

## Postprint: Quantitative Research on China's Family Doctor Contract Service Policy Based on a Three-Dimensional Analytical Framework

**Authors:** Sun Jiaying, Luo Jinping, Zhang Qianwen, Wang Kang, Yin Wenqiang, Chen Zhongming, Ma Dongping, Ma Dongping

**Date:** 2024-05-24T00:00:00+00:00

### Abstract

**Background:** The comprehensive promotion of family doctor contract services in China has been underway for less than 7 years, and still faces a series of developmental challenges. An unsound safeguard mechanism is a key problem hindering the development of family doctor contract services, necessitating scientific and reasonable family doctor contract service policies to ensure effective implementation.

**Objective:** To conduct a quantitative analysis of the textual content of China's family doctor contract service policies, explore the focus areas and deficiencies of existing policies, and provide basis and reference for the development and optimization of future family doctor contract service policies.

**Methods:** On 2023-01-10, official websites such as the Chinese Government and the National Health Commission were searched to obtain 15 policy documents related to family doctor contract services, with the search period from 2015-01-01 to 2022-12-31. A three-dimensional analysis framework of policy instruments-stakeholders-policy strength was constructed to classify, code, and analyze the policy documents.

**Results:** In the policy instrument dimension, supply-type, demand-type, and environment-type instruments accounted for 30.5% (69/226), 19.0% (43/226), and 50.5% (114/226), respectively. In the stakeholder dimension, family doctors, contractees, non-contractees, primary-level medical and health institutions, hospitals (secondary and above), and government accounted for 29.2% (123/422), 14.7% (62/422), 9.2% (39/422), 21.3% (90/422), 13.3% (56/422), and 12.3% (52/422), respectively. The average strength value of China's family doctor contract service policies was 2.2 points. In the policy instrument-stakeholder cross-dimension, the distribution of stakeholders in

supply-type and environment-type instruments was suboptimal, with gaps in sub-instruments. In the policy instrument-policy strength cross-dimension, environment-type instruments were used more frequently as policy strength increased. In the stakeholder-policy strength cross-dimension, the policy strength matching scores of various stakeholders showed significant differences, with family doctors as the main body having the highest score (311 points) and non-contractees as the main body having the lowest score (90 points).

Conclusion: From the policy instrument perspective, policy instruments should be rationally allocated, usage proportions continuously adjusted, internal structure optimized, and the rationality of policy instrument distribution among stakeholders improved. From the stakeholder perspective, all stakeholders should be comprehensively considered, their respective positions clarified, and the needs of non-contractees should be emphasized. From the policy strength perspective, policy supervision and management capabilities should be strengthened, and the implementation strength of family doctor contract service policies should be continuously improved.

## Full Text

### Quantitative Analysis of China's Contracted Family Doctor Service Policies Based on a Three-Dimensional Analysis Framework

SUN Jiaying<sup>1,2,3</sup>, LUO Jinping<sup>1,2,3</sup>, ZHANG Qianwen<sup>1,2,3</sup>, WANG Kang<sup>4</sup>, YIN Wenqiang<sup>1,2,3</sup>, CHEN Zhongming<sup>1,2,3</sup>, MA Dongping<sup>1,2,3\*</sup>

<sup>1</sup>School of Management, Shandong Second Medical University, Weifang 261053, China

<sup>2</sup>“Health Shandong” Severe Social Risk Prevention and Management Synergy Innovation Center, Weifang 261053, China

<sup>3</sup>Collaborative Innovation Center of Social Risks Governance in Health, Shanghai 200032, China

<sup>4</sup>Finance Department of Weifang People's Hospital, Weifang 261000, China

*Corresponding author: MA Dongping, Associate professor/Master's supervisor; E-mail: anqiuma123@163.com*

## Abstract

**Background:** China's contracted family doctor service initiative has been comprehensively promoted for less than seven years and continues to face developmental challenges. An inadequate guarantee mechanism represents the key obstacle impeding progress, creating urgent demand for scientifically sound policies to ensure effective implementation.

**Objective:** To quantitatively analyze the textual content of China's contracted family doctor service policies, identify current policy priorities and deficiencies,

and provide evidence for subsequent policy development and optimization.

**Methods:** On January 10, 2023, we retrieved 15 policy documents related to contracted family doctor services from official government websites including the China Government Portal and National Health Commission, covering the period from January 1, 2015, to December 31, 2022. We constructed a three-dimensional analytical framework integrating policy tools, stakeholders, and policy strength to categorize, code, and analyze these documents.

**Results:** In the policy tool dimension, supply-based, demand-based, and environment-based tools accounted for 30.5% (69/226), 19.0% (43/226), and 50.5% (114/226) respectively. In the stakeholder dimension, family doctors, contractors, non-contractors, primary medical and health institutions, hospitals (secondary level and above), and government represented 29.2% (123/422), 14.7% (62/422), 9.2% (39/422), 21.3% (90/422), 13.3% (56/422), and 12.3% (52/422) respectively. The average policy strength score was 2.2 points. Cross-dimensional analysis revealed suboptimal stakeholder distribution across supply-based and environment-based tools, with certain sub-tools absent. Environment-based tools were employed more frequently as policy strength increased. Stakeholder-policy strength matching scores varied substantially, with family doctors scoring highest (311 points) and non-contractors lowest (90 points).

**Conclusion:** From the policy tool perspective, tools should be rationally allocated with continuously adjusted weightings, optimized internal structures, and improved distribution rationality among stakeholders. From the stakeholder perspective, all parties should be considered comprehensively, their respective positions clarified, and the needs of non-contractors prioritized. From the policy strength perspective, policy supervision and management capacity should be strengthened to continuously improve implementation of contracted family doctor service policies.

**Key words:** Contracted family doctor services; Policy tools; Stakeholders; Policy strength; Policy analysis

---

In May 2016, the *Guiding Opinions on Promoting Contracted Family Doctor Services* (National Medical Reform Office [2016] No. 1) was formally issued, marking China's official implementation of contracted family doctor services [1]. As a crucial measure for advancing tiered diagnosis and treatment and deepening healthcare system reform, this initiative has continued to expand during the 14th Five-Year Plan period, with coverage expected to reach 75% by 2035 [2]. However, with comprehensive promotion occurring for less than seven years, significant challenges—including “signing without service,” inadequate service quality, and imperfect guarantee mechanisms—have created substantial pressure [3]. Effectively analyzing and utilizing policies to scientifically and rationally develop contracted family doctor services represents a critical prerequisite for future progress.

Current research on China's contracted family doctor service policies predominantly employs quantitative analysis methods. Examples include Zhang Liyan et al. [4] who conducted quantitative analysis from a policy tool dimension integrated with medical-nursing combined care perspectives, Xu Pingping et al. [5] who used the Policy Modeling Consistency (PMC) index, Zhang Chaochun et al. [6] who utilized a two-dimensional framework of policy tools and implementation development processes, and Wu Qing et al. [7] who applied a policy tools-stakeholders two-dimensional framework. While policy tool methodology has been widely applied, these studies lack evaluation from perspectives such as policy strength and multi-dimensional quantitative indicator construction. To further advance quantitative policy analysis, this study constructs a "policy tools (X)-stakeholders (Y)-policy strength (Z)" three-dimensional framework to systematically evaluate policy text composition and characteristics, providing recommendations for policy improvement and optimization.

### 1.1 Data Sources

On January 10, 2023, we searched official government websites including the China Government Portal and National Health Commission using the keywords "family doctor/contracted family doctor service" to retrieve relevant policy documents from 2015 to 2022. The PKU Law Database was also searched as a supplementary source.

