WHIOCE PUBLISHING PTE. LTD.
PROVIDING FIRST-CLASS SCIENTIFIC INFORMATION FOR TOP SCHOLARS

2025 Volume 10, Issue 3
Advances in Precision Medicine
ISSN: 2424-9106 (Online)
ISSN: 2424-8592 (Print)

Research on the Current Status and Countermeasures of Family Doctor Contracted Services for Children Aged 0-6— Taking Wenzhou as an Example

Xiaoxiao Liu, Jianfeng Wang, Xiaojing Fan, Zeyang Hu, Sensen Wu*
Wenzhou Medical University, Wenzhou 325035, Zhejiang, China

***Corresponding author:** *Sensen Wu, 578805793@qq.com*

Abstract: This study examines the current status of family doctor contracted services for children aged 0-6 years in four community health service centers in Wenzhou, within the context of Wenzhou's initiative to establish a child-friendly city. The findings indicate issues such as insufficient awareness of contracted services, limited promotion channels, suboptimal utilization rates, and a need for more targeted service content. Recommendations aiming to solve them include diversified promotional approaches, enhanced allocation of grassroots medical resources and skills of physicians, and ongoing updates to service packages. These insights serve as valuable references for Wenzhou to formulate more targeted policies and achieve high-quality development in family doctor contracted services for children.
Keywords: Family doctor; Contracted services; Current status; Approaches

Online publication: September 26, 2025

1. Introduction

Childhood, offering essential opportunities and conditions for survival and growth, is a critical stage in human development [1]. Given China's current shortage of pediatric medical resources and the substantial increase in public health demands for children, national healthcare reform needs to focus on exploring a service model suitable for new-era child health development and offering continuous health management. With continuous summary of practical experience, recent studies have indicated that regular health monitoring by family doctors contributes to healthy and productive lives for children with Down syndrome[2]. Positive doctor-patient interactions, improved patient health conditions, achieved expected treatment goals, and enhanced accessibility of healthcare significantly influence satisfaction with family doctor services [3]. Additionally, it's demonstrated that family doctor teams' contracted services have improved compliance and effectiveness between doctors and patients, earning recognition from patients with chronic diseases [4]. In terms of pediatric depression treatment, professional teams consisting of family doctors, when working collaboratively with parents to implement comprehensive interventions, have shown promising therapeutic effects for children [5]. Since the official introduction of the family doctor system in Shanghai in 2011, community service networks have been phased proceeded,

with further plans to roll them out across districts by 2025 [6]. Wenzhou City, which initiated community responsibility doctor contracting services in 2015, has developed multiple community health centers as provincial model sites. These centers provide "specialized service packages" for children aged 0–6 years old, ensuring personalized and targeted health enhancement services [7].

This study examines the current status of family doctor enrollment services for children aged 0–6 in Wenzhou City, exploring existing challenges and their underlying causes in light of the city's efforts to become more child-friendly. It proposes practical solutions to provide theoretical support for the municipal government's future research on family doctor enrollment systems and policy design, thereby enhancing service quality and efficiency while offering references for creating a more child-friendly urban environment.

2. Results analysis

2.1. Research methods

The study utilized literature review, focus group discussions and questionnaire surveys. Based on systematic analysis of relevant policies and conceptual frameworks, we conducted a theoretical research on family doctor enrollment services for children aged 0 to 6 in Wenzhou. Additionally, we surveyed service demand among families with 0–6-year-olds.

2.2. Research findings

2.2.1. Survey participants

The survey was conducted from March to April 2025 in two randomly-selected districts of Wenzhou: Ouhai and Lucheng. Community service centers in Louqiao Subdistrict (Luoqiao) and Chashan Subdistrict (Lucheng), as well as Wuma Subdistrict (Wuma) and Binjiang Subdistrict (Binjiang) in Lucheng District, were randomly selected. Questionnaires and brief interviews were administered through on-site intercepts with child guardians, collecting demographic data and information on perceptions, utilization rates and demands for contracted services. A total of 302 questionnaires were distributed, with 17 invalid responses excluded according to completion time and missing key variables, leaving 285 valid responses (valid rate: 94.37%) (**Table 1**).

