

### Research on the Development of Community Elderly Care Centers with Government Support in the Context of Internet Big Data

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#### **ABSTRACT**

The aging problem facing China is increasing, and with it comes the serious problem of elderly care. As an important way to solve the urban aging problem, community elderly care centers have become a model of elderly care vigorously implemented in many cities, and the government plays a crucial role in the development process of community elderly care centers. In this study, we analyze how local governments in developed areas play a role in the development of community elderly care centers in the context of Internet big data technology. And through experience summaries, we provide lessons for areas where community elderly care is not yet developed. The main way to start is through the following aspects: the government should use internet big data as the technical support, take the community as the basis, and establish the community elderly center construction model with internet big data technology by improving policies and regulations, enriching service content, improving service level, and cultivating professional talents as the main way.

**Keywords-**community elderly care; government; operation model

#### 1. Introduction

Thanks to the strong support from the central government and local governments at all levels, the community elderly care centers model has developed rapidly in China, and a large number of community elderly care centers have sprung up in various places as organizations providing senior care services. community elderly care centers combine the advantages of both home care and institutional care, enabling the elderly to receive professional senior care services close to their homes. However, along with the development of community elderly care centers, the problems of community elderly care centers have gradually emerged. To a large extent, community elderly care centers are still a government-led development method, so community elderly care centers rely on government funding to maintain daily operations, and the problem of insufficient funding is becoming increasingly apparent. With the increasing demand for senior care, there is no doubt that the government will face huge financial pressure. In addition, due to the government-led form, the

government dictates the content of the services provided by the community elderly care centers, which to a large extent does not reflect the demands well, and thus it is difficult to improve the satisfaction of the elderly. Therefore, the question of what role the government plays and what role it plays in the development of community elderly care centers have become a pressing issue to be studied.

The aging of the population brings a serious burden to the design of the elderly and puts pressure on the healthcare business. By defining the role of the government in the development of community elderly care centers, we can largely solve the current problems faced by the development of community elderly care centers, and then solve the problem of the elderly, alleviate the negative impact of population aging on China's economic and social development, and at the same time drive the employment of the society with the development of the whole elderly industry.

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#### 2. METHODS

This study analyzes how and what role local governments play in the development of community elderly care centers by interpreting the policy actions of local governments in China, summarizes the advanced experiences of local governments in building community elderly care centers, and proposes corresponding strategies to provide lessons for other places where the development of community elderly care centers is not yet good enough.

#### 3. RESULTS AND ANALYSIS

Faced with the increasingly serious elderly care problem, many cities in China have chosen to establish community elderly care centers as a solution. In regions where community elderly care centers are well developed, local governments have mainly adopted the following policy measures to develop community elderly care centers.

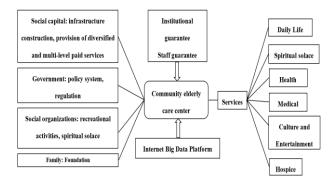
By using the community as a grassroots self-governing organization, it can understand the specific situation of each family and each elderly person to the greatest extent, and on this basis, it can better carry out the specific work of the center. As a senior care, the most core part is to provide personalized and diversified professional senior care services on the basis of meeting physiological and security needs.

According to Maslow's Hierarchy of Needs theory, physiological and safety needs are the first two needs of the elderly that must be met by community elderly care centers, and only after these two needs are met can we talk about higher-level needs. Especially for the elderly who have lost their mobility, it is more important to focus on their physiological needs. The most basic thing for community elderly care centers is to provide daily food service, housekeeping service, related medical care, health companionship, etc. For the elderly who are in good physical and mental condition, there is a need to provide them with higher level services to meet their spiritual needs, such as cultural entertainment, learning and other services[1].

In addition to providing various senior care services for the elderly, community elderly care centers also need to face the two problems of personalization and specialization. Each elderly person's physical condition is different, and for those who are suffering from diseases, their illnesses, treatment plans, medications and care methods will be different, which requires community elderly care centers to provide more personalized services. In addition, as each elderly person's life experience, educational background, religious beliefs, family status and many other aspects will be different, they will have different answers to the same questions. For example, when faced with an illness, some elderly

people will actively cooperate with doctors, while others will treat it negatively, while others will choose to wait for death with optimism and dignity. Therefore, it is necessary to provide "personalized" services in senior centers.

In terms of specialization, it is based on "personalization" and provides specialized services for the elderly with different physical conditions. Aging is often associated with disease, and the main "specialization" is professional medical and nursing services.



