

# *Medical Bozhou, Tourism Vigorous—A Study on the Potentiality of Medical Tourism Development in Bozhou*

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**Abstract:** At present, medical tourism has become a new type of tourism industry with the fastest growth in the world. With the aging of the population and the increase of the high net worth population, people's attention to their health and body shape has promoted the rapid development of the medical tourism industry. This paper takes Bozhou city, which is famous for its large number of traditional Chinese medicine resources, as the research object, and investigates the development status of medical tourism in Bozhou through literature collection, field investigation and expert consultation. On this basis, the development potential of medical tourism in Bozhou is analyzed by combining qualitative methods with quantitative measures such as Delphi method and analytic hierarchy process. In view of this, this study provides some suggestions for the development of medical tourism in Bozhou City, and hopes to make due contributions to the construction of a "big health" society.

## 1. Introduction

Medical tourism is a new form of tourism produced after the highly integration of tourism industry and medical industry [1]. It combines medical care with tourism and vacation, aiming to meet people's pursuit of physical health, but also to meet the spiritual level of relaxation needs. In this way, people can not only enjoy a beautiful environment and high-quality services in the process of medical treatment, but also relax and achieve a state of physical and mental balance by traveling after medical treatment.

The global medical tourism market is thriving, with a value in the billions and an expected annual growth rate of over 20%. Thailand, the UAE, and Costa Rica are prime destinations, each offering specialized medical services. Thailand's government supports this sector with a five-year plan, anticipating 25 billion baht in revenue by 2023. The UAE, particularly Dubai Medical City, attracts international patients with a wide range of treatments. Costa Rica's combination of quality healthcare, natural beauty, and low costs draws about 70,000 visitors annually from the US, Canada, and other high-cost countries.

The Outline of the Healthy China 2030 Plan issued by the CPC Central Committee and The State Council proposes that China should make full use of its rich medical and tourism resources to build

a health and medical tourism destination with international competitiveness. The "14th Five-Year Plan for Tourism Development" in 2022 also emphasizes the need to promote "tourism +" and "+ tourism" to form a new situation of integrated development of multiple industries. The top 20 report has made clear requirements for the high-quality development of the industry. It can be seen that medical tourism has entered the national level consideration, and the coupling and coordinated development of medical industry may become one of the effective ways to improve the quality of tourism in China.

Bozhou, in Anhui, is a hub for traditional Chinese medicine (TCM), known as the "medicine capital." Since Han times, it has cultivated herbs and advanced the TCM industry. Today, Bozhou's TCM manufacturing drives local growth and significantly contributes to China's TCM efforts. It aims to become a global TCM manufacturing center, with Bozhou Kangmei Chinese Medicine City already a world-leading trading and R&D hub.

This paper takes the medical tourism of Bozhou city as the object, studies the development status of medical tourism here, selects and constructs evaluation indicators for the development potential of medical tourism, makes a quantitative analysis of the development potential of medical tourism, and puts forward countermeasures for the development of medical tourism in Bozhou City.

## **2. Research Methods**

### **2.1 Evaluation System for the Development Potential of Medical Tourism in Bozhou City**

#### **2.1.1 Medical technology level**

The level of medical service is the key factor affecting the emergence of international medical tourism, and the perfection of basic reception facilities also affects the level of medical treatment, and the most important factor is the satisfaction of medical tourism consumers. Bozhou City is working hard to improve medical facilities and improve the level of medical technology.

#### **2.1.2 Tourism development level**

The level of tourism development depends on the endowment of tourism resources, and the endowment of tourism resources is also an important factor affecting the level of medical tourism development in medical tourism destinations. Bozhou City has organized wonderful tourism activities after the epidemic was released; setting off a boom in winter tourism, and rural tourism has become a new growth point.

#### **2.1.3 Urban economic development level**

The cost of medical tourism is inseparable from the level of local economic development and prices, so the development of medical tourism is affected by the level of local economic development. Bozhou City's economy continues to recover to a good trend, the main indicators are in a reasonable range, the growth rate of many indicators is higher than the provincial average, and the development resilience continues to show.

## **2.2 Quantitative Analysis**

### **2.2.1 Delphi Method**

Because there is no way to obtain the historical data of the potential index of tourism medical development of medical tourism. However, we need to predict the potential index of the

development of medical tourism, so we set up an expert group and hired eight experts, including tourism experts, marketing experts and medical experts, to predict the potential index of the development of tourism medical development. The eight experts put forward their personal judgments, and the feedback results are shown in Table 1.