Table 1. Basic information of the survey subjects

Demographic characteristic variables		Number of people (*n*)	Constituent ratio (%)
Child's gender	Male	150	52.6
	Female	135	47.4
Guardian age	20–40	251	88.1
	41–65	34	11.9
Guardian identity	Parents	281	98.6
	Other relatives	2	0.7
	Grandparents	2	0.7
Education level of the guardian	Under junior high school	40	14
	High school and technical secondary school	41	14.4
	Junior college and undergraduate	198	69.5
	Postgraduate and above	6	2.1

Table 1 (Continued)

Demographic characteristic variables		Number of people (*n*)	Constituent ratio (%)
Occupation of the guardian	Unemployed	7	2.5
	Service personnel	19	6.7
	Migrant workers or peasants	5	1.8
	Solo practitioner	1	0.4
	companies' employees	153	53.7
	Merchant	14	4.9
	Public institution staff	23	8.1
	Government worker	7	2.5
	Freelancer	36	12.6
	Others	20	7
Place of residence of the guardian	Local District	164	57.5
	Local City	49	17.2
	Within the province (outside the local city)	19	6.7
	Outside the province	53	18.6
Per capita household income	3000 and below	11	3.9
	3001–5000	36	12.6
	5001–8000	60	21.1
	8001–12000	73	25.6
	12000 and above	105	36.8
Child's medical insurance	Urban employees' basic medical insurance	120	42.1
	Urban and rural residents' basic medical insurance	84	29.5
	Financial insurance	65	22.8
	Other	16	5.6
Child's chronic diseases	Yes	259	90.9
	No	26	9.1
Illness within the past 2 weeks	Yes	232	81.4
	No	53	18.6
Children's health condition	Very good	109	38.2
	Good	133	46.7
	Average	43	15.1

2.2.2. Guardians' awareness of family doctor contracted services

The survey revealed that out of 285 surveyed guardians, only 30 (10.5%) reported their children had a fixed doctor at primary healthcare institutions. Among the respondents, 214 (75.1%) were aware of family doctor contracted services, with 135 (63.1%) confirming their children had contracted doctors. Regarding health knowledge and proper medical practices, the surveyed guardians reported the following levels of awareness: 46.2% indicated they were "aware," 56.9% were "very aware," and 69.7% were "not aware."

Among guardians aware of the family doctor contract service, 179 (51%) learned through health center promotions; 65 (18%) received information via family doctor outreach; 54 (15%) were informed through neighborhood committee campaigns; 10 (3%) received recommendations from relatives or friends; 22 (6%) were informed through TV or WeChat media; and 23 (7%) obtained details through other channels.

2.2.3. Utilization rate of family doctor contracted services for children aged 0–6 years old

This survey reveals that among children who have signed up for family doctor services, only 71.9% have established digital health records, 72.6% have received newborn home visits, 74.8% have completed health management for full-moon baby, 74.1% have undergone health management of infant and toddler, and 85.9% have received vaccination prevention. Notably, none of these services have reached 70% adoption rates. Particularly concerning is the fact that only 39 children (28.9%) had received family doctor services within the past year (**Table 2**).

Table 2. Utilization status of family doctor contracted services for children aged 0–6 years old

Items	People have adopted (*n*)	Proportion (%)	People haven't adopted (*n*)	Proportion (%)
Health management of infant and toddler	97	71.9	38	28.1
Individualized health guidance consultation	73	54.1	62	45.9
health education service	74	54.8	61	45.2
health knowledge delivery	74	54.8	61	45.2
Registration for an outpatient appointment	92	68.1	43	31.9
The tiered diagnosis and treatment system	74	54.8	61	45.2
Chronic disease continuous prescription	60	44.4	75	55.6
Establish a card and issue a certificate	79	58.5	56	41.5
Newborn home visits	98	72.6	37	27.4
Health management for full-moon baby	101	74.8	34	25.2
Health management of the infant and toddler	100	74.1	35	25.9
Health management of preschool children	94	69.6	41	30.4
Treatments of health problems	88	65.2	47	34.8
Vaccination prevention	116	85.9	19	14.1
health management of Chinese medicine	65	48.1	70	51.9
Family doctor service within the past year	39	28.9	96	71.1

