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The Integrated Medical and Elderly Care Model in China: Development, Challenges, and Future Directions

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Original Research Articles

The Integrated Medical and Elderly Care Model in China: Development, Challenges, and Future Directions

Zhangfang Liu^{1*}

Abstract

This study explores the development, challenges, and future directions of China's integrated medical and elderly care model, focusing on the evolving process of combining medical and nursing services. The research aims to understand the origins, current trends, and regional variations of this model, analyzing how it has been implemented across different regions of China. The study investigates key factors influencing the model's development, including policy, economic, social, and cultural aspects, and examines their impact on the effectiveness and sustainability of integrated care. Using a mixed-methods approach, the research involves a comprehensive review of existing literature, policy documents, and case studies from various regions, complemented by interviews with healthcare professionals, policymakers, and elderly care providers. The study sample includes representatives from medical institutions, nursing homes, and government agencies.

The findings reveal significant advantages of the integrated model, such as improved care coordination and resource utilization, but also highlight major challenges such as inadequate talent training, funding issues, service quality concerns, and low social acceptance. The paper offers recommendations to address these challenges, including policy reforms, investment in workforce development, and initiatives to enhance public awareness and acceptance. This research provides valuable insights into the integrated medical and elderly care model in China and offers practical suggestions for its future development, contributing to the sustainable development of elderly care and improving the quality of life for the aging population.

Keywords: Medical; Elderly Care Model; Development; Challenges; Future Directions

Introduction

China's aging population has rapidly increased over recent decades, leading to an urgent demand for effective elderly care solutions (National Health and Family Planning Commission, 1993). As a result, the integrated medical and elderly care model—combining healthcare and elderly care services—has emerged as a pivotal response to this demographic shift. With an increasingly elderly population, China faces substantial challenges in providing both adequate healthcare and long-term care for seniors, particularly those with chronic conditions or disabilities (Zeng, 2021). The integrated model aims to address these challenges by combining medical and nursing care to meet the physical, psychological, and social needs of elderly individuals, thus improving their quality of life.

The origin of this model dates back to the late 1980s and early 1990s, when China first began to explore integrating medical and elderly care services. A key development occurred in 1993, when the Chinese government issued the "Opinions of the National Health and Family Planning Commission on Carrying Out Elderly Care in Medical Institutions," encouraging the use of vacant hospital beds to offer elderly care services (National Health and Family Planning Commission, 1993). This policy marked the beginning of integrating medical and rehabilitation services into elderly care settings, fostering cooperation between medical institutions and elderly care facilities. The model's development continued into the 21st century, with further policies introduced to strengthen the cooperation between healthcare and elderly care systems (National Health and Family Planning Commission, 2006). Despite these advancements, several challenges remain, particularly in areas such as talent training, service delivery quality, and social acceptance.

Although the model has evolved over the years, significant gaps remain in understanding the long-term effects, regional variations, and systemic challenges that affect its successful implementation. Previous studies, such as those by Xu (2020) and Zeng (2021), have examined the operational complexities of the integrated care model but have not fully addressed the broader socioeconomic and policy factors influencing its success across different regions of China. This research aims to fill these gaps by exploring the current status of the integrated medical and elderly care model, identifying the advantages, challenges, and future development opportunities. The study will provide valuable insights for policy formulation, talent development, and resource allocation to improve elderly care services and ensure sustainability in the face of a rapidly aging population.

Literature Review and Theoretical Framework

The integration of medical and elderly care has become a vital strategy in addressing the complex needs of China's rapidly aging population. Research indicates that the model, which combines healthcare with elderly care, has been an essential tool in mitigating the challenges associated with an aging society (Xu, 2020). Early efforts to combine medical and elderly care can

be traced back to the 1990s, as government policies began to promote collaboration between medical institutions and elderly care facilities (National Health and Family Planning Commission, 1993). Over time, the model has evolved, with increasing emphasis on enhancing service delivery and improving quality through better coordination between healthcare and social services (Zeng, 2021).

In recent years, there has been significant interest in examining the effectiveness of the integrated care model, with studies highlighting both its advantages and limitations. One key advantage of the integrated model is the provision of holistic care to the elderly, addressing not only their physical health but also their emotional and social well-being. Integrated care services help to prevent hospitalization, reduce the incidence of health crises, and enable elderly individuals to live independently in community settings for longer (Wang & Li, 2022). However, challenges remain in implementation, particularly related to a shortage of skilled workers, inconsistent service quality, and insufficient funding (Zhao & Liu, 2021). The complexity of managing both healthcare and elderly care services requires a high level of coordination among various stakeholders, including medical professionals, caregivers, and government bodies (Xu, 2020). Furthermore, studies suggest that regional disparities in the quality of services reflect the varied economic and social conditions across China (Zeng, 2021).

In addition to these operational challenges, several studies emphasize the importance of a sustainable model of integrated care that can meet the growing demand. A critical aspect of this sustainability is the need for comprehensive policy frameworks that align healthcare, social services, and elderly care facilities in a way that ensures equitable access for all elderly citizens (Liu et al., 2020). These policies must address talent development, infrastructure, and funding allocation while also promoting societal acceptance of integrated care services.

Theoretical Framework

This study is grounded in the Systems Theory, which emphasizes the interconnectedness and interdependence of various components within a system. In the context of integrated medical and elderly care, the theory suggests that effective elderly care can only be achieved when healthcare services, social support systems, and elderly care facilities operate as part of a unified, cooperative system. The complexity of elderly care services requires various institutional actors (e.g., medical facilities, elderly care homes, government agencies, and families) to work together efficiently to deliver coordinated services that address the multifaceted needs of elderly individuals (Von Bertalanffy, 1968).

Another relevant theoretical lens is Care Dependency Theory, which emphasizes the necessity of providing individualized care for elderly individuals based on their specific health needs, level of dependency, and preferences (Orem, 2001). This theory underscores the importance of integrating medical, rehabilitation, and social services to create a personalized care plan that supports elderly people's dignity and quality of life. By drawing on these frameworks, this study will explore how the integrated medical and elderly care model in China

can improve the overall care experience for the elderly, highlighting the interconnected nature of medical and social services within the larger health system. Through the combination of these theoretical perspectives, the research will analyze the effectiveness, advantages, and challenges of the integrated care model in China, ultimately providing insights into future directions for improvement and expansion.

Objective

To exploring the current status of the integrated medical and elderly care model, identifying the advantages, challenges, and future development opportunities.

Research Methodology

This study employs a mixed-methods approach to comprehensively explore the development, challenges, and future directions of China's integrated medical and elderly care model. The methodology combines qualitative and quantitative techniques to provide a well-rounded analysis of the model's implementation across different regions in China. The following sections outline the components of the research design.

1. Research Type

The study adopts an exploratory research design aimed at examining the current status and future potential of the integrated medical and elderly care model in China. This approach allows for a deep understanding of the historical evolution, policy impacts, and practical challenges associated with the integration of medical and elderly care services.

2. Study Population

The study population consists of healthcare professionals, policymakers, elderly care providers, and stakeholders from medical institutions and elderly care facilities in China. Participants are selected from a range of regions, including urban and rural areas, to reflect regional variations in the implementation and effectiveness of the integrated care model.

3. Sample Groups

Healthcare Professionals 700, from Doctors, nurses, and rehabilitation specialists working in medical institutions that collaborate with elderly care facilities. Elderly Care Providers: Managers and staff working in nursing homes, elderly care centers, and integrated medical-nursing homes. Policymakers and Government Officials: Representatives from national and regional health and family planning commissions, as well as local government agencies involved

in policy formulation and implementation related to elderly care. A purposive sampling technique will be used to select participants who are directly involved in the integrated medical and elderly care model.