Table 1: Expert grading table

Expert number	First Judgment	Second Judgment	Third Judgment
1	380	385	390
2	350	360	380
3	421	406	410
4	378	390	403
5	408	424	430
6	380	394	405
7	394	405	398
8	430	432	445
Average	392.625	399.5	407.5

In forecasting, the final judgment is made by integrating the previous feedback, so the last judgment is generally the main judgment in forecasting. If calculated according to the average of the third judgment of the eight experts, the average potential index of the development of medical tourism is 407.5. According to the prediction of the development potential index, it obviously shows that the development prospect of medical tourism is very impressive.

### 2.2.2 Analytic Hierarchy Process

#### ① Problems to be studied

Travelers can choose three modes of travel: medical travel, ecological tourism and traditional tourism. The main factors to be considered are the sightseeing scenery, cultural knowledge, food, accommodation and transportation [2]. Now the travel mode chosen by travelers is scientifically selected according to each element.

#### ② Build a hierarchy

Target layer: Choose the mode of travel

Index level: A1 sightseeing scenery, A2 cultural knowledge, A3 food, accommodation and transportation

Scheme level: B1 medical travel, B2 ecotourism, B3 traditional tourism

#### ③ Construct judgment matrix

The quantified value of comparison among indicators is specified in Table 2:

Table 2: Quantified values of comparison between indicators

Factor i over factor j	Quantized value
Equally important	1
Slightly important	3
Stronger important	5
Strongly important	7
Extremely important	9
The middle of two adjacent judgements	2,4,6,8
Reciprocal	$a_{ij}=1/a_{ji}$

The judgment matrix of target layer and index layer is shown in Table 3:

Table 3: Judgement matrix of target layer and index layer

Z	A1 Sightseeing View	A2 Cultural knowledge	A3 Food, drink, housing and transportation
A1 Sightseeing View	1	1/3	1/4
A2 Cultural knowledge	3	1	1/2
A3 Food, drink, housing and transportation	4	2	1

④ Calculate the corresponding weights of elements of each layer -- the weights obtained by arithmetic average method are shown in Table 4:

Table 4: Corresponding weights of elements of each layer

Z	A1 Sightseeing View	A2 Cultural knowledge	A3 Food, drink, housing and transportation	W Arithmetic average
A1 Sightseeing View	0.125	0.1	0.143	0.123
A2 Cultural knowledge	0.375	0.3	0.286	0.123
A3 Food, drink, housing and transportation	0.5	0.6	0.571	0.557

⑤ The consistency test of the calculation results of the total hierarchical ranking is shown in Table 5:

Table 5: Consistency test of the calculation results of total hierarchical ranking

Z	A1 Sightseeing View	A2 Cultural knowledge	A3 Food, drink, housing and transportation	W Arithmetic average	Aw
A1 Sightseeing View	0.125	0.1	0.143	0.123	0.37
A2 Cultural knowledge	0.375	0.3	0.286	0.320	0.96
A3 Food, drink, housing and transportation	0.5	0.6	0.571	0.557	1.77

The eigenvalue  $m=3.061956$

$CI=(m-n)/(n-1)=0.030978$

$RI = 0.52$

$CR = CI/RI = 0.059573 < 0.1$

Through consistency test, it is confirmed that the weight value is reasonable, as shown in Table

5.

Table 6: Indicator weights

A1 Sightseeing View	Medical travel	Ecotourism	Traditional tourism	Medical travel	Ecotourism	Traditional tourism	W Arithmetic average	A1w
Medical travel	1	1/2	1	0.25	0.25	0.25	0.25	0.75
Ecotourism	2	1	2	0.5	0.5	0.5	0.5	1.5
Traditional tourism	1	1/2	1	0.25	0.25	0.25	0.25	0.75

The eigenvalue  $m=3$

$CI=(m-n)/(n-1)=0$

$RI = 0.52$

$$CR = CI/RI = 0 < 0.1$$

6. Through consistency test, it is confirmed that the weight value is reasonable, as shown in Table 6.

Table 7: Indicator weights

A2 Cultural knowledge	Medical travel	Ecotourism	Traditional tourism	Medical travel	Ecotourism	Traditional tourism	W Arithmetic average	A1w
Medical travel	1	2	2	0.5	0.5	0.5	0.5	1.5
Ecotourism	1/2	1	1	0.25	0.25	0.25	0.25	0.75
Traditional tourism	1/2	1	1	0.25	0.25	0.25	0.25	0.75

