

## Motivation and Decision on Medical Tourism Service in Thailand

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— *Review of* —  
**Integrative  
Business &  
Economics**  
— *Research* —

### ABSTRACT

This research involves discovering what are the motivations and factors that influence customers in making a decision for medical tourism service in the case of Thailand country. Such entities are defined by combines factors that influence foreigners who having both health and tourism activity. A theoretical analysis and empirical research using the competitive advantage of the nation theory together with a hierarchy of need theory. The result showed that there are two difference groups of medical tourist, medical focused tourist and tourism focused tourist. Medical focused tourists are those who come to the country with the major purpose of having medical medically-necessary treatment, having the cosmetic surgery, and optimum healthcare treatment. Meanwhile, they also take their time on the voyage. Therefore, they focus mainly on factors associated with medical treatment and services such as cost, quality and reputation of hospital and physician. While tourism focused tourists are those who come for tourism and having their health check, dental care and wellness treatment. This kind of tourist emphasizes on those factors associated with tourism services such as an attractive destination, the convenience of hotel and travel, transportation, entertainment and leisure place.

Keywords: Medical tourism, Health Tourism, Diamond Model

### I. INTRODUCTION

The phenomenal fast growing market of Medical tourism business is respectively gaining more attention from both academics and business field. Medical tourism is new types of services that integrate tourism business and medical services together, which also known as a multi-disciplinary service. The scope of services is very broad because it is the view of the international Perspective. The main point of medical tourism business is that people travel outside of their home country to another country for medical or health care services and tour in that country E. Cohen (2008). The medical tourism market in 2006 is estimated at 20,000 million and increased to 35,000 million dollars in 2009 Tourism Authority of Thailand (2012). Thailand's on the top ranking of countries that have been popular over the world to come to medical tourism. Making it become a national major business that generates more than revenue for the country each year. More than 3 million foreigners came to receive medical services in the hospital and other healthcare facilities in 2012, which generated approximately 70,000 million baht to the nation Office for National Statistics (2013). However, is not only Thailand that focus on the medical business but India, Singapore and Malaysia and many countries around the world also announced the clear policy to be the medical center of the world. Therefore in order to maintain the strong position and gain such competitive advantage in the global arena. Thailand needs to be aware of this intense

competitive situation, retain existing strengths and create another competitive advantage over rivals.

Moreover, Thailand must be prepared for the Asian Economic Community in 2015 as the integration is very beneficial to the medical tourism of Thailand, since the population of AEC is larger than 580 million people with more than 1.5 trillion dollars of international trade value. Besides, this market will play a greater role and gain more bargaining power in the world economy as well as the European Union SCB (2011). Moreover, the medical tourism is also expected to be the main source of income to the country. The government aims to draw more than 2 million medical tourists into the nation each year, which will flow money into the country for over 4 hundred billion baht in 5 years. Such income can be divided into medical care services over 2.8 hundred billion baht, Wellness service 7.8 hundred billion baht, traditional medicine and alternative medicine 2.8 hundred billion baht, and herbal products over 4 hundred billion baht. Therefore, it is necessary to know the motivations and factors that influence customers on making decision for medical tourism service in Thailand in order to gain more competitive advantage and also continue to be leader in medical tourism of the world. Therefore in order to maintain the strong position and gain such competitive advantage in the global arena. Thailand needs to be aware of this intense competitive situation, retain existing strengths and create another competitive advantage over rivals.

## II. CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

Medical tourism means that people traveling abroad to receive medical treatment along with the holiday or that people took advantage of his/her medical vacation abroad E. Cohen (2008). It also refers to the process of "leaving home" for medical treatments and healthcare abroad or elsewhere in another country. In some cases, medical tourism includes such relaxed holidays with a trip of medical treatment or health care in the selected country. Deloitte Center for Health Solutions (2008). Thus, it can assume that medical tourism is the situation that the travelers who travel to foreign countries to get medical service or healthcare and traveling together E. Cohen (2008). Therefore, the concept of medical tourism is a concept formed by two main theories, including theories of tourism and medical services. However, since this research is to determine the motivation and the factors that affect the decision on service of a medical tourism in Thailand. This can gain the competitive advantages and compete in a global market. In this study, the researcher took the Diamond Model M. Porter (1990), which studied about the competitive advantage of the nation as the main theory along with the other theories, as follows.

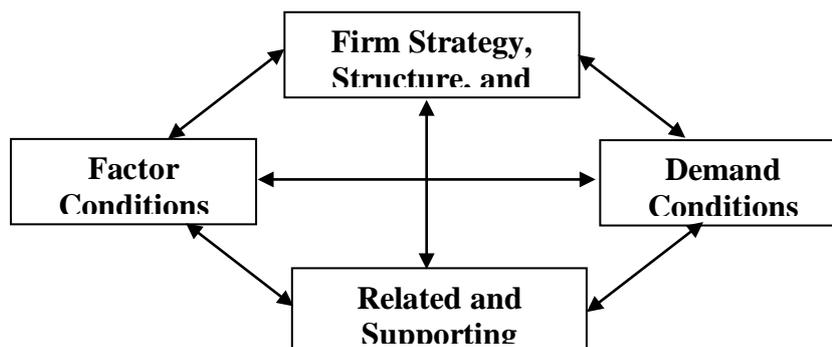


Fig. 1 Determinants of National Competitive Advantage

### 1) National Competitive Advantage

The theory argues that the competitiveness and success of companies in each industry which can bring the ability to compete with the nation depend on the efficiency of production factors which are labor, capital, and natural resource. Thereby each country must compete by creating a business environment of the nation to gain the highest competitiveness. Government agencies and private organizations have different roles. But it is relevant and work together to build strength to the country. When applied national competitive advantage theory to the medical tourism business of Thailand, four coherence key elements can be identified as follows:

Factor condition can be considered as pulling factors. It consist of beautiful landscapes, warm climate suitable for physical rehabilitation, economic development with a low cost of living, politics relatively calm, the health law less restrictive than many countries, Being social and cultural services, people are friendly (2) Demand Condition which consider as push factors that make people travel to get medical services outside their home country along with tourism. It can be divided into two major part medical need and tourism need. Medical need consist of reputation of the hospital, the expertise of doctors and therapists, quality and medical standards, the speed of service, modern medical technology, wide range medical services and not illegal, affordable/cost-effective price, privacy, and excellent of care. Tourism part consists of interesting destination, comfortable hotels, the availability of food, recreation facilities and provides entertainment. (3) Related and supporting Industries consist of tour agency, hotel, airline, transportation, entertainment business, restaurant leisure business, embassy, and other related business. (4) Firm strategy, structure and rivalry consist of improvement of quality and medical standards , hiring medical professionals , providing fast service , focus on service excellence , providing value added services such as interpreters, visa extension , money exchange, offering special promotion / package, Advertising / publicity through various media, opening overseas branches, contracting business partnerships with international hospