

# Study on the Development of Health Care Industry in Liaoning Province under the Background of Population Aging

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**Abstract:** At present, the problem of population aging in China has become increasingly prominent. The aging of the population will not only bring certain pressure to social security and public services, but also continuously affect the vitality of social development, innovation and potential economic growth efficiency. Under this background, the old-age service model must be constantly innovated. As a health care industry model relying on the primary, secondary and tertiary industries and integrating medical care, health, tourism and culture, it has gradually become a new social pension service supply model. As a new business model, the health care industry model can not only provide high-quality old-age services to alleviate the shortage of social old-age services, but also play an important role in stimulating economic growth, adjusting industrial structure and solving labor employment. At present, the development opportunities and challenges of health care industry in Liaoning Province coexist. In view of the current development problems of health care industry in Liaoning Province, this paper puts forward specific countermeasures to promote the high-quality development of health care industry in Liaoning Province.

**Keywords:** Population Aging; Liaoning Province; Health Care Industry

## 1. Introduction

With the rapid development of China's economy, people's requirements for the quality of life are constantly improving. "Good health, happy mood, healthy life and happy old age" has become people's common demand for a happy life. Physical and mental health has not only become the new trend of modern life, but also the common goal pursued by mankind unremittingly<sup>[1]</sup>. Some economists in the United States believe that the era of health care has arrived, and the health industry will become another emerging industry that changes the global economic development after mechanization industry, electronic industry and Internet information industry<sup>[2]</sup>.

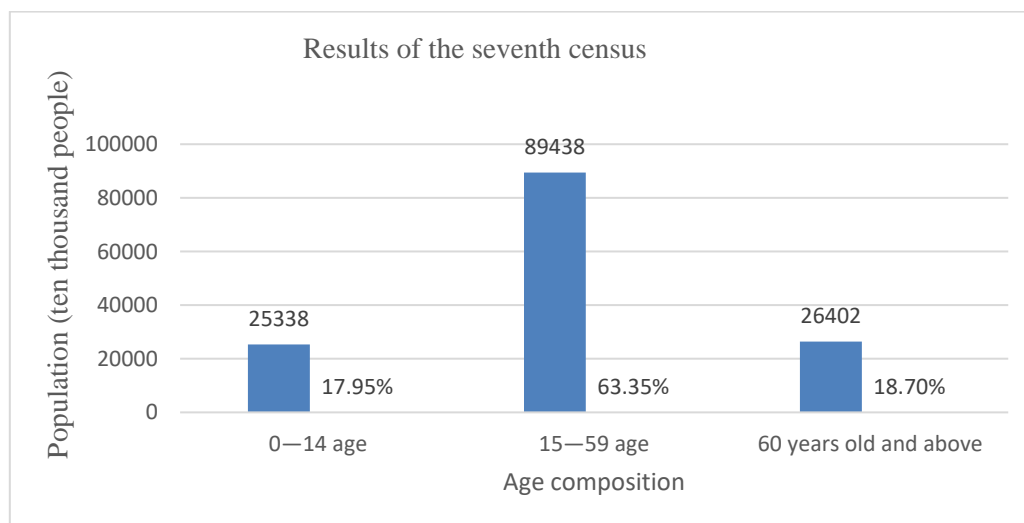


Figure 1: Results of the Seventh Census in China

For our country, population aging has become an extremely serious social problem and seriously affects the development of society and economy<sup>[3]</sup>. According to statistics, in 2020, the population over 65 years old in China has reached 190.64 million, accounting for 13.5% of the total population. It is estimated that by 2025, the population over 60 years old in China will reach 300 million, becoming a super-old country (Figure 1). China's aging population is mainly characterized by large population base, accelerated aging process and high probability of chronic diseases among the elderly, which brings new challenges to solve the problem of social aging, and the problem of healthy old-age care for the elderly has also become a hot spot of social focus<sup>[4]</sup>. Based on this, the health care industry, which integrates multiple functions such as old-age health care, medical care and leisure services, has become a new industry<sup>[5]</sup>.