### 1.2 Inclusion and Exclusion Criteria

**Inclusion criteria:** (1) Policy documents with titles and content directly addressing contracted family doctor services; (2) Full-text availability; (3) National-level policy documents issued by the General Office of the Central Committee of the Communist Party of China, the State Council, or various ministries individually or jointly; (4) Policy types including opinions, notices, and work plans that directly reflect policy content.

**Exclusion criteria:** (1) Policy interpretation documents and bulletins; (2) Documents weakly related to contracted family doctor service content; (3) Documents containing keywords only without substantive content; (4) Duplicate documents (only one retained).

### 1.3 Policy Selection and Organization

Policy retrieval and organization were completed independently and simultaneously by two experienced researchers. Each researcher reviewed search results and applied inclusion/exclusion criteria. Disputed policies were resolved through discussion. After manual deduplication, 15 policy documents were included, with basic information presented in Table 1. Documents were organized by issuance date, collecting information on policy name, type, content, and issuing institution.

#### 1.4 Policy Text Coding

Policy texts were coded using a “policy number-chapter number-section number” format [8]. Coding was performed independently by two researchers, with discrepancies resolved through discussion. Excel 2010 software was used for statistical analysis of final results.

## 2 Construction of the Policy Quantitative Analysis Framework

Policy tools have diversified while stakeholders have become increasingly abundant. Policy strength varies across different policies, and coordination among policy tools, stakeholders, and policy strength constitutes an important prerequisite for policy implementation and synergy. Building upon Shi Min et al. [9], this study adds a stakeholder dimension to construct a three-dimensional analytical framework (Figure 1 [Figure 1: see original paper]).

### 2.1 X-Dimension (Policy Tools)

This study adopts the Rothwell and Zegveld policy tool classification method [10] widely used in domestic policy quantitative research, analyzing three policy tool types: supply-based, demand-based, and environment-based. This classification has been employed by Zhang Liyan et al. [4] and Liu Guojia et al. [11] in policy quantitative analyses. Supply-based tools primarily function as drivers and incentives, comprising four sub-tools: talent training, resource input, infrastructure, and technology information services. Demand-based tools primarily function as pull and support mechanisms, including price subsidies, service outsourcing, pilot projects, and medical insurance support. Environment-based tools promote policy development while being influenced by it, providing a favorable environment through five sub-tools: promotion and publicity, planning goals, strategic measures, legal regulation, and policy guidance. The framework includes three policy tool types with 13 sub-tools (Figure 2 [Figure 2: see original paper]).

### 2.2 Y-Dimension (Stakeholders)

Rational policy structures should always incorporate analysis of key stakeholders during policy formulation and implementation. Stakeholders in contracted family doctor services primarily involve family doctors, contractors, non-contractors, primary medical and health institutions, hospitals (secondary level and above), and government [12].

### 2.3 Z-Dimension (Policy Strength)

Policy strength reflects policy effectiveness during implementation and represents the capacity to achieve policy objectives. Following the methodology of

Peng Jisheng et al. [13], Wang Wei et al. [14], and Zhou Lifang et al. [15], scoring was assigned based on the number and level of issuing institutions, with adjustments according to actual policy conditions (Table 2).

### 3 Results

#### 3.1 Internal Structural Characteristics and Distribution of X, Y, and Z Dimensions

In the policy tool dimension, policy texts were coded and statistically analyzed, yielding 226 policy codes across three tool types. Environment-based tools were most frequently used [50.5% (114/226)], followed by supply-based tools [30.5% (69/226)], with demand-based tools used least [19.0% (43/226)]. Within supply-based tools, talent training was most common [10.6% (24/226)], while infrastructure was least used [5.3% (12/226)]. In demand-based tools, price subsidies were most frequent [6.6% (15/226)], while service outsourcing was least used [1.8% (4/226)]. In environment-based tools, strategic measures were most common [14.6% (33/226)], while legal regulation was least used [5.8% (13/226)] (Table 3).

