

# The Problems and Solutions of the Community Home-Based Old-Age Care Model

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**Keywords:** Home-based care, Community care, Family pension.

**Abstract.** Community home endowment as a new mode of pension, family pension and social pension to realize combination, it can conform to the objective demands of an ageing population, and also reduce the pension burden of family members, also meet the psychological needs of old people, make them live in the familiar environment at the same time can also accept various community endowment service, this is undoubtedly the most worth extending pension mode. Community endowment patterns, however, there are some problems, so in this paper, through the analytic hierarchy process (AHP) to evaluate home endowment policy, and through the distribution of the questionnaire form, using the quantitative index weight to evaluate endowment patterns, and implementation of the key factors that affecting endowment satisfaction is a person's demand, at last the paper, I put forward some advice to improve community home endowment service level, as well as to increase government support, etc.

## Introduction

China's aging and aging population is pushing up the number of disabled elderly people. However, the institutional pension, family pension and the policies guiding the development of social service market are all in short supply. With the change of urban family structure in China, the situation of 1+2+4 (1 family, 2 couples and 4 elderly people) is increasingly prominent. In 2009, Beijing first proposed to improve the city's "9064" old-age service model, which is expected to be realized in 2020. In February 2011, the Ministry of Civil Affairs issued the 12th five-year plan for the construction of social old-age care service system, which proposed the pattern of old-age care services "based on home-based old-age care, supplemented by community old-age care and supported by institutional old-age care". On the whole the development of China's old-age service system is not very full, unable to meet the increasing pension service demand, and urban and rural old-age service development is not balanced, the pension service development in rural areas is still very insufficient, can't meet the demand of residents endowment service.<sup>[1]</sup> Therefore, community service is becoming more and more important in old-age care. But the existing community home endowment as a supplement to the traditional mode of pension, the degree and the strength is relatively weak, difficult to meet the needs of the growing diversification pension, especially in the aspects such as the elderly spiritual needs, although community home endowment relative to the other pension mode has some advantages, but because of the service system is not perfect enough, also presented the problems. The problem of old-age care not only needs to be solved by material support, but also includes various problems such as daily care, spiritual comfort, medical care, etc. Therefore, it is necessary to analyze the problems existing in the existing community home-based old-age care service and put forward some policy opinions, so as to build a more complete community old-age care service system.

## Methods

In order to analyze the problems existing in the endowment patterns that occupy the home, in this paper, using the analytic hierarchy process (AHP) to evaluate home endowment policy and through expert interview and survey, using the quantitative evaluation index weight of pension mode,

determining the key factors affecting pension satisfaction and implementation, and puts forward suggestions.

**Basic Concepts**

The basic idea of AHP is to decompose the problem into different elements by analyzing the factors contained in the complex problem and their interrelationships, and then combine these elements into different top-down layers of attributes, so as to form a multi-level structure. The basic steps of ahp include system analysis, element analysis, hierarchy diagram, judgment matrix construction, weight calculation, consistency test, etc.

**Theoretical Model**

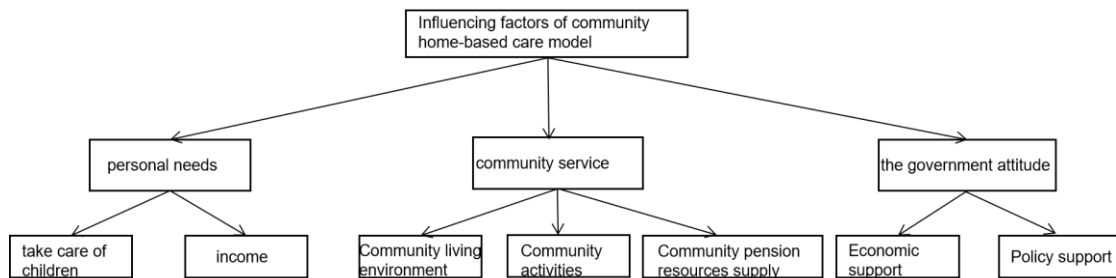


Fig. 1

1) Construct judgment matrix

Table 1. Judgment matrix of A

A	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>
A <sub>1</sub>	1	3	5
A <sub>2</sub>	1/3	1	3
A <sub>3</sub>	1/5	1/3	1

2) Use the summation method to calculate the eigenvalue:

Press the judgment matrix A column normalized:  $b_{ij} = a_{ij} / \sum a_{ij}$ ;

Normalized matrix according to line the summation:  $c_i = \sum b_{ij}$  ( $i=1,2,3,\dots,n$ );

C<sub>i</sub> normalization: get the eigenvector  $W = (w_1, w_2, \dots, w_n)^T$ ,  $w_i = c_i / \sum c_i$ ; W as A feature vector approximation

$$A = \begin{bmatrix} 1 & 3 & 5 \\ 1/3 & 1 & 3 \\ 1/5 & 1/3 & 1 \end{bmatrix}, W = (0.633 \ 0.261 \ 0.106)^T$$

3) Calculate the maximum characteristic root:

$$\lambda_{\max} = \frac{1}{n} \sum_i \left( \frac{(AW)^i}{W_i} \right), \lambda_{\max} = 3.039$$

4) Conduct consistency test:

$$C.I. = \frac{\lambda_{\max} - n}{n - 1} = 0.019 < 0.1, \text{ meet the consistency requirements.}$$