The eigenvalue  $m=3$

$$CI=(m-n)/ (n-1) =0$$

$$RI = 0.52$$

$$CR = CI/RI = 0 < 0.1$$

7. Through consistency test, it is confirmed that the weight value is reasonable, as shown in Table 7.

Table 8: Indicator weights

A3 Food,drink, housing and transportation	Medical travel	Ecotourism	Traditional tourism	Medical travel	Ecotourism	Traditional tourism	W Arithmetic average	A1w
Medical travel	1	1	1	0.333	0.333	0.333	0.334	1.002
Ecotourism	1	1	1	0.333	0.333	0.333	0.333	0.999
Traditional tourism	1	1	1	0.333	0.333	0.333	0.333	0.999

The eigenvalue  $m=3$

$$CI=(m-n)/ (n-1) =0$$

$$RI = 0.52$$

$$CR = CI/RI = 0 < 0.1$$

8. Through consistency test, it is confirmed that the weight value is reasonable, as shown in Table 8.

⑥ Analytic hierarchy process analysis results are shown in Table 9:

Table 9: Analysis results of analytic hierarchy process

Z	W Arithmetic average	Medical travel	Ecotourism	Traditional tourism
A1 Sightseeing View	0.123	0.25	0.5	0.25
A2 Cultural knowledge	0.320	0.5	0.25	0.25
A3 Food, drink, housing and transportation	0.557	0.334	0.333	0.333

In summary, we can obtain:

Final score for medical travel: 0.376788

Final score of ecotourism: 0.326981

Traditional travel final score: 0.296231

So travelers should opt for medical travel.

### **3. Result Analysis**

#### **3.1 Analysis of the Potential Development of Medical Tourism in Bozhou**

##### **3.1.1 Medical technology level**

At present, according to the data shown by the Bozhou Bureau of Statistics, the number of hospitals in Bozhou has been on the rise in recent years. It is expected that more hospitals will appear in Bozhou in the future. With a total investment of 6.6 billion yuan, 60 of 88 projects in the "three-year improvement and two-year consolidation" action of the medical and health industry have been completed, and the construction of the city's Second People's Hospital and the city's children's Hospital have been accelerated, and the influence of the brand of "Beihuatu" traditional Chinese medicine has been increasing.

##### **3.1.2 Tourism development level**

Bozhou, renowned for its traditional Chinese medicine, offers a rich tourism experience with numerous attractions, including 9 4A-level sites. The city's medical and health care culture, along with its rural tourism, boosts the sector. With key rural tourism villages, TCM health bases, and provincial tourism spots, Bozhou's endowment in tourism resources is notable. Festivals like the Shao Flower Health Culture Tourism Festival and the Wuma Peach Blossom Festival add to its appeal, making Bozhou a prime destination for medical and leisure tourism.

##### **3.1.3 Urban economic development level**

Since 2022, Bozhou City's economy has shown resilience, with key indicators within a reasonable range and growth rates exceeding provincial averages. Stability in the macro-economy, agricultural sector, and investment in fixed assets, along with a significant recovery in consumption, has driven this progress. Additionally, emerging industries and new business models are fueling growth, demonstrating the city's economic vitality and potential.

#### **3.2 Analysis of the Development Mode and Path of Medical Tourism in Bozhou City**

Medical tourism is a form of tourism that combines tourism and health services. However, medical tourism in Bozhou City can be divided into different medical tourism models by virtue of its various advantages and combining its own advantages and opportunities. This study further determines the future development mode of medical tourism in Bozhou city with the help of twos matching combination and mode analysis.

##### **3.2.1 Cultural awareness tour**

Bozhou, as the hometown of Laozi and Zhuangzi, has a strong cultural flavor of Taoism. Bozhou has rich traditional Chinese medicine culture and historical sites, from which a characteristic tourist route can be designed, so that tourists can feel the charm of traditional Chinese medicine culture and health concept in Bozhou while playing. For example, a special tourist route can be arranged in Bozhou to give tourists an exclusive feeling of health. The starting point is set as the Daode Palace, and the way passes through Chen Tuan hometown and Mengcheng Zhuangzi Temple, and finally arrives at Jianggong Temple. Visitors can visit this part of the journey, to appreciate the Taoist way of health, and its cultural heritage.