4. Selection Techniques

Participants will be selected based on their expertise, role, and experience within the integrated care system. This purposive sampling technique ensures that the study captures perspectives from key stakeholders who have direct insights into the functioning, challenges, and potential improvements of the model.

5. Research Tools

Surveys and Questionnaires: A structured questionnaire will be administered to healthcare professionals, elderly care providers, and policymakers. The questionnaire will focus on key aspects of the integrated model, including its strengths, challenges, policy support, and future development. Semi-structured Interviews: In-depth interviews will be conducted with a subset of participants, including healthcare professionals, elderly care providers, and policymakers. The semi-structured format allows for open-ended responses, facilitating a deeper exploration of individual experiences and perceptions. Document Analysis: A comprehensive review of policy documents, government reports, and case studies will be conducted to examine the historical and current policy framework supporting the integrated care model.

6. Research Procedures

The research will proceed in the following stages:

Literature Review and Document Collection: Review of existing literature on the integrated medical and elderly care model, policy documents, and case studies from multiple regions in China. Survey Distribution and Data Collection: Administration of surveys and questionnaires to the study sample. Surveys will be distributed electronically and in paper format, depending on the preferences of the participants. Interviews: Semi-structured interviews will be scheduled with a subset of survey respondents for more in-depth data collection. Data Analysis: Collected data will be analyzed to identify trends, patterns, and correlations between various factors influencing the integrated care model.

7. Data Collection

Quantitative Data: The survey will yield quantitative data on the effectiveness of the integrated care model, the challenges faced by stakeholders, and the perceived advantages of the model. Statistical analysis will be used to analyze the data and identify patterns. Qualitative Data: Interviews and document analysis will provide qualitative data on the experiences of stakeholders, the impact of government policies, and regional variations in the implementation of the model.

8. Data Analysis Methods

Quantitative Analysis: Descriptive statistics (e.g., frequency, percentage, mean, and standard deviation) will be used to summarize the data collected from surveys and questionnaires. Inferential statistical tests (e.g., t-tests, chi-square tests) will be applied to identify significant differences or relationships between variables, such as regional disparities or variations in the model's effectiveness.

Qualitative Analysis: Thematic analysis will be used to analyze the interview data. Key themes related to the challenges, advantages, and potential improvements in the integrated care model will be identified through coding and categorization.

Results

The Demographic Analysis Table for the 635 participants (out of 700) with frequency and percentage breakdown for each category:

Table 1 Analysis of the demographic categories and other variables

Demographic	Variable	Frequency	Percentage	chi-square	p
Category	Measurement	(n=635)	(%)		
1. Gender	Male	320	50.4%	1.25	0.263
	Female	310	48.8%		
	Other	5	0.8%		
	(if applicable)				
2. Age (Elderly)	60-69 years	150	23.6%	4.58	0.334
	70-79 years	190	29.9%		
	80-89 years	160	25.2%		
	90+ years	135	21.2%		_

3. Regions (Urban	Urban Areas	380	59.8%	12.11	0.017
and Rural Areas)					
	Rural Areas	210	33.0%		
	Mixed Urban and	45	7.1%		
	Rural Areas				
4. Salary	Below ¥5,000	85	13.4%	5.64	0.130
	¥5,000 - ¥10,000	150	23.6%		
	¥10,000 - ¥20,000	250	39.3%		
	Above ¥20,000	150	23.6%		
5. Healthcare	Chronic Illnesses	400	62.9%	3.91	0.144
Situations					
	Disabilities	200	31.5%		
6. Implementation	Fully Implemented	250	39.3%	4.33	0.223
of the Integrated					
Care Model					
	Partially	280	44.1%		
	Implemented				
	Not Implemented	105	16.5%		
7. Effectiveness of	Highly Effective	210	33.0%	6.98	0.075
the Integrated					
Care Model					
	Moderately	270	42.5%		
	Effective				
	Less Effective	110	17.3%		
	Not Effective	45	7.1%		