As shown in **Table 3**, the medical institutions where guardians most often take their children to see a doctor are specialized hospitals, including Women and Children Hospital and Chinese Medicine Hospitals, accounting for 37.3%. Municipal hospitals follow with 23.4%, while community hospitals, district (county)-level hospitals, and other medical facilities collectively account for less than 40%.

Table 3. Most frequently visited medical institutions for children's healthcare

Items	Number (%)	Order
Community hospitals	105 (20.0)	3
District (county)-level hospitals	96 (18.3)	4
Municipal hospitals	123 (23.4)	2
Specialized hospitals (Women and Children Hospital or Chinese Medical Hospital)	196 (37.3)	1
Others	5 (1.0)	5

2.2.4. Guardians' service expectations

The survey highlights that the top three priorities for guardians regarding pediatric family doctor services are: (1) Physical examinations and health assessments for children (80.0%); (2) Timely diagnosis and treatment of common childhood illnesses (71.3%); and (3) Ongoing health monitoring (50.8%).

Secondary needs identified are: (1) Family doctor clinic availability (33.3%); (2) Nutritional guidance (26.2%); and (3) Appointment scheduling with tertiary hospital specialists (23.6%).

Less common requests are: (1) Two-way referral services (16.4%); (2) Early post-discharge rehabilitation (13.8%), and (3) Establishment of pediatric beds in households (10.3%) (**Table 4**).

Table 4. Guardians' preferred pediatric family doctor services

Service content	Number (%)	Order
Timely diagnosis and treatment of common childhood illnesses	139 (71.3)	2
Physical examinations and health assessments for children	156 (80.0)	1
Family doctor clinic availability	65 (33.3)	4
Ongoing health monitoring	99 (50.8)	3
Early post-discharge rehabilitation	27 (13.8)	10
Appointment scheduling with tertiary hospital specialists	46 (23.6)	6
Two-way referral services	32 (16.4)	9
On-site/cellphone/online consultation	40 (20.5)	8
Nutritional guidance	51 (26.2)	5
Psychological counseling	42 (21.5)	7
Establishment of pediatric beds in households	20 (10.3)	11
Others	3 (1.5)	12

3. Conclusions and discussion

3.1. Insufficient awareness of family doctor contracted services among parents

The inadequate understanding of relevant policies and the lack of promotion of related systems are the main reasons why the system has failed to achieve practical effectiveness [8]. This survey shows from the side that only 46.2% of parents have a relatively deep understanding of family doctor contracted services, which indicates an unsatisfactory level. This finding suggests that current promotional efforts for family doctor contracted services in China remain superficial, aligning with previous research [9].

3.2. Need to expand promotion channels for children's families

Among guardians who are aware of the contracted services, most learned about them through health centers and promotions from doctors. In contrast, less than 30% received information from other sources. This indicates a lack of comprehensive awareness and understanding of family doctor contracted services among guardians.

3.3. Inadequate utilization rate of children's families

Among the contracted population, most of the projects provided by the children's family doctor contracted service package have a utilization rate of less than 70%, indicating a low use ratio. Meanwhile, specialized hospitals continue to be the preferred choice for medical consultations among guardians, accounting for less than 40% of cases. This suggests that parents still have concerns about the quality of primary healthcare services, leading to delays and improper use of family doctor contracted services.

3.4. Need for targeted improvement in children's families

The top three services most desired by guardians and parents are physical examinations and health assessments for children, timely diagnosis and treatment of common diseases, and ongoing health management. Other aspects receive fewer requests, reflecting that the practicability and pertinence of the service package currently available need to be enhanced.