## 2. Research purpose and significance

Liaoning Province, as a province with a hundred years of industrial history, has a heavy proportion of traditional heavy chemical industry, and the environment for economic development is extremely complex<sup>[6]</sup>. At present, the market demand continues to weaken, the profits of enterprises continue to decline, the investment is weak, the real economy has many difficulties, and the pressure of economic downturn and transformation and revitalization is enormous<sup>[7]</sup>. Under the new normal of economic development, the health care industry has become an important force for Liaoning Province to adjust its structure, benefit people's livelihood and promote upgrading<sup>[8]</sup>. Actively broadening new ideas, vigorously developing the health care industry, creating a new engine for economic development under the new normal, developing the service industry under the new normal and promoting economic growth will help speed up the economic restructuring of Liaoning Province, cultivate new kinetic energy, and promote the health care industry to move towards the middle and high-end development, which has important strategic significance<sup>[9]</sup>.

## 3. Development status and theoretical research of health care industry

Health care is the general name of "health" and "old-age care", and the industry produced by health care is called "health care industry". To sum up, the health care industry is the sum of the related industrial departments that provide health care products and services for the society<sup>[10]</sup>. However, according to the differences of consumer groups, market demand, related industries, resource differences and topography, many different types of health care industries can be derived<sup>[11]</sup>. Based on the consumer groups, the health care industry can be divided into women, pregnant infants and young children, teenagers and middle-aged and elderly people; Based on related industries, the health care industry can be divided into health care agriculture, health care manufacturing and health care service industries; Based on the difference of resources, the health care industry can be divided into forest health care, climate health care, marine health care, hot spring health care and Chinese medicine health care; Based on the geomorphology, the health care industry can be divided into plateau health care, mountain health care, hilly health care and plain health care<sup>[12]</sup>. Health care industry may be another industry with great market potential after Internet finance and sharing economy. The United States even calls the "health care industry" the "fifth wave of wealth" in the world. Health care industry is a typical representative of modern service industry, which covers many formats, related to urban construction, ecological environment, culture and education, etc., and has a great trend of industrial integration. Looking at the world and China, the health care industry will usher in great growth in the future.

At present, more than 100 countries and regions in the world have carried out health tourism. In 2017, the global health tourism industry was about 678.5 billion US dollars, accounting for 16% of the total tourism revenue. In 1990s, foreign countries began to study the embryonic form of health care industry. Foreign scholars' research on health care focuses on four levels: individual behavior and lifestyle, society and community, urban local planning system and overall social environment conditions. The World Health Organization (WHO) took the lead in launching the "Health Promotion" campaign. SM Ferri believes that tourism can achieve health promotion and "active aging" and realize the sustainability of social resources. John Parr is committed to improving community health, best known as the Colorado Healthy Communities Initiative (CHCI). He calls on the community to establish a public community health record to collect residents' health information and improve the quality of life of community residents. Michael Marmot and Sharon Frie believe that meeting residents' health needs is the core of urban governance and planning, and the planning and design of urban environment has a significant impact on health equity through its impact on residents' behavior and safety. According to

statistics, the compound annual growth rate of China's medical and health industry is about 17.92%. The scale of the health care industry will reach 8 trillion yuan and 22 trillion yuan respectively by 2020 and 2030, and the GDP will be driven by 6% and 8% respectively. By 2030, the scale of China's health care industry is predicted to reach 16 trillion yuan (Figure 2).

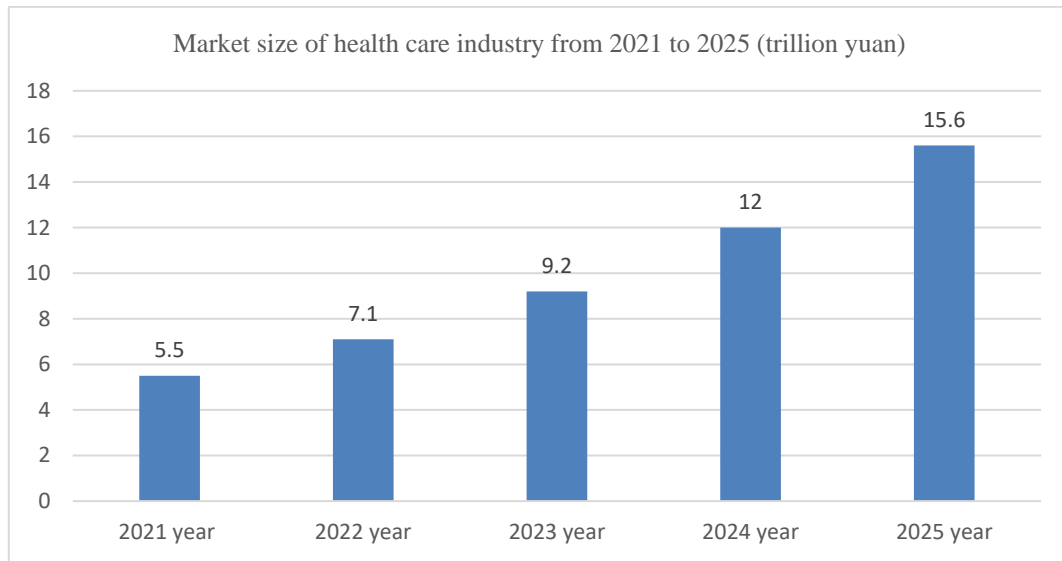


Figure 2: Forecast of market development scale of health care industry

#### 4. The necessity of developing health care industry in Liaoning Province

##### 4.1 Need for an intensifying process of population ageing

The intensification of population ageing is an urgent need for the development of health care industry. According to statistics, in 2021, the proportion of the population aged 60 and above in Liaoning Province was 25.72%, and the proportion of the population aged 65 and above was 17.42%, which was close to a moderately aging society. In this case, it is imperative to study the needs of an aging society, meet the needs of healthy, scientific and happy old-age care for the elderly, and promote the rapid development of health care industry in Liaoning Province.

##### 4.2 The need for social progress

In the past 40 years of reform and opening up, people's living standards have been greatly improved, and the whole province and even most areas of the country have built a well-off society in an all-round way. People's yearning for a happy life in the elderly is no longer to be healthy and have no worries about food and clothing, but to put forward higher requirements and expectations. On the material side, what is needed is warm housing, convenient supermarket, high-level medical care, clean community and smooth transportation. In the spiritual aspect, what is needed is harmonious neighborhood relations, supporting recreational facilities, beautiful tourism and leisure environment and so on. To achieve this goal, it is necessary to make overall planning for the pension industry and develop multi-industries.

##### 4.3 Impact of the Family Planning Policy

In 1982, family planning was identified as a basic national policy and written into the Constitution. At present, these only children born after 1980s have to work for their own jobs and raise their own children. Life pressure is relatively high, and many people are not around their parents. It is unrealistic to rely on their children to provide for the aged. At present, people have generally recognized institutional pension and cooperative pension. However, for the supplier, there is still a lot of concrete work to be done on how to establish health care institutions, establish health care communities, study the related factors affecting the development of health care industry, and think about the operation mode of health care industry.

**4.4 The need to promote employment**

At present, the post-90s population in China has reached nearly 80 million. Since 2015, there have been more than 7 million college graduates every year in China, and the country has tried every means to promote the employment of college students. Health care industry involves many industries such as real estate, medical care, maintenance, culture, health, transportation, tourism, etc. The rapid development of health care industry will become a reservoir to absorb employment and an important source to increase people's income. According to the Survey Report on Employment Willingness of Chinese College Students in Pension Service in 2019, 70.35% of Chinese college students majoring in pension service are willing to work in this industry, but there will be differences due to factors such as gender, birth time, domicile, household registration type, annual family income, grade, major distribution and internship opportunities. These differences are as follows: boys are more willing to engage in old-age services than girls; The closer to graduation, the less willing college students are to work in this industry; In areas with severe aging situation such as Liaoning and Shandong, college students are relatively willing to engage in old-age services; Compared with college students with urban hukou, college students with agricultural registered permanent residence are obviously more willing to engage in old-age services; The more internship opportunities schools provide, the more students are willing to work in their own industries (Figure 3).

