work norms and agreements reached through bilateral negotiation. Maintaining good GP-contracted resident relationships can change both parties’ positions, with understanding and mutual trust forming the foundation for effective service and function execution. Finally, organizational management departments need to promote “medical-preventive integration” mechanism construction. GP services are essentially a team-based service model with GPs as the core. However, the phenomenon of GPs “fighting alone” is common. Promoting team service integration requires integration in organizational management, functional community population services, health financing, human resources, information construction, and other aspects [16], ultimately reducing GP workload, broadening service content and pathways, and meeting residents’ expectations.

**Limitations:** Functional communities are diverse, and this study could not include all types of functional community samples. Additionally, it lacks samples from organizational management departments regarding functional community GP role expectations, which needs further improvement in follow-up research.

**Author Contributions:** Ge Libin conceived and designed the study, conducted feasibility analysis, and wrote the manuscript; Yuan Jing, Tang Yanwen, and Dong Ming collected, analyzed, and interpreted data; Zhai Jiayi revised the manuscript; Qin Li was responsible for quality control and review, supervision and management, and is accountable for the manuscript.

**Conflicts of Interest:** This article has no conflicts of interest.

## References

- [1] Sun Xinran, Wan Heping, Han Yule, et al. Study on the service project system and weight of family doctor contract services in functional communities[J]. Chinese General Practice, 2021, 24(34):
- [2] Dou Yong, Long Yulin, Zhang Xiaoyan. Current situation, problems and suggestions of family doctor services in China[J]. China Economic & Trade Herald, 2023(12):73-76.
- [3] Shanghai Municipal Health Commission. Guidance on Promoting Community Health Services in Functional Communities in Shanghai [Hu Wei Ji Ceng (2021) No. 5][EB/OL]. (2021-04-12)[2022-08-29]. <https://www.shanghai.gov.cn/>
- [4] Mei Lichen, Tang Zhenqing, Zhang Yue, et al. Study on the demand and influencing factors of family doctor services in science and innovation functional communities[J]. Chinese General Practice, 2021, 24(22):
- [5] Xu Weiqi, Wang Lan, Tang Zhenqing, et al. Study on the content of health service packages of family doctor services for functional community populations[J]. Shanghai Journal of Preventive Medicine, 2022, 34(5):483-486. DOI:10.19428/j.cnki.sjpm.2022.21379.
- [6] Wu Juanli, Chen Yuanhong, Cheng Huiqin, et al. Study on the supply and demand differences of family doctor services in science and innovation functional communities[J]. Chinese Journal of General Practice, 2023, 21(4):637-640. DOI:10.16766/j.cnki.issn.1674-4152.002949.
- [7] Xu Jian, Yao Gang, Pan Wenlei, et al. Study on the satisfaction status and influencing factors of family doctor contract services among young and middle-aged building populations[J]. Chinese General Practice, 2022, 25(22):2782-2789.
- [8] Shi Bin. Study on influencing factors and stratification of health service demand in Shanghai' s functional communities based on KANO model[D]. Nanchang: Jiangxi University of Chinese Medicine, 2023.
- [9] Tang Zhenqing, Wang Minghan, Shi Bin, et al. SWOT analysis of community health services in functional communities in Shanghai[J]. Shanghai Medical & Pharmaceutical Journal, 2023, 44(10):3-5, 38.
- [10] Sheng Fei, Lu Ping, Zhou Liqing, et al. Countermeasures to promote family doctor contract services and primary care first contact and follow-up visits[J]. Chinese Journal of General Practitioners, 2024, 23(2):
- [11] Xi Congqing. Role Theory: Interaction Between Individual and Society[M]. Hangzhou: Zhejiang University Press, 2010:100.
- [12] Wan Qiong, Liu Weijing. Exploration of the construction of ideal doctor image in The Plague[J]. Chinese Medical Humanities, 2023, 9(8):24-28.
- [13] Wei Yun, Wang Feiyue, Wang Meirong, et al. Research progress on the evaluation index system of general practitioner post competency in China[J]. Chinese General Practice, 2021, 24(19):
- [14] Zhang Jindan, Min Shuhui, Guo Ruiqi, et al. Impact of medical service accessibility

and social capital on self-rated health of the elderly: analysis based on CLHLS data[J]. Chinese Health Service Management, 2023, 40(10):765-768, 800. [15] He Yifan. Study on the impact of general practitioners on the rise of health expenditure in China[D]. Beijing: Capital University of Economics and Business, 2021. [16] Gu Hai, Li Zihao, Wang Furu, et al. Key issues, mechanism innovation and implementation path of medical-preventive integration[J]. Health Economics Research, 2024, 41(1):45-49. [17] Liu Fang, Chen Junxiang, Shen Fulai. Investigation on health status and needs of occupational populations in an industrial park in Shanghai[J]. Chinese Journal of General Practitioners, 2024, 23(4):354-

(Received: 2024-02-21; Revised: 2025-09-28)

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

*Source: ChinaXiv –Machine translation. Verify with original.*