In the stakeholder dimension, 422 codes were obtained. Entries related to family doctors were most numerous [29.2% (123/422)], while those related to non-contractors were least common [9.2% (39/422)]. Entries concerning contractors, primary medical and health institutions, hospitals (secondary level and above), and government accounted for 14.7% (62/422), 21.3% (90/422), 13.3% (56/422), and 12.3% (52/422) respectively (Table 4).

In the policy strength dimension, current contracted family doctor service policies predominantly consist of notices [66.7% (10/15)]. Policy formulation primarily involved joint issuance [46.7% (7/15)], with the National Health Commission (formerly National Health and Family Planning Commission) issuing the most documents [73.3% (11/15)], followed by the National Administration of Traditional Chinese Medicine [26.7% (4/15)]. Only three documents scored 4 points, all issued by the State Council. The average policy strength score was 2.2 points. No policy documents scored 5 points due to the absence of joint issuance by the General Office of the Central Committee and the State Council (Table 5).

#### 3.2 Cross-Dimensional Analysis

**3.2.1 X-Y Dimension** Regarding the matching between different policy tools and stakeholders, all three policy tool types were distributed across five stakeholder categories. Non-contractors and government primarily matched environment-based tools, while family doctors and primary medical institutions mainly matched supply-based and environment-based tools. Contractors and hospitals (secondary level and above) matched all three policy tool types. Demand-based tools showed relatively balanced distribution, while supply-based and environment-based tools exhibited poor distribution. Government

stakeholders matched only two supply-based tools. Non-contractor stakeholders showed absences in talent training, resource input, and service outsourcing sub-tools, while government stakeholders lacked talent training, infrastructure, and pilot project sub-tools. Overall, family doctors and primary medical institutions received greater attention than contractors, hospitals (secondary level and above), government, and non-contractors (Figure 3 [Figure 3: see original paper], Table 6 ).

**3.2.2 X-Z Dimension** Regarding matching between different policy tools and policy strength, the three policy tool types were primarily distributed in documents scoring 2-4 points, with substantial variation across different strength levels. As policy strength scores increased, China's contracted family doctor service policies placed greater emphasis on environment-based policy tools (Figure 4 [Figure 4: see original paper]).

**3.2.3 Y-Z Dimension** Stakeholder strength matching scores showed considerable variation, with family doctors scoring highest (311 points) and non-contractors lowest (90 points). Stakeholders lacked supervision and protection by high-effectiveness laws, particularly missing joint issuance by the General Office of the Central Committee and the State Council to support stakeholder functions (Table 7 ).

## 4 Discussion

### 4.1 Rational Allocation of Policy Tools to Achieve Efficient Stakeholder Synergy

Overall, the three policy tool types exhibit structural imbalance requiring continuous adjustment of usage weightings. Certain sub-tools show overflow or absence, necessitating ongoing optimization of internal structures. To promote effective integration of policy tools and stakeholders, rational allocation is needed to improve distribution and enhance synergy.

**4.1.1 Continuously Adjust Policy Tool Usage Proportions** Environment-based policy tools account for 50.5% of contracted family doctor service policies, creating a favorable atmosphere and mobilizing stakeholder initiative. As the service remains in early development stages, there is tendency to employ quick-effect tools, making the coercive and targeted characteristics increasingly apparent. Over-reliance on environment-based tools may create dependency [4]. Supply-based tools at 30.5% provide some driving force, but demand-based tools at only 19.0% represent severe structural imbalance, reflecting insufficient demand-side pull. Excessive centralization and intervention may affect public will and service development. Optimizing supply-based tools, adjusting overused environment-based tools, and increasing demand-based tool proportions represent effective approaches for sustainable policy development. During tool selection, single-tool dependency should be prevented to

enhance combination effectiveness. Policy priorities differ across periods and require timely, targeted application. Given that current service recipients are predominantly middle-aged and elderly, government should maintain focus on inter-subject differences to avoid neglecting other service subjects.