**Figure 1.** Community Elderly Care Centers Operation Model

As the institutional bearer of community elderly care centers, the community elderly care centers provide professional elderly care services for the elderly through the community elderly care centers. In the construction of community elderly care centers, the government provides financial support to senior centers by guiding social capital to participate in an orderly manner, and provides diversified and multi-level services to the elderly[2]; the government also guides social organizations to participate in the daily services of senior centers, mainly by using volunteer teams to bring more cultural and recreational activities and spiritual comfort to the elderly; the government also pays attention to the basic role of the family, and uses the family as a unit to promote social respect for the elderly. The government also focuses on the basic role of the family, and advocates the social style of respecting and honoring the elderly in the society as a family unit; and the government mainly plays the role of a guide in the whole process, and gives support at the institutional level and supervises the relevant responsible entities. In terms of supporting guarantee, the government will give community elderly care centers more room for development by improving the institutional guarantee, strengthening the cultivation of professionals, and integrating senior care resources. In terms of specific senior care services, community elderly care centers provide both physical and spiritual services to better meet the senior care needs of the elderly. In terms of daily operation and management, the senior center makes use of the big data platform to improve service efficiency to a greater extent, as shown in "Fig. 1".



### 3.1Specialization: play a guiding role and coordinate the participation of multiple subjects

Community elderly care centers involve many subjects, and each of them needs to cooperate closely in order to give full play to the advantages of community elderly care centers. The local government will introduce social capital into the construction and service provision of community elderly care centers, and play the advantages of social organizations and families in community elderly care centers, and social organizations will provide richer voluntary activities to enrich the cultural and recreational life of the elderly. The government has also been promoting a culture of caring for the elderly by strengthening the propaganda of respect for the elderly, and the community has been forming a culture of caring for the elderly through the competition of model families and outstanding individuals. In addition, the government also organizes skills training activities to enable the families of the elderly to take care of them in a more scientific way. This has created a situation in which multiple parties participate[3].

## 3.2Personalization: Improve the support guarantee and establish the Internet big data platform

#### 3.2.1Perfect supporting guarantee

Firstly, system protection. The system is a prerequisite for the healthy development of the industry. The local government should improve the laws and regulations of the community elderly care industry, form a perfect legal protection system, and improve the policy system for the development of the industry. Specifically, this includes industry access system, industry supervision system, effect evaluation system, institutional operation system, and violation punishment system.

Second, personnel protection. Cultivating senior care professionals is a prerequisite for improving service level and quality. Professional training sessions on elderly care services are held to attract personnel with service experience to carry out specialized elderly care work. Local governments have also cultivated a group of private volunteer service teams in order to provide better quality services to the elderly[4].

Third, resource integration. Take advantage of the grassroots level of the community and integrate the resources of multiple sectors in the community, such as medical care and legal aid.

#### 3.2.2Establish an Internet big data platform

Local governments take advantage of modern information technology to improve the quality and effectiveness of community elderly care centers services

by establishing a big data platform on the Internet, as shown in "Fig. 2".

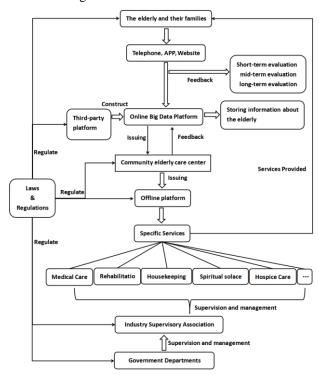


Figure 2. Internet Big Data Platform Operation Model

Seniors receiving services are registered with the community elderly care centers, which keeps a record of their basic information through an online big data platform. Seniors and their families can book services with the senior center by making a request.

When the center receives the service request from the elderly, it will learn the basic information of the elderly through the online big data platform, which will help the staff to provide more accurate services for them. In addition, the elderly and their family members can evaluate the center's services by phone, mobile app and website, including short-term, medium-term and long-term evaluation. The evaluation effect directly affects the subsequent rating of that community elderly care centers, which in turn is related to the amount of government benefits the center can receive.

The big data platform is built by a third-party platform, through which seniors and their families can pay directly to the paid services provided by the center. The community elderly care centers are also monitored by both industry associations and government departments to ensure maximum regulation of their operations.

The community elderly care centers will also equip each senior with a cell phone with one-touch distress and positioning function, so that when the senior is in danger alone, he/she can send distress information to the center by one-touch distress, lock the senior's location precisely according to the positioning, and make a prediction of



the possible danger according to the basic information of the senior on the big data platform, so as to help the center rescue the senior in time to the greatest extent[5].