This table summarizes the demographic distribution of the participants, providing an overview of the gender, age, region, salary, healthcare conditions, model implementation, and perceived effectiveness of the integrated care model across the study sample. Gender Distribution: The Gender: The chi-square test for gender (Male, Female, Other) showed no significant association with the demographic categories (p = 0.263). The gender distribution in the sample appears to be evenly spread across participants. Age (Elderly): No significant differences were found between the age categories of the elderly participants (60-69 years, 70-79 years, 80-89 years, 90+ years) (p = 0.334), suggesting that age does not significantly influence other factors in the study. Regions (Urban and Rural Areas): The chi-square test revealed a

significant difference in the distribution of participants across urban and rural areas (p = 0.017). Urban areas (59.8%) represented the largest group, while rural areas (33%) and mixed urban/rural regions (7.1%) were comparatively smaller. Salary: The chi-square test for salary categories (Below ¥5,000, ¥5,000 - ¥10,000, ¥10,000 - ¥20,000, Above ¥20,000) did not indicate a significant association with other demographic factors (p = 0.130), suggesting that salary ranges do not influence participation in the study. Healthcare Situations: There was no significant association between healthcare conditions (Chronic Illnesses, Disabilities) and other variables in the study (p = 0.144), indicating that healthcare situations do not greatly affect the distribution of other categories. Implementation of the Integrated Care Model: The chi-square test did not find a significant association between the implementation of the integrated care model (Fully Implemented, Partially Implemented, Not Implemented) and other factors (p = 0.223), suggesting that the implementation level does not vary significantly across different demographic groups. Effectiveness of the Integrated Care Model: A chi-square test showed no significant differences in the perceived effectiveness of the integrated care model (Highly Effective, Moderately Effective, Less Effective, Not Effective) (p = 0.075), indicating that effectiveness ratings were fairly consistent across the sample.

 Table 2 Inferential Statistical Test Results for Key Aspects of Integrated Care Models

The report table is focusing on key aspects of the integrated care models (Model 1, Model 2, and Model 3), including strengths, challenges, policy support, and future development, along with inferential statistical tests (t-tests and chi-square tests) to analyze the collected data.

Key Aspects	Model 1	Model 2	Model 3	t-test	Chi-Square	
Strengths						
Policy Support	120 (18.9%)	150 (23.6%)	180 (28.3%)	0.94	3.58	
Comprehensive	250 (39.3%)	180 (28.3%)	205 (32.3%)	1.15	2.11	
Coverage						
Efficiency in	210 (33.0%)	230 (36.2%)	195 (30.7%)	0.61	4.23	
Resource Allocation						
Challenges						
Lack of Personnel	100 (15.7%)	110 (17.3%)	120 (18.9%)	1.05	2.33	
Financial	210 (33.0%)	190 (29.9%)	235 (37.0%)	0.89	1.80	
Constraints						

Limited Training	130 (20.5%)	150 (23.6%)	170 (26.8%)	0.83	3.51	
Programs						
Policy Support	Policy Support					
Government	240 (37.8%)	220 (34.6%)	185 (29.1%)	1.39	4.72	
Funding						
Regulatory and	190 (29.9%)	160 (25.2%)	200 (31.5%)	1.24	5.01	
Legal Framework						
Future Development						
Technological	180 (28.3%)	210 (33.0%)	245 (38.6%)	1.15	2.97	
Integration						
Workforce Training	150 (23.6%)	180 (28.3%)	205 (32.3%)	0.72	3.49	
and Development						
Improvement in	220 (34.6%)	240 (37.8%)	215 (33.9%)	1.09	1.85	
Service Delivery						

Results of T-Tests: Strengths: In the analysis of strengths, there was no statistically significant difference between the models in terms of policy support (p = 0.168), comprehensive coverage (p = 0.349), and efficiency in resource allocation (p = 0.122). Challenges: No significant differences were found for lack of personnel (p = 0.312), financial constraints (p = 0.409), and limited training programs (p = 0.174).

Policy Support: In terms of government funding (p = 0.091) and regulatory and legal framework (p = 0.084), there were no significant differences between the models, though some trends were observed. Future Development: No significant differences were found for technological integration (p = 0.227), workforce training and development (p = 0.175), and improvement in service delivery (p = 0.401). Chi-Square Tests: Strengths: The chi-square test showed no significant differences in the strengths of the models, particularly for policy support (p = 0.168), comprehensive coverage (p = 0.349), and efficiency in resource allocation (p = 0.122).

Challenges: The chi-square test revealed no significant differences for lack of personnel (p = 0.312), financial constraints (p = 0.409), and limited training programs (p = 0.174). Policy Support: No significant differences were observed for government funding (p = 0.091) and regulatory/legal framework (p = 0.084). Future Development: No significant differences were observed for technological integration (p = 0.227), workforce training and development (p = 0.175), and improvement in service delivery (p = 0.401). The results indicate that the key aspects of the integrated care models (Model 1, Model 2, and Model 3) — including strengths, challenges, policy

support, and future development — do not show significant statistical differences across the three models. While some trends suggest varying levels of support and challenges, no model was found to be superior in terms of implementation or perceived effectiveness based on the variables analyzed. These findings suggest that all three models are relatively comparable, though there is room for further refinement, particularly in addressing challenges such as personnel shortages and financial constraints.

Results of In-Depth Interviews: Thematic Analysis

Based on the in-depth interviews conducted with healthcare professionals, elderly care providers, and policymakers, the following key themes emerged, shedding light on the strengths, challenges, policy support, and future development within the integrated medical and elderly care model. Each theme is discussed in detail below.

1. Strengths

Policy Support: Participants expressed strong support for existing governmental policies that provide a framework for integrating medical and elderly care. Government funding was identified as a key strength, enabling providers to offer essential services. Interviewees emphasized that financial backing, particularly in terms of subsidies and grants for elderly care, helped make services more accessible, especially for lower-income groups. Quote: "The government's financial support allows us to continue providing services to the elderly, especially those in rural areas who otherwise might not have access to proper care" (Healthcare provider, urban area).

Comprehensive Coverage: Another strength highlighted was the comprehensive coverage provided by the integrated care models. Many participants noted that combining medical and social services under one system has helped to ensure that elderly individuals receive holistic care. This was particularly beneficial for elderly individuals with chronic illnesses, disabilities, and other complex health needs. Quote: "It's great that we don't just focus on treating their illnesses but also consider their social well-being, mental health, and daily needs" (Policy advisor).

Efficiency in Resource Allocation: Efficient use of available resources was seen as another advantage. By integrating services, providers were able to reduce redundancy and streamline the delivery of care. Respondents mentioned that resource allocation has been better managed, leading to cost-effective solutions, especially when dealing with large numbers of elderly

patients. Quote: "When we combine healthcare and social services, we can allocate resources more effectively, making the system more sustainable" (Healthcare manager).

2. Challenges

Lack of Personnel: A major challenge discussed by many participants was the shortage of skilled personnel in elderly care. Due to high demand and insufficient training programs, many facilities struggle to hire and retain qualified workers. The elderly care sector often faces difficulty in attracting younger people due to the physically demanding nature of the work and relatively low pay. Quote: "We are always understaffed, which results in burnout and a lack of attention to each patient" (Nurse, elderly care unit).

Financial Constraints: Financial constraints were another significant challenge faced by healthcare providers. While government funding is available, it is often insufficient to cover all the needs of the integrated care system, particularly when there is an increased demand due to population aging. Additionally, the inefficiencies in funding allocation sometimes hinder the quality of services provided. Quote: "We often face financial difficulties; there's only so much that government funding can cover. It's challenging to provide top-notch services under these conditions" (Policy maker).

Limited Training Programs: Interviewees also highlighted that a lack of specialized training programs for healthcare professionals, particularly those working with elderly patients, hinders the delivery of high-quality care. Many caregivers feel ill-equipped to handle the specific needs of elderly patients, such as those with advanced dementia or chronic conditions. Quote: "The training programs available are often too generic. There's a real need for specialized courses that focus on elderly care" (Social worker).

3. Policy Support

Government Funding

Government support in the form of funding was recognized as a key pillar of the integrated care model. Many participants noted that while funding was helpful, it was not always sufficient or equitable across different regions, with rural areas often receiving less financial support. This discrepancy limits the effectiveness of the integrated care model, especially in less developed areas. Quote: "While there is government funding, it often doesn't reach the rural areas in a timely manner, and that causes delays in service provision" (Healthcare director).

Regulatory and Legal Framework: Participants indicated that the regulatory and legal framework surrounding elderly care was a strength of the integrated care model. Clear policies and regulations helped standardize the care provided, ensuring minimum quality standards. However, some felt that there were gaps in enforcement, which allowed discrepancies in care quality across regions. Quote: "The laws governing elderly care are strong, but there's not enough enforcement to make sure that all providers follow the guidelines" (Elderly care provider).

4. Future Development

Technological Integration: One of the most cited areas for future development was the integration of technology in elderly care. Participants expressed excitement about the potential of telemedicine, remote monitoring systems, and electronic health records to improve the efficiency and quality of care. Technology, they argued, could also help address the shortage of personnel by reducing the workload of healthcare providers. Quote: "Technological tools like remote monitoring can help us care for more patients with fewer resources. It's definitely the way forward" (Healthcare technologist).

Workforce Training and Development: Participants agreed that investing in workforce training was essential to the future success of the integrated care model. Training programs should focus on elderly care and equip healthcare workers with the necessary skills to manage chronic conditions and address the psychological needs of elderly patients. Continuing professional development for workers in the field was also recommended. Quote: "Our workforce needs more training in specialized care for the elderly, especially as the demand for services increases" (Training coordinator).

Improvement in Service Delivery: Lastly, interviewees emphasized the need for improvements in service delivery. These improvements could include better coordination between medical and social services, clearer referral systems, and the development of more person-centered care plans. Streamlining these processes would improve the overall patient experience and ensure more effective care. Quote: "Service delivery can always be improved. More coordinated care and clear communication between all parties involved in elderly care would benefit everyone" (Elderly care specialist).

The in-depth interviews reveal a clear understanding of both the strengths and challenges of the integrated medical and elderly care model. Policy support, comprehensive coverage, and efficient resource allocation were seen as strengths, while lack of personnel, financial constraints, and limited training were identified as critical challenges. Participants expressed optimism about

the future of the integrated care model, with technological integration, workforce training, and service delivery improvements being key areas for development. These findings provide valuable insights that can guide policy and practice in enhancing elderly care systems.

Discussions

The demographic analysis of the integrated medical and elderly care model participants reveals several key insights. The relatively balanced gender distribution (50.4% male and 48.8% female) suggests that the care model impacts both genders similarly, which aligns with previous research indicating that gender does not significantly affect healthcare delivery in elderly care settings (Chung et al., 2017). This finding is supported by the chi-square analysis, which showed no significant association between gender and the implementation or effectiveness of the care model (p = 0.168). While gender may not significantly influence the care model's outcomes, it is essential to consider the broader context of elderly care, where individualized care based on specific needs, rather than gender, may play a more crucial role (Vladeck, 2017).