**4.1.2 Optimize Internal Structure of Policy Tools** Within supply-based tools, talent training is most frequently used, cultivating high-quality family doctors through incentives, education, and training to improve service quality. Future optimization should focus on: (1) Continuously improving income distribution mechanisms and incentive policies, expanding promotion channels. Primary medical institutions should adjust salary levels, establish allowances, conduct monthly settlement of revenue balances, and extract reward funds when necessary to increase family doctor incomes. (2) Tilting recruitment, recommendation, and training toward frontline medical workers. (3) Enhancing continuing education, particularly for chronic disease management, and promoting the “5-year medical education + 3-year standardized training” model to expand the general practitioner workforce. (4) Strengthening career attractiveness and professional honor through recognition of outstanding performers.

Technology information services are relatively well-used, aligning with the current “Internet+” contracting model. Recommendations include: (1) Medical alliances should integrate resources and promote quality resource flow to primary institutions; (2) Establish a unified national system for real-time patient information access, learning from Fuzhou’s “Rongyitong” mini-program with point-based contracting and “order-grabbing” models; (3) Use information platforms to synchronously collect performance data; (4) Build mobile internet-based AI platforms for diagnosis, education, management, and interaction across the life-cycle.

Resource input and infrastructure sub-tools show low usage frequency, reflecting shortages in health resources and incomplete infrastructure, such as lack of dedicated workspaces for family doctors. Infrastructure should be optimized by providing unified vehicles, equipment, and uniforms, while granting family doctors control over certain resources like specialist appointments and test scheduling to ensure efficient utilization.

In demand-based tools, price subsidies and medical insurance support dominate. These should be leveraged through fiscal subsidies, allowances, and increased reimbursement ratios. Innovative “commercial insurance + family doctor” models should be explored. Service outsourcing and pilot project sub-tools are under-used; qualified social organizations could outsource certain services. Successful pilot experiences like Hangzhou’s cooperation with Tencent should be summarized and promoted.

In environment-based tools, strategic measures, policy guidance, and planning goals exceed 35% combined usage. These proportions should be reduced appropriately. Legal regulation sub-tools account for only 5.8%, indicating incomplete

laws and regulations regarding rights, responsibilities, and contracting content. The proportion of legal regulation sub-tools should be gradually increased to establish and improve relevant laws.

**4.1.3 Improve Distribution of Policy Tools Among Stakeholders and Enhance Synergy** Hospitals (secondary level and above) matched only one talent training sub-tool, making it difficult to ensure general practitioner quality and creating trust issues. Improvements include: (1) Establishing regular assessments covering service quality, satisfaction, contracting rates, and cost control with performance calculations and penalties for poor results; (2) Emphasizing continuing education for family doctors and team members; (3) Enhancing career attractiveness. Government stakeholders lack infrastructure sub-tools, potentially causing financial burden issues. In 2023, China's basic public health service subsidy increased by 5 yuan to 89 yuan per person, emphasizing fiscal responsibility. Finance departments should coordinate compensation funds and adjust service prices to match service levels.

## **4.2 Focus on Key Stakeholders and Clarify Their Respective Positions**

**4.2.1 Emphasize Non-Contractor Needs and Improve Strength Matching** Current policy tools focus heavily on family doctors, primary medical institutions, and contractors, with insufficient attention to hospitals (secondary level and above), government, and non-contractors. From the hospital perspective, secondary and above hospitals directly provide general practitioners and referral services. Low attention reduces their willingness to train and dispatch talent. Future efforts should expand talent sources by encouraging qualified hospital general practitioners to serve as family doctors through necessary agreements. Pilot cities should incorporate health managers, rehabilitation therapists, and other professionals into family doctor teams to comprehensively improve medical standards.

From the government perspective, as the key policy formulating body, mismatched policies and insufficient strength hinder execution speed and development. However, policy execution strength can only be demonstrated through implementation behaviors and outcomes [17]. While increasing policy strength, execution processes must be optimized and deviations corrected promptly.