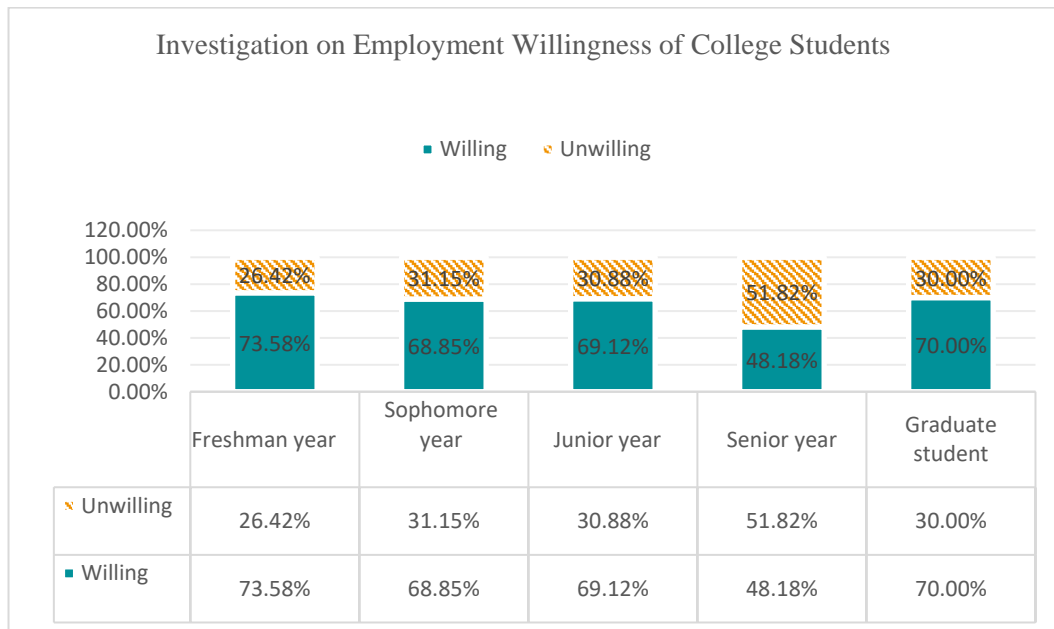


Figure 3: Investigation Report on Employment Willingness of Chinese College Students' Pension Service in 2019

**5. Problems in the development of health care industry in Liaoning Province**

**5.1 The health care industry has weak foundation, shortage of facilities, insufficient funds and insufficient utilization of resources**

The health care industry in Liaoning Province started late and its industrial base was weak. The service quality of health care institutions and medical infrastructure for health care are generally insufficient. The health care industry in Liaoning Province is short of facilities and equipment related to old-age services, health testing, disease prevention and control, health care and rehabilitation, health care tourism, sports, culture, entertainment, etc. Compared with the huge health care demand in Liaoning Province, it is far from meeting the needs of various related consumer groups. In recent years, Liaoning Province has attached great importance to the investment in old-age services and wisdom and health care. Government investment is mostly concentrated in the field of basic old-age care, with insufficient integration with tourism, finance, sports, experience, culture, entertainment, medical care and other related industries, insufficient old-age care products, limited capital scale and low proportion of health care industry. The main source of funds for health care industry is the combination of policy funds and various investment and financing channels. The inter-regional allocation of health care

industry in Liaoning Province is not scientific enough, and the superior health care resources have not been fully utilized.

### ***5.2 The format of the health care industry is immature, and the industry has failed to develop in a coordinated manner***

Health care industry involves many professional fields and related industries, including health care agriculture, health care manufacturing and health care service industries. Health care industry is a systematic project, which involves multiple departments and needs multi-party linkage. As a compound industry, the overall development level of health care industry in Liaoning Province is low at present, and its relevant functional departments have not yet formed a joint force. The variety of health care products is not rich enough, the industrial format is single, and the consumption level of health care is still at the low-end level. All kinds of resources in the health care industry have not been effectively coordinated, and related fields have not yet achieved linkage development.

### ***5.3 Imperfect system of policies and regulations***

Health care industry is a comprehensive industry centered on health care activities, including industries and departments that directly or indirectly provide them with material or non-material services and support such as culture, information, manpower, material resources, financial resources and intelligence. The development of health care industry is obviously influenced and restricted by national policies and regulations. Although Liaoning Province has implemented a unified urban and rural residents' medical insurance system, which has solved the problem of reimbursement in different places, the national medical insurance has not yet been networked nationwide, and the medical insurance policies of different provinces, autonomous regions and municipalities directly under the Central Government have their own policies, which affects the reimbursement settlement of residents' medical insurance; The differences in household registration policies in different provinces or regions lead to obstacles for residents to settle down; The purchase restriction policy of buying houses in different places has affected people's purchase behavior. All these are not conducive to population mobility, and inhibit the elderly population from going to Liaoning Province for health care.