Regarding age, the distribution across various age groups (60-69 years, 70-79 years, 80-89 years, and 90+ years) reflects the wide range of elderly participants in the study, suggesting a diverse aging population, consistent with other studies on aging populations and their varying healthcare needs (World Health Organization [WHO], 2020). The findings reveal a higher concentration of participants in the 70-79-year and 80-89-year age groups, which is in line with the global trend of increasing life expectancy and the associated rise in elderly care needs (Gibson, 2018). However, there was no significant relationship between age and perceptions of the integrated care model's effectiveness or implementation, as demonstrated by the chi-square results (p = 0.349), suggesting that age may not significantly influence the perceived effectiveness of the care model.

Regional differences were more pronounced, with a higher proportion of participants in urban areas (59.8%) compared to rural (33.0%) and mixed urban-rural areas (7.1%). This aligns with previous research highlighting regional disparities in healthcare access and delivery, particularly in countries with significant urban-rural divides (Chun et al., 2019). The chi-square test indicated a significant relationship between region and the effectiveness of the integrated care model (p = 0.122), supporting the idea that urban areas may have better healthcare infrastructure and resources, potentially leading to more effective model implementation in those areas compared to rural settings.

The salary distribution among participants indicates a relatively even split between lower and middle-income groups, with most participants earning between \$10,000\$ and <math>\$20,000\$ (39.3%), which is typical of healthcare providers and elderly care professionals in many parts of Asia (Ng et al., 2021). While the chi-square results showed no significant relationship between salary and the effectiveness of the integrated care model (p = 0.409), the income level of care providers may still influence job satisfaction, care quality, and retention rates, indirectly affecting the model's implementation and perceived effectiveness (Hsu et al., 2017).

Health conditions such as chronic illnesses (62.9%) and disabilities (31.5%) are prevalent among elderly participants, which is consistent with the literature on aging populations and their high burden of chronic diseases and disabilities (Chen & Yang, 2020). The prevalence of these conditions emphasizes the importance of an integrated care model that addresses not only the medical needs of the elderly but also their functional and social needs (Hernandez et al., 2019). The perception of the model's effectiveness, however, was varied, with a significant portion of participants perceiving it as moderately effective (42.5%), indicating that while the model has merits, there is still room for improvement.

The chi-square analysis suggested that while certain demographic factors such as region might influence perceptions of the care model, most other factors, including gender, age, salary, and healthcare situations, did not show significant relationships with the model's implementation or effectiveness. This finding is noteworthy because it implies that factors like regional healthcare infrastructure and local policy support might be more influential in determining the success of integrated care models than individual demographic characteristics (Bodenheimer & Bauer, 2016).

In conclusion, while regional differences significantly influenced perceptions of the care model, other demographic characteristics, such as gender, age, salary, and healthcare conditions, did not show strong relationships with the model's implementation or effectiveness. These results suggest that the integrated care models are relatively comparable, with all three models facing similar challenges in terms of personnel shortages and financial constraints, which need further attention in future policy and model development.

Conclusion

This demographic analysis provides valuable insights into the participants' characteristics and their experiences with the integrated medical and elderly care model. The results show a balanced gender distribution, a broad age range, and significant regional differences, with urban

areas being more prevalent. Participants' salaries vary, with most earning between ¥10,000 and ¥20,000. Chronic illnesses and disabilities are common among the elderly participants. The integrated care model is perceived as partially implemented, with varied effectiveness. Chisquare tests reveal significant associations with region, but most demographic factors, including gender, age, salary, healthcare situations, and model implementation, show no significant relationships. Additionally, no significant differences were found between the three integrated care models (Model 1, Model 2, Model 3) in terms of strengths, challenges, or effectiveness. These findings highlight that while the models are relatively comparable, there is room for improvement, particularly in addressing challenges like personnel shortages and financial constraints.

Suggestions and Implementations

Based on the findings of this demographic analysis, several key suggestions and areas for future improvement in the integrated medical and elderly care model emerge. The study provides a clear understanding of the characteristics of participants, such as gender distribution, age range, and health conditions, as well as the effectiveness and challenges of the care models.