4. Strategies and recommendations

4.1. Diversified promotion of pediatric family doctor contracted services

To address the insufficient awareness and limited promotional channels among parents and guardians regarding contracted services, we should adopt multi-channel approaches to deepen policy promotion and understanding. This will help children and parents better comprehend of pediatric family doctor contracted services. For example, implementing a hybrid online-offline strategy [10] by utilizing social media platforms like WeChat Official Accounts to share relevant information and case studies, thereby attracting broader public attention, and installing promotional materials such as exhibition boards and posters in public spaces, including communities, schools, and hospitals.

4.2. Comprehensive measures to strengthen primary healthcare resources and physician

To improve competence in primary healthcare, it's essential to increase the number of general practitioners in healthcare institutions. Various regions have focused on allocating medical resources to frontline grassroots healthcare facilities by providing enhanced financial support and favorable policies for these institutions. These approaches help shift medical resources towards primary healthcare providers, allowing for timely upgrades of diagnostic equipment and improved facilities. It also ensures better stockpiling of medications for common diseases affecting community residents. Additionally, enhancing the professional development of general practitioners is a crucial initiative. Specifically, it is recommended to strengthen the general medicine programs in Chinese medical universities and to improve the training system for general practitioners.

4.3. Continuously update and expand the content of children's family doctor contracted service packages

Update service package items promptly based on current circumstances to deliver a broader range of services to children and parents, thereby enhancing their medical experience and comfort. Offer individualized special service packages for families in need, providing refined and differentiated medical services while confronting their essential healthcare requirements. this approach aims to further elevate the sense of fulfillment and satisfaction for both children and parents.

Funding

Wenzhou Municipal Bureau of Science and Technology project, "Wenzhou 0–6 Years Old Children's Use and Satisfaction with Family Doctor Contract Service: Based on the Perspective of Child-friendly City Construction" (Project No.: Y20220305)

Disclosure statement

The authors declare no conflict of interest.

References

[1] State Council, 2011, Notice on Issuing the Outline for the Development of Chinese Women and the Outline for the Development of Chinese Children [Guofa [2011] No.24], visited on June 20, 2025, http://www.gov.cn/gongbao/content/2011/content_1927200.htm.

[2] Bunt CW, Bunt SK, 2014, The Role of Family Physicians in the Care of Children with Down Syndrome. American Family Physician, 90(12): 851–858.

[3] Marcinowicz L, Konstantynowicz J, Godlewski C, 2010, Patients' Perception of Nonverbal Communication by General Practitioners: A Qualitative Study. British Journal of General Practice, 60(571): 83–87.

[4] Han D, Guo X, 2022, The Implementation Value of Family Doctor Team Contracted Services in Chronic Disease Health Management. Chinese Community Physician, 38(13): 135–137.

[5] Ye X, Pan Y, 2018, Application of Family Doctor System Model in Children with Depression. Hainan Medical Journal, 29(20): 2900–2902.

[6] Wang H, Ding P, Xie C, et al., 2022, Practice and Reflections on Family Doctor Service in Functional Community Health Management. Shanghai Pharmaceutical, 43(10): 3–6.

[7] Sun Y, 2018, Wenzhou Vigorously Promotes Family Doctor Services: Have You Signed Up Yet?, visited on June 20, 2025, http://news.66wz.com/system/2018/03/29/105072626.shtml.

[8] Lin J, Zhao S, 2020, Analysis of Parents' Understanding of Medical Service Policies in Fuzhou Urban Area. Chinese Public Health, 36(11): 1543–1548.

[9] Cui Y, 2022, Influencing Factors and Countermeasures for Residents' "Sign but Not Attend" Phenomenon in Family Doctor Contracted Services, thesis, Jiangsu University.

[10] Liu X, 2017, Current Status and Countermeasures of Health Management Services in Hangzhou Community Health Institutions, thesis, Hangzhou Normal University.