### ***5.4 The concept of health care industry lags behind***

For a long time, Chinese people's concept of providing for the aged is limited to family providing for the aged and children providing for the aged. Whether it is society or family, they have not fully realized the impact of social reality on residents' providing for the aged, and have not prepared for their thoughts and actions. First of all, the elderly do not pay attention to healthy old-age care. According to the interview and investigation of the elderly population over 65 years old, most people think that as long as they are healthy, they can support themselves completely, without their children to support them, let alone go to nursing homes and families to support the elderly. Some people think that going to a nursing home when they are healthy is "shameful", costly and not free. Most of the elderly living in nursing homes have no children around, and they are physically inconvenient to move and have poor self-care ability. Secondly, the society does not attach importance to the development of health care industry. There is a consensus that the society is aging, but the idea of taking old-age care as an industry and carrying out industrialized management has not yet been formed. A large number of nursing homes and nursing homes have been established in the whole province, but the orientation of these old-age care institutions is mainly to provide for the aged, to solve the food and shelter of the elderly, and to pay insufficient attention to other material and spiritual needs of the elderly, such as building community medical care, cultural life, leisure and entertainment for the elderly, etc. Some real estate companies have begun to lay out old-age real estate, but the operating effect is not ideal, which is also related to the lack of understanding of the health care industry.

## **6. Countermeasures for the Development of Health Care Industry in Liaoning Province**

### ***6.1 Strengthen the top-level design and improve the strategic position of the development of the health care industry***

Improve the strategic position of health care industry development, and cultivate health care industry into a new growth point and an important pillar industry of economic development in Liaoning

Province. Organize high-standard planning, carry out high-efficiency promotion, hold high-level docking, take stimulating market demand as a breakthrough, constantly cultivate new consumption patterns, and lead the health care industry to achieve new breakthroughs in development. Health care industry is a compound industry with the characteristics of large investment, long return period and long industrial chain, which involves a wide range and many departments. It is suggested that the Liaoning provincial government should put the health care industry in an important strategic position of Liaoning's economic development according to the current industry foundation and development plan of tourism, agriculture, pharmaceutical industry, etc., and on the basis of integrating the ecological resources, medical resources, biomedicine and other resources of the whole society. Do a good job in top-level design in standard setting and platform construction. Organize overall planning, carry out overall layout, pay attention to planning, implement evaluation, adjust and revise relevant policies in time, coordinate all aspects of forces including competent departments, industry associations, health care institutions and financial institutions, and build an all-round old-age service system. At the level of development layout, we should be biased towards the old-age service industry and projects, give support in market access, land policy, financing support and talent support, encourage, support and guide the development of the health care industry, increase the research on the health care industry, and realize the coordinated development of the health care industry with population policy, social security and elderly medical care.

### ***6.2 Build a diversified and multi-level health care industry system and promote the linkage of health care industry***

In the self-development planning of the health care industry, lay out and develop the health care industry according to the actual needs of the health care market in Liaoning Province, innovate the old-age care model, and design and develop old-age care products and services. Construct a diversified and multi-level health care industry system. Improve the old-age service system, optimize the development environment of health care industry, bring health care into the scope of public services, adopt strong policies to promote and establish a sound security system. Encourage the active participation of grass-roots communities and residents to promote the healthy and rapid development of the health care industry. Focusing on the market demand of Liaoning Province, different health care projects are formulated for different consumer groups, different industries develop synergistically, and different regional characteristics and location functions are highlighted. Develop ecological health tourism and characteristic cultural tourism in Liaoning Province, develop health service industry, extend the construction of Chinese medicine medical service system, and develop ecological industry focusing on the production of organic agricultural products and Chinese medicine health care products. Focusing on health, health preservation, old-age care, medical and health care, physical fitness and leisure tourism, we will jointly promote the growth of the health care industry in the coordinated development of the primary, secondary and tertiary industries.

### ***6.3 Develop Kangyang Tourism, Build a Global Kangyang Brand, and Promote the Construction of Kangyang Town***

Liaoning Province has a vast territory, rich health care resources and development conditions, which can continuously enrich the global health care format, find out the most unique advantages of the region, improve health care service facilities, carefully cultivate and continuously expand the health care tourism industry, and create charming ecological health care brands. Relying on the natural, cultural, historical and cultural resource endowments of Liaoning Province, we will build a characteristic healthy town with superior resources as the theme, and promote the integration and development of health industry, pension industry, tourism industry and new urbanization. Realize the upgrading of health care industry and the improvement of residents' quality of life in Liaoning Province.