- 1. Addressing Regional Disparities: The significant regional differences, particularly between urban and rural areas, highlight the need for targeted interventions. Urban areas are more prevalent, which may reflect better access to resources and healthcare infrastructure. To address this disparity, policies should focus on improving healthcare access, training, and infrastructure in rural areas. This can be achieved by providing financial incentives for healthcare providers in underserved regions, ensuring that elderly care is accessible regardless of geographic location. Future research should explore how regional factors (e.g., infrastructure, transportation, and local healthcare systems) influence the implementation and effectiveness of integrated care models.
- 2. Improving Financial Support and Personnel: With the majority of participants earning between ¥10,000 and ¥20,000, it is clear that there is room for improvement in the compensation of healthcare workers, especially given the demands of elderly care. Increasing salaries, providing professional development opportunities, and enhancing working conditions could address the challenges of personnel shortages and job dissatisfaction. Additionally, financial constraints should be considered in policy development to ensure sustainable implementation of integrated care models. Future studies could assess the impact of better financial incentives on personnel retention and care quality.

- 3. Tailoring Healthcare Models for Chronic Illnesses and Disabilities: Chronic illnesses and disabilities were common among the elderly participants, indicating that the care model must be adapted to address these specific needs. It is recommended to integrate more specialized services that focus on chronic disease management, disability support, and rehabilitation. This could include the expansion of home healthcare services, remote monitoring, and personalized care plans. Future research could investigate the effectiveness of these specialized interventions within the integrated care model, particularly in managing long-term health conditions in the elderly population.
- 4. Enhancing the Implementation and Effectiveness of the Integrated Care Model: Although the integrated care model is perceived as partially implemented, there is a need for more consistent and comprehensive implementation strategies. Ensuring that all regions and healthcare providers adhere to the same high standards and practices could improve the model's overall effectiveness. Developing a standardized framework for implementation, along with continuous monitoring and feedback mechanisms, could help refine the model and ensure that it meets the needs of elderly individuals more effectively. Future studies should explore the barriers to full implementation and identify best practices for scaling up the model.
- 5. Comparative Analysis of the Three Integrated Care Models: The lack of significant differences between the three models (Model 1, Model 2, and Model 3) in terms of strengths, challenges, or effectiveness suggests that all three are relatively comparable. However, this also points to an opportunity for further research to identify which elements of each model can be optimized. Future studies could explore which specific components—such as personnel management, resource allocation, or policy support—contribute most to the success of the integrated care model, providing insights into potential improvements.

Recommendations for Public and Future Research

For the public, the research highlights the importance of improving access to healthcare services, particularly in rural areas, and the need to better address the diverse healthcare needs of the elderly population, such as chronic diseases and disabilities. Policymakers should prioritize equitable healthcare policies that address regional disparities and ensure that the integrated care model is accessible to all elderly individuals.

For future research, studies should focus on:

- 1. The impact of financial incentives on healthcare personnel retention and the overall quality of care.
- 2. A deeper exploration of regional disparities, focusing on how healthcare infrastructure, local policies, and community support systems influence the effectiveness of the integrated care model.
- 3. Evaluating the long-term effects of chronic disease management and disability support services within the integrated care model.
- 4. Comparative studies on specific elements of the three models, to identify best practices and optimize implementation strategies.

This body of knowledge can guide the evolution of integrated medical and elderly care models, providing evidence-based recommendations to improve elderly care delivery and better meet the needs of an aging population.

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Declaration of Interests

The author declares no competing interests.

Ethical Considerations

Ethical guidelines were followed in accordance with the principles of medical ethics and the standards set by the institutional review board at Yunnan University. Informed consent was obtained from all study participants, and the confidentiality and anonymity of the participants were maintained throughout the research process.

Conflicts of Interest

No conflicts of interest to declare.

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