



Research on Smart Endowment Supply—Based on Service Chain Theory

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Abstract. In the context of the current new normal of China's population, the level of smart elderly care services in China directly determines the development of the aging society. The wisdom of relying on the development of modern intelligent technology and information technology services for the elderly is a social systems engineering, and the wisdom endowment service supply problems of public policy, the shortage of financial fund, at the same time, the linkage of the family community, wisdom, with less transition behavior endowment concept of consciousness cultivation and propagation as well as the supply of social participation, etc. Future endowment service supply optimization needs wisdom from the system, the social aspects of collaboration and accurate response, by making endowment service support policy adjustment in the development of wisdom endowment service supply of the industrial structure, relying on the policy to promote, service supply and the performance evaluation of three big system, construction of wisdom, the aging society It provides reference for the development of supply-side reform of China's smart elderly care industry.

Keywords: supply side reform · Smart elderly service · Social systems engineering

1 Introduction

1.1 The Origin of Wise Pension

The concept of “wisdom endowment” first put forward by British life trust fund, the so-called “wisdom” breaking the defect of traditional pension model by the constraints of time and space, with the help of modern technology such as mobile Internet, Internet of things, cloud computing and big data, etc., will service in each subject together to form an organic whole, improve the quality of pension services. Smart pension opens a new era of pension service and provides new ideas for solving global pension problems. Parrott (2015), a British scholar, believes that smart endowment in a broad sense takes the government as the core, mobilizes endowment resources of communities and families in the context of scientific and technological development, and makes each subject cooperate with each other to meet various needs of the elderly. Anas Abou Allaban et al. (2020), professor of electrical and Computer Engineering at Northeastern University in

Boston, conducted a literature review of papers on smart home services published during the five years from 2013 to 2018, and found that studies on smart home services in Asia mainly focused on physical support tools. Research in Europe has focused on social interaction and the development of new platforms. From a technology standpoint, some smart systems and technologies are approaching maturity, such as physical support tools and fall detection. However, there are still engineering problems such as product design and comprehensive testing before practical application. More complex systems, such as smart homes and mobile robots, need more research.

1.2 Domestic Research Status of Smart Pension

Through consulting a large number of literature, it is found that the research on smart endowment in China started later than that in foreign countries. The concept of “smart pension” was first formally proposed by the National Office for Aging in 2011, but there were similar studies on “information-based pension” and “digital pension” in the academic circle before this. Liao Chuhui Xi’an Jiaotong University (2021) in the health industry development background, the wisdom of endowment service old user adoption factors, based on the perspective of perceived quality, through the questionnaire survey to get the data, the structural equation model is used for the empirical test, build a contains the wisdom of the six dimensions of perceived quality factor endowment service user satisfaction and adoption intention research model.

2 The Significance of Supply Side Reform of Smart Elderly Care

2.1 The Silver Wave Promotes the Silver Economy

At the Second World Assembly on Ageing, the World Health Organization (WHO) formally put forward the concept of “active ageing”, advocating to ensure that older people can enjoy physical and mental health, freedom and a higher quality of life for a longer period of time. According to estimates by the National Office on Aging, in 2020, there will be 29 million elderly people over 80 years old and disabled, 42 million disabled, and 118 million empty nests or living alone. “9073” has always been the main manifestation of China’s pension structure. Although the state is committed to improving the service level of institutional and community pension, family pension is still the main choice of the elderly after their old age. With the miniaturization of China’s family structure, parents and children living in different places, the family pension function gradually weakened, for most of the elderly, independent pension is imminent. As the elderly grow older, it is inevitable that they will suffer from physical decline, disability, loneliness and other mental or physical problems. This will pose serious challenges to long-term care and the quality of life of hundreds of millions of families. In 2019, The General Office of the State Council on Promoting the Development of Elderly Care Services proposed to promote the integrated development of home care, community care and institutional care. We will support elderly care institutions to operate community elderly care service facilities and provide home-based services to elderly people.

2.2 Improving the Multi-level Social Support System for Elderly Care

During the period of “much starker choices-and graver consequences-in” Our country has formed with the wisdom that occupy the home, medical integrated endowment of institutions and community endowment service mode, under this background, the “60” after retired elderly live with dual kinetic energy boost GDP per capita is expected to top \$10000, making our country endowment service forms should be potential to become the next level 10 trillion sunrise industry. Held in Shanghai in 2021 the ninth session of China’s elderly welfare of success of product innovation entrepreneurship competition, provides the wisdom endowment outstanding creative achievements exhibition and exchange platform, as well as the government and market determination to promote construction of production with good signal, for the development of the collaborative wisdom pension products increasingly update development also will enhance the use of consumer confidence. The General Office of the State Council on Promoting the Development of Elderly Care Services also proposed to establish and improve the professional skill level identification and education and training system for elderly care workers, while vigorously promoting employment in the elderly service industry.

3 Difficultier in the Supply Side Reform of Smart Elderly Care

3.1 The Top-Level Design is Relatively Lagging Behind

In recent years, the central government has successively issued policy documents to promote the development of smart elderly care services. However, the development level of different localities is not synchronized, the relevant policy design of smart elderly care service development is relatively lagging behind, and the standardized construction of smart elderly care service lacks overall layout planning at provincial and national levels. On the one hand, there are less than 10 national pension service standards in China’s pension service industry, and only two mandatory standards. On the other hand, the number of local standards issued and implemented by provinces and cities is relatively small and seriously fragmented, and many core areas of old-age service standards are still blank.

3.2 The Legislation on Security for the Elderly is not Sound

On the one hand, there is only one law for the protection of the rights and Interests of the elderly, which is the core law for the protection of the elderly. On the other hand, the relevant legislative rules are missing, and the provisions still have problems such as principled guidance, general provisions and fuzzy guarantee subjects, which make the law cannot be effectively implemented in the process of specific application. There are no relevant laws and regulations to regulate security risks or information leakage in the use of smart care services for the elderly, which affects consumers’ confidence in using these products to a certain extent.

3.3 Overall Shortage of Basic Support

First of all, the pension service industry is short of talents, and the number of professional employees is difficult to match the demand for pension. According to the 2017 Report on The Training of Elderly Service Personnel in China, there are less than 500,000 people serving various types of elderly service providers in China. In addition, according to the 2018 China Civil Affairs Statistics Yearbook, the number of elderly care workers certified by the Ministry of Civil Affairs with national professional qualifications is less than 50,000, which is a huge gap and far from meeting the needs of the aging population in the future. Secondly, the financial support for the elderly service is insufficient, and the current fiscal policy supporting the development of smart elderly service is insufficient.

3.4 The Elderly Are Incapable of Their Own Abilities

Due to their personal characteristics, such as differences in health status, cognitive ability and economic income level, elderly users have lower acceptance and equipment use of smart care services than young and middle-aged people of the same period. Lack of jobs through mentoring to help alleviate anxiety and confusion caused by technology digital services. At present, there is a lack of social atmosphere for advocating smart and scientific pension, and there is no social support system for smart pension.

4 Strategies and Suggestions for Improving the Supply of Smart Elderly Care Services

4.1 Supply Side of Smart Elderly Care Service

Smart technologies are transforming into new factors of production and governance tools. Smart technologies are the basic conditions and technological development trend for promoting the construction of digital China. Development wisdom pension services to develop wisdom endowment service industry as the support, by wisdom endowment service platform to provide products and technology of intelligent change to enhance the quality of life of the elderly, the ability to enhance their social participation, break through the government department or a separate the limits of the main supply, open the holistic governance “authority”, utilize the scale effect of the policy. Through the construction of a multi-center linkage supply system, the supply quality of services and the updating speed of products can be improved to narrow the gap between the supply and demand of smart elderly care services. The trust and technical barriers of the elderly should be broken through the mutual complement of online and offline pension services and the combination of real and virtual pension services.

4.2 Smart Pension Transmission Environmental Management

We will vigorously develop education for the elderly, rely on communities to develop education for the elderly, and establish and improve a family-community-urban education network for the elderly, so that they can study nearby. A national public service

platform for education for the elderly has been established to encourage various educational institutions to organize or participate in education for the elderly in various forms. Cultivate the awareness of wisdom among the elderly, create a social atmosphere for digital life and smart life, and enhance the confidence and motivation of the elderly to receive smart pension services.

4.3 Demand Side of Smart Elderly Care Service

The promotion of smart elderly care is a complex project, which needs to consider the supply problem from the perspective of science and technology, and also needs to analyze the different needs of the elderly from the “people-oriented” perspective, so that the smart elderly care service can meet the needs of the elderly at different levels. We will improve the social security system, raise the pension replacement rate for the elderly, partially subsidize the use and purchase of smart pension services, and guide the inclusive development of smart pension services. Help the elderly face up to their own needs, from seeking medical treatment to healthy aging to maintain health, cultivate the awareness of active aging of the elderly, improve their social participation ability and active degree, so as to participate in the smart society trust smart pension services.

5 Conclusions

Relying on information technology and modern intelligent technology to develop smart old-age services is a comprehensive system project. In the face of the current problems in the system and policy of smart old-age care, supportive environment, family community linkage, buyers and users of services and products, in the future, the supply-side optimization of smart old-age care needs to start from the aspects of system design, social coordination, and social transfer, through the construction of a standardized smart old-age market, support model communities, formulate development policies, optimize industrial structure, and learn from excellent cases and experiences at the same time, and constantly detail the development of smart old-age services in various regions. Promote the development of China’s smart pension industry and gradually achieve equilibrium.

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