### ***6.4 Promote "Internet plus Health Care Service" and Develop a New Model of Wisdom and Health Care***

With the advent of the 5G network era, the wide application of mobile communication tools, Internet of Things and other technologies has brought a good opportunity for the development of health care industry in Liaoning Province. Liaoning Province should make full use of new generation information technologies such as integrated artificial intelligence, Internet of Things + cloud computing and big data, promote the development of intelligent home health care service platform project in

Liaoning Province, and integrate and develop to form intelligent health care platform in Liaoning Province, so that the elderly can enjoy health care services at home. Optimize the design of scientific and technological products and services for the elderly, and build a barrier-free system suitable for aging. Develop smart medical technologies such as health training, remote diagnosis and treatment, and family beds; Use smart technology to transform and upgrade the traditional old-age service format and promote the integration and development of institutions, communities and homes; Use intelligent technology to improve the governance ability of society, especially grass-roots society. To provide a safe, comfortable and convenient modern and intelligent living environment for community residents. Develop the "Internet plus Kangyang Tourism" system, develop the Kangyang tourism industry into a modern open system, develop the Kangyang tourism mode, improve the service quality and consumption experience of Kangyang tourism, build a Kangyang tourism marketing network system, develop intelligent Kangyang tourism products, and make scientific planning of Kangyang tourism with the help of big data.

### ***6.5 Strengthen health care supervision***

The health care industry is in its infancy at present, and strict supervision and management will promote the sound development of the health care industry. The regulatory authorities of related industries should establish the concept of service and overall situation, and take the health care industry as a major event that benefits the society and leads the social progress. Related industries (such as community medical care) should formulate entry thresholds, and those who do not meet the requirements of the thresholds are prohibited from entering; For industries that are not suitable for setting thresholds (such as community nursing homes and other institutions), it is necessary to formulate service standards, such as formulating per capita residential area, per capita medical staff ratio, and environmental sanitation standards; Strengthen the supervision and assessment of the regulatory authorities to avoid making the supervision and assessment become a mere formality.

## **7. Conclusion**

With the deepening of population aging in China, the problem of providing for the aged has become an extremely serious social problem, which seriously affects the development of society and economy. Solving the problem of population aging and making the elderly have a stable and harmonious life in their later years is not only the objective requirement of social development, but also the need of implementing people-oriented. The report of the 19th National Congress of the Communist Party of China clearly pointed out that the main contradictions in the primary stage of socialism in China have changed, and the people's pursuit of a better life has become increasingly prominent. With the rapid development of China's economy and the rapid improvement of people's living standards, people's requirements for the quality of life are getting higher and higher. The concept of "healthy living" is deeply rooted in people's hearts, and the health care industry came into being with the favorable social situation, becoming a sunrise industry with strong development momentum. Health care industry is an industrial innovation under the background of normalization of health care demand, rigidity of old-age care demand and insufficient supply of old-age care services in China, so as to meet the old-age care service needs of the elderly. It has important theoretical and practical value for realizing a healthy China and promoting the innovation and development of excellent culture. Health care industry is a comprehensive industry that relies on the primary industry, the secondary industry and the tertiary industry and integrates medical care, health, tourism and culture. It plays an important role in stimulating economic growth, adjusting industrial structure, improving public service level and solving labor employment.

This paper expounds the necessity of developing health care industry in Liaoning Province, and analyzes some problems existing in developing health care industry in Liaoning Province, including weak foundation of health care industry in Liaoning Province, shortage of facilities, insufficient funds and insufficient utilization of resources; The format of the health care industry is immature, and the industry has failed to develop together; The system of policies and regulations is imperfect; The concept of health care industry lags behind. In order to promote the development of health care industry in Liaoning Province, this paper puts forward corresponding solutions to the above problems, including strengthening the top-level design and improving the strategic position of health care industry development; Construct a diversified and multi-level health care industry system and promote the linkage of health care industry; Develop Kangyang Tourism, Build a Global Kangyang Brand, and Promote the Construction of Kangyang Town; Promote "Internet plus Health Care Service" and

Develop a New Model of Wisdom and Health Care; Strengthen the supervision of health care. The research in this paper will provide some ideas for promoting the high-quality development of health care industry in Liaoning Province.

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