5) By looking up the index of same-order mean random consistency, we know that R.I.=0.58

Table 2. Indicators

Order number	3	4	5	6	7	8	9	10	11	12	13	14
RI	0.58	0.89	1.12	1.26	1.36	1.41	1.46	1.49	1.52	1.54	1.56	1.58

$$C.R. = \frac{C.I.}{R.I.} = 0.033 < 0.1, \text{Meet the requirements.}$$

6) Similarly, continue to construct the judgment matrix:

Table 3. Judgment matrix of A<sub>1</sub>

A <sub>1</sub>	B <sub>11</sub>	B <sub>12</sub>
B <sub>11</sub>	1	4
B <sub>12</sub>	1/4	1

Where, A<sub>1</sub> eigenvector is W= (0.8 0.2)<sup>T</sup>  
 Characteristics of the root λ max = 2  
 Consistency index CI=0 CR=0

Table 4. Judgment matrix of A<sub>2</sub>

A <sub>2</sub>	B <sub>21</sub>	B <sub>22</sub>	B <sub>23</sub>
B <sub>21</sub>	1	3	1/3
B <sub>22</sub>	1/3	1	1/5
B <sub>23</sub>	3	5	1

Where, A<sub>2</sub> eigenvector: W= (0.261, 0.106, 0.633)<sup>T</sup>  
 Characteristics of the root λ max = 3.039  
 Consistency index CI=0.019 CR=0.033

Table 5. Judgment matrix of A<sub>3</sub>

A <sub>3</sub>	B <sub>31</sub>	B <sub>32</sub>
B <sub>31</sub>	1	2
B <sub>32</sub>	1/2	1

Wherein, A<sub>3</sub> eigenvector: W= (0.667 0.333)<sup>T</sup>  
 Characteristics of the root λ max = 2  
 Consistency index CI=0 CR=0

7) Total hierarchical ordering

**Table 6. Weight ranking**

level	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	Total ranking weight
	0.633	0.261	0.106	
B <sub>11</sub>	0.8	0	0	0.5064
B <sub>12</sub>	0.2	0	0	0.1266
B <sub>21</sub>	0	0.261	0	0.068121
B <sub>22</sub>	0	0.016	0	0.004176
B <sub>23</sub>	0	0.633	0	0.165213
B <sub>31</sub>	0	0	0.667	0.070702
B <sub>32</sub>	0	0	0.033	0.003498

**The Empirical Results**

**Table 7. The result**

level	Personal needs	Community service	The government attitude	Total ranking weight
	0.633	0.261	0.106	
Take care of children income	0.8	0	0	0.5064
Community living environment	0.2	0	0	0.1266
Community activities	0	0.261	0	0.068121
Community endowment resources supply	0	0.016	0	0.004176
Economic support	0	0.633	0	0.165213
The government's support	0	0	0.667	0.070702
	0	0	0.033	0.003498

For the home-based care model, individual demand is the most important factor for the elderly. Community service is an important guideline for the elderly. Support from the government will make the elderly choose this kind of retirement. For individual needs, child care is more important than the income level of the elderly, for community services; the supply of community endowment resources should be larger than living environment and community activities. For government attitude, economic support is more important than policy support <sup>[2]</sup>.

**Summary**

As family pension is still the first choice for the elderly, there are great demands on children and spouses. However, the reality is that children face life pressure and rarely meet the needs of the elderly to accompany them. Therefore, the following Suggestions are made:

**Play an Active Role in the Community**

Home-based old-age care services are not only life care, but also spiritual comfort and psychological counseling. Communities should carry out home-based old-age care services according to local conditions to meet the diverse needs of the elderly, improve the quality of life of the elderly, so that the elderly can achieve a happy old-age care. For example, the neighborhood committee of the community can, according to the actual situation, set up interest teams in the community, such as the elderly dance team, the elderly choir and the elderly fitness team, so as to enhance the sense of community belonging and cohesion of the elderly through organizing colorful community activities.

### **Construction of Professional Team**

Building a professional community home-based care service team is a necessary condition to promote the development of care for the aged, which requires the joint efforts of the government, the community and universities.<sup>[3]</sup>The government should improve the competitive selection system of community staff, standardize and institutionalize the management of community posts, and increase the attraction of community posts to the applicants by improving the salary, perfecting the insurance allocation, and issuing subsidies. Due to the special characteristics of the elderly, the service team must be professional and have good education.

### **Improve and Perfect Relevant Laws, Regulations and Policies and Measures**

Accelerate the legislation of the elderly's rights and interests and the construction of elderly communities and make long-term plans for their development. Under the national conditions of our country, the development of community elderly care service depends largely on the degree of policy support. The government should formulate various policies to support community elderly care from a macro perspective, such as land use for community elderly care facilities, preferential policies on charges for elderly care facilities, government financial support plans for community elderly care facilities and projects.<sup>[4]</sup>

### **Government Funding**

The government needs to support the development of the old-age care industry as a backup force, but the old-age care fund is insufficient and the source is unstable, and the necessary funds are the most important to ensure the development of home-based old-age care services in the community, so the government needs to appropriate allocation, or it can adopt social donations, appropriate fees and other methods. Due to the shortage of funds, the objects of home-based care services can only be limited to some elderly with economic difficulties, unable to meet the needs of the elderly who need high-quality care services, and restricting the rapid development of home-based care services in communities. Therefore, subsidies should be given to the elderly in need.

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