## 3.3Service content: Enrich service content and improve service quality

#### 3.3.1Protecting daily life

The service content of this part includes basic life protection such as clothing, food, housing and transportation, and provides the most basic life care, which is divided into two ways: care for the elderly and home care. The community elderly care centers provide home care services for the elderly who have difficulty in moving around, and provides care services for the elderly who are placed in the community elderly care centers.

#### 3.3.2Mental comfort and cultural entertainment

Loneliness is a psychological problem faced by many elderly people. With limited mobility and the absence of family and friends, many elderly people feel lonely and isolated. That is why it is important to provide spiritual comfort to the elderly.

#### 3.3.3Health management and medical care

Aging is often associated with disease, and with the deterioration of body functions, many elderly people suffer from chronic diseases and pain. Therefore, it is important to provide professional health management and medical care for the elderly. The specific ones include daily dietary guidance, accompanying services, rehabilitation training, etc. In addition, health records of the elderly are established and regular medical checkups are provided for the elderly to prevent certain sudden diseases[6].

#### 3.3.4Hospice care

Professional end-of-life services are provided to terminally ill patients and their families to alleviate the dual torment of illness and mental anguish suffered by terminally ill patients, as well as to relieve the psychological pressure of the patients' families, so that death is not such an unacceptable fact[7].

#### 4. CONCLUSION

This paper takes the government as the entry point and focuses on what role the government should play in the development of community elderly care centers in the context of Internet big data, and summarizes what role local governments have played in the development of community senior care in advanced regions.

#### 4.1The government must adhere to the demandoriented elderly service supply method and continuously expand the content of elderly services

The needs are always linked to the level of social and economic development. It is foreseeable that in the future, the needs of the elderly will gradually increase, and the diversification of service contents will become the development direction of community elderly care centers. Therefore, the government must pay attention to the needs of the elderly and enrich the content of senior care services at both material and spiritual levels. While focusing on increasing the quantity, it is also necessary to focus on increasing the quality. The elderly industry is different from other service industries in that due to the aging of the elderly's body, if an unexpected condition occurs while receiving services, it may cause a very serious blow to the elderly. Therefore, the government must pay attention to the quality of the services provided by the community elderly care centers and do the appropriate checks before new services are used for official provision. At the same time, before the service is promoted, a rigorous pilot test must be conducted to ensure that the service program is foolproof and that every effort is made to protect the safety and health of the elderly.

#### 4.2The government should continuously deepen the forms and ways of multi-body participation and stimulate the potential of each body

Coordinated participation of multiple subjects is the development trend of community elderly care centers. The government should clarify what roles each subject needs to play in the process of participating in the community elderly care centers and what responsibilities each subject needs to take, so as to give full play to the advantages of different subjects. In addition, in the process of multi-participation, it is necessary to establish a perfect supervision and management system to supervise the behavior of each entity at any time and to give severe punishment to those who violate the relevant laws and regulations. At the same time, it is also necessary to establish a set of incentive mechanism to encourage each subject to actively participate in the construction of community elderly care centers, and to give appropriate rewards to those who perform well, so as to bring out the maximum potential of each subject.

## 4.3The government needs to take the lead in promoting multi-industry participation and cross-industry collaboration

The senior care industry is not an isolated industry, and multiple industries need to work together if they want to provide more and better services. In the



technology industry, the government needs to actively explore how high technology can be applied to the services of community elderly care centers, using modern science and technology to provide a better senior care experience for the elderly; in the medical industry, leading medical technology can be applied to community elderly care centers to protect the physical and mental health of the elderly to extend their life span, especially for the elderly who are suffering from diseases, using modern medical technology can reduce to a greater extent the pain caused by illness. In the arts industry, provide more cultural products suitable for the elderly to enrich their spiritual world; in the legal industry, provide the elderly with relevant legal knowledge to prevent them from being cheated ......

# 4.4The government attaches importance to the role played by modern science and technology in the development process of community elderly care centers

The development of Internet big data technology has brought new vitality to every industry, and community elderly care is no exception. The government has vigorously promoted the use of advanced science and technology in the services of community elderly care Through Internet big data technology, community elderly care centers can establish exclusive health files for each elderly person receiving services, learn their age, weight and height, medical history, family members and other various conditions, and customize more personalized and specialized service contents for them. With the development of science and technology, in the future, various advanced technologies such as 5G technology, artificial intelligence and AR will be able to be applied to community elderly care, which will surely bring more rich elderly care experiences to the elderly.

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