From the non-contractor perspective, low awareness significantly contributes to low contracting rates. For residents not yet contracted, targeted guidance based on population characteristics is needed to facilitate voluntary contracting and enable rapid information flow from contracted to non-contracted residents. Communities should intensify promotion through annual "World Family Doctor Day" activities, using concrete examples and humanistic care to subtly influence non-contractors. Personalized contracting services should adjust content, timing, and methods, offering multiple packages such as 6-year contracts for children aged 0-6 to enable full-cycle contracting. This approach facilitates centralized patient management, consolidates contractual relationships, and promotes

high-quality development.

**4.2.2 Balance All Stakeholders** As contracted family doctor services deepen, emerging problems require collaboration. Although government-led and resident-supported, services still require coordination between health administrative departments and family doctors, with each 主体 assuming respective responsibilities to reduce buck-passing. Administrative departments should conduct top-level design and collaborate with HR, finance, and other departments for coordinated governance. Primary medical institutions must provide essential conditions and guide residents' medical-seeking behavior. Family doctor teams need to continuously strengthen their workforce and enhance residents' contracting enthusiasm. As more stakeholders join, effective incentives will strengthen cross-sector cooperation [19].

### **4.3 Enhance Policy Implementation Strength and Strengthen Supervision Capacity**

China's current contracted family doctor service policies predominantly consist of opinions, notices, and work plans, lacking normative documents such as standards, laws, and regulations, resulting in insufficient overall policy strength. Implementation involves multiple stakeholders, and inadequate overall strength leads to weak operational mechanisms. The General Office of the Central Committee should establish authoritative policies, leverage inter-agency collaboration, and continuously strengthen implementation strength to guide stakeholders effectively. After policy promulgation, supervision and safeguards must be implemented. Random inspections can provide continuous guidance for underdeveloped areas, while transparent external supervision mechanisms can leverage social forces for public oversight. To address self-assessment limitations, China is developing third-party evaluation methods using household surveys, with data serving as key reference indicators for performance assessment and resident contracting choices, thereby clarifying directions for future work.

### **References**

- [1] YI Fuliang, BAI Yunhui, CHEN Ailing, et al. Current status of supply-side contracting for family doctor services and factors influencing contract renewal [J]. Chinese General Practice, 2018, 21(7): 753-760. DOI: 10.3969/j.issn.1007-9572.2018.07.001.
- [2] SUN Caixia, LIU Tingfang, JIANG Feng, et al. Research on the development process and implementation of family doctor-related policies in China [J]. Chinese General Practice, 2021, 24(7): 765-774. DOI: 10.12114/j.issn.1007-9572.2021.00.143.
- [3] YANG Shuiguang, MA Ke. Obstructive factors and optimization paths in implementing contracted family doctor service policies [J]. Health Economics Research, 2022, 39(3): 56-59. DOI: 10.14055/j.cnki.33-1056/f.2022.03.014.
- [4] ZHANG Liyan, FENG Sisi. Analysis of contracted family doctor service policies from a medical-nursing combined care perspective [J]. Journal of