### **3.2.2 Chinese medicine procurement business tour**

Bozhou City in recent years has begun to hold the annual Chinese herbal medicine trading conference. The development of each exhibition has attracted thousands of companies to participate in, as well as hundreds of thousands of pharmaceutical manufacturers to participate in this exhibition. So far, the total investment has exceeded 40 billion yuan. This exhibition has become a professional event in the field of traditional Chinese medicine in China, and is also the largest exhibition of its kind in the country. Through this exhibition, the popularity of Bozhou has been significantly improved, which not only attracts more investment, but also gives rise to a large number of tourists to come to sightseeing and experience local culture.

### **3.2.3 Chinese Medicine Research Tour**

Bozhou can take the combination of "famous enterprise + factory pharmacy process demonstration + enterprise culture + pharmacy experience" for the development of traditional Chinese medicine study tour according to the local characteristics of traditional Chinese medicine. Specific measures can include: strengthening publicity, building visitor channels, building cultural exhibition halls, opening tourist experience sites, etc.

### **3.2.4. Health food tasting tour**

Bozhou health culture has a long history. If modern Chinese medicine is combined with traditional medical health care and food health, it can create a famous catering enterprise with health culture characteristics. On this basis, it can also consider meeting the needs of traditional Chinese medicine health care at the same time, fully tap the characteristics of local cuisine, and organically combine the two for secondary development. Specific measures can include: research and development of local special medicinal food snacks, opening food streets, night markets, promoting health catering culture, training health chefs, etc.

### **3.2.5. Chinese herbal medicine plantation tour**

Bozhou has a large area of Chinese herbal medicine plantation such as Linyongcheng Chinese Medicine Garden, 18 Li Town flower sea, in addition to the world's largest peony sea certified by Guinness, Bozhou Peony Sea. Bozhou City can launch a series of tourist experience services and strengthen infrastructure construction according to its characteristics.

## **3.3 Analysis of the Development Pattern of Medical Tourism in Bozhou City**

### **3.3.1 Comparative analysis of the development potential of medical tourism in Bozhou City**

According to the analysis of the indicators of sightseeing scenery, cultural knowledge, eating, drinking, living and traveling, as well as the medical tourism, ecological tourism and traditional tourism of the program level, Bozhou is the most suitable for the development of medical tourism.

Compared with the other two types of tourism, the weight of cultural knowledge accounts for the largest proportion, which is 0.5, and the score of eating, drinking, living and traveling is also higher than that of the other two types of tourism. Even the sightseeing scenery with the least weight is only the same as traditional tourism and slightly lower than ecological tourism. Through comparative analysis of the data, medical tourism has the highest score, with the score of 0.376788.

Bozhou, with its rich healthcare culture, inherits the legacy of Hua Tuo and has a deep-rooted tradition of traditional Chinese medicine. It's also known for its wine culture, notably the production of Gujing tribute wine and health wines. This heritage is integrated into daily life through medicinal



foods, Wuqin opera, and medicinal wines. Bozhou's strategic location and affordable living enhance its development potential. Despite having less ecological tourism, the city offers numerous cultural attractions, including the Anhui Gujing Wine Culture Exposition Park, Hua Opera Tower, Caocao's Underground Military Road, and Huazu Temple, showcasing its diverse tourism resources.

### 3.3.2 Development countermeasures of medical tourism in Bozhou City

Based on the above qualitative and quantitative analysis of the development potential of medical tourism in Bozhou, the following strategies can be adopted to achieve better development of medical tourism in Bozhou.

① Provide policy support to optimize the development environment of medical tourism

Bozhou's medical tourism industry is still nascent, lacking a comprehensive service system. Its development requires interdepartmental collaboration. Government should devise strategies with policy and financial support. Transportation should facilitate medical tourists with dedicated offices and personnel. Hospital management needs a rigorous grading system for quick standardization, focusing on practitioners, technology, and facilities, with a unified certification process [3].

② Clear market positioning and formulate marketing strategies

Bozhou City joined the Yangtze River Delta Economic Coordination Conference on October 15, 2019. With the construction of interregional integrated transportation in the Yangtze River Delta, Bozhou's future economic development has been endowed with infinite possibilities. Therefore, after "entering Changchang", Bozhou should clearly define its market position and formulate marketing strategies [4]. Bozhou should attract investment from Yangtze River Delta pharmaceutical firms; foster university and research institute partnerships for TCM advancement, and build a global TCM hub. It needs to enhance communication platforms for innovation, environmental protection, finance, and logistics, aiming for a comprehensive free trade zone and regional cooperation. Active participation in market environment unity, promoting "release control service" reform, and establishing a traceability system for Chinese medicinal materials and food safety is essential. Bozhou should align with Shanghai, Jiangsu, and Zhejiang to create a top-tier business environment.