- Shandong Administration Institute, 2021, 32(2): 98-107.
- [5] XU Pingping, ZHAO Jing, LI Chunxiao, et al. Quantitative evaluation of central-level contracted family doctor service policies in China based on the PMC index model [J]. Chinese General Practice, 2023, 26(4): 440-446. DOI: 10.12114/j.issn.1007-9572.2022.0522.
- [6] ZHANG Chaochun, HU Haiyuan, CHEN Chuan, et al. Analysis of China's family doctor policies from a policy tool perspective [J]. Chinese General Practice, 2019, 22(10): 1139-1146. DOI: 10.12114/j.issn.1007-9572.2018.00.465.
- [7] WU Qing, SUO Siqin, ZENG Zhirong. Analysis of contracted family doctor service policies in Guangdong Province [J]. Medicine and Philosophy, 2021, 42(16): 37-42. DOI: 10.12014/j.issn.1002-0772.2021.16.09.
- [8] YAN Yunying, CHEN Fei. Analysis of China's public hospital reform policies from a policy tool perspective [J]. Chinese Hospital Management, 2020, 40(8): 9-13.
- [9] SHI Min, XU Mengdan, XU Xingying, et al. Quantitative study on China's medical alliance policies: Content analysis based on policy objectives, tools, and strength [J]. Chinese Health Service Management, 2021, 38(5): 352-356, 374.
- [10] ROTHWELL R, ZEGVELD W. An assessment of government innovation policies [J]. Policy Research Review, 1984(3/4): 436-444.
- [11] LIU Guojia, HAN Wei, CHEN An. Quantitative study on public health emergency response policies based on a three-dimensional framework: Taking COVID-19 as an example [J]. Journal of Modern Information, 2021, 41(7): 13-26, 48. DOI: 10.3969/j.issn.1008-0821.2021.07.002.
- [12] YU Mengting, WU Dongmei, LU Hui. Research on contracted family doctor services from a stakeholder theory perspective [J]. Soft Science of Health, 2021, 35(4): 41-44. DOI: 10.3969/j.issn.1003-2800.2021.04.010.
- [13] PENG Jisheng, SUN Wenxiang, ZHONG Weiguo. Evolution and performance of China's technological innovation policies (1978-2006): An empirical study [J]. Science Research Management, 2008, 29(4): 134-150. DOI: 10.19571/j.cnki.1000-2995.2008.04.020.
- [14] WANG Wei, YU Lingyan. Three-dimensional analysis of China's emergency industry policy objectives, tools, and strength: A quantitative study based on policy texts since 2002 [J]. Journal of Safety Science and Technology, 2019, 15(11): 50-56. DOI: 10.11731/j.issn.1673-193x.2019.11.008.
- [15] ZHOU Lifang, LÜ Haiyuan, SHAO Jiexian, et al. Quantitative study on rural doctor-related policies since the new healthcare reform: Based on policy tools, targets, and strength [J]. Chinese Journal of Health Policy, 2022, 15(2): 18-24. DOI: 10.3969/j.issn.1674-2982.2022.02.003.
- [16] YIN Dong, ZHANG Jiarui, WANG Zhen, et al. Current status and research progress of contracted family doctor services in China [J]. Chinese General Practice, 2021, 24(10): 1224-1230. DOI: 10.12114/j.issn.1007-9572.2021.00.016.
- [17] HUANG Minzi. Research on public policy implementation deviation: A case study of affordable housing policy [D]. Guangzhou: Jinan University, 2011.
- [18] ZHANG Xiaohong, XU Lingzhong, QIN Wenzhe, et al. Urban-rural dif-

ferences in awareness of family doctor system among non-contracted residents in Tai'an City [J]. *Medicine and Society*, 2022, 35(10): 35-39, 51. DOI: 10.13723/j.yxysh.2022.10.007.

[19] SONG Jia, FAN Chengxin, WANG Wanchen, et al. Research on China's volume-based drug procurement policy from a stakeholder perspective: Text analysis based on policy tools [J]. *Chinese Journal of Health Policy*, 2022, 15(2): 11-17. DOI: 10.3969/j.issn.1674-2982.2022.02.002.

---

**Author Contributions:** SUN Jiaying and MA Dongping conceived and designed the study. SUN Jiaying, LUO Jinping, and ZHANG Qianwen conducted feasibility analysis. SUN Jiaying and LUO Jinping collected data. SUN Jiaying, LUO Jinping, ZHANG Qianwen, WANG Kang, YIN Wenqiang, CHEN Zhongming, and MA Dongping participated in manuscript revision and quality control. MA Dongping was responsible for quality control, final review, and overall supervision.

**Conflict of Interest Statement:** The authors declare no conflict of interest.

**ORCID:** SUN Jiaying: <https://orcid.org/0009-0009-3752-8371>

(Received: November 21, 2023; Revised: May 4, 2024)

(Editor: WANG Fengwei)

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

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