③ Relying on the advantages of traditional Chinese medicine resources, build brand medical tourism products

The quality of the brand affects the efficiency of the market. In order to occupy a dominant position in the fierce market competition, Bozhou City should make full use of the branding strategy. For Bozhou city, traditional Chinese medicine is a unique resource, which should be fully developed and utilized to develop the brand of traditional Chinese medicine health tourism with Bozhou characteristics [5]. Bozhou, known as "Hometown of Huatuo" and "Medicine Capital of China," hosts the Chinese Medicine International Expo, attracting global participants and promoting TCM culture. With extensive herbal medicine planting and recognition as "the first Chinese herbal medicine city," Bozhou's resources support building TCM-based brands, driving medical tourism growth.

④ Strengthen the construction of medical tourism industry organizations

Bozhou's medical tourism industry, in its infancy, lacks standardization. To develop, it needs structured organization, professional training, and collaboration with educational and medical institutions [6]. Strategic measures for coordinated growth, tailored development models, and market segmentation are essential. Infrastructure and reception facilities must be upgraded, along with transportation systems for better accessibility. Organizational strengthening and government support are crucial, including policy enhancements, bilingual talent training, and overcoming language barriers in medical settings.



### 3.3.3 Strategic positioning analysis of Bozhou medical tourism development

Through the discussion and analysis of the development potential of medical tourism in Bozhou City, a deeper strategic positioning can be carried out according to the above data and results.

Early stage of development: traditional Chinese medicine health care activities as the main, tourism activities as a supplement. The development of medical tourism in Bozhou City is still in the initial stage of exploration, and it can establish a good reputation by carrying out traditional Chinese medicine health care activities, attract tourists, open the market, and integrate into medical tourism of traditional Chinese medicine.

Middle stage: Focus on viewing experience and shopping. Bozhou city can establish a base of traditional Chinese medicine through the existing traditional Chinese medicine resources, and develop traditional Chinese medicine medical tourism through the scenic spots formed by pieces of traditional Chinese medicine for viewing and providing traditional Chinese medicine. At the same time, finished health care drugs can be sold in the Chinese herbal medicine base to meet the needs of consumers [7], promoting economic growth while promoting the knowledge of traditional Chinese medicine.

Later stage of development: Bozhou can enhance medical tourism by focusing on food health care and martial arts fitness. Traditional Chinese medicine ingredients like peony and trichosanthin can be used in medicinal-themed restaurants. As the hometown of Hua Tuo, Bozhou can establish Wuqin Play teaching halls to promote this traditional health maintenance practice. By combining dietary care with martial arts fitness, Bozhou can increase its appeal for medical tourists and boost the industry's growth.

## 4. Conclusion and Innovation

### 4.1 Conclusion

Bozhou is a hometown of Chinese medicinal materials, with extremely rich related medical resources. However, Bozhou has a low level of economic development and low popularity, which makes it difficult to carry out medical tourism. This study believes that medical tourism should be developed from the characteristics of Chinese medicinal materials in Bozhou. The development of medical tourism in Bozhou can be promoted by combining the health care culture, health specialties, tourism resources and other medical care modes in Bozhou.

### 4.2 Main Innovation Points

(1) First of all, this paper is to get a clear picture of the development of medical tourism, through understanding the causes of medical tourism, and then through integrating domestic and foreign academic research on medical tourism, so as to lay a foundation for the discussion of medical tourism theory and the evaluation of medical tourism development potential. Starting from the factors affecting the development potential of medical tourism, Has established Bozhou city's economic development potential index, medical technology and level development potential index and tourism development potential index system.

(2) This paper establishes a set of scientific and feasible index system, namely Bozhou medical tourism development potential index system, using quantitative and qualitative methods combined, using the quantitative method, Delphi method to measure and analyze, according to the analysis results, Bozhou medical tourism to launch the corresponding countermeasures.

### 4.3 Deficiencies of Research

This paper evaluates Bozhou's medical tourism potential, developing an index system and method. However, due to time, reference, and personal constraints, improvements are needed. Future research should expand data collection and analysis of key factors like medical technology, tourism, and urban economics, while addressing harder-to-quantify influences. This will establish a comprehensive framework and measurement tools for assessing medical tourism potential, guiding Bozhou's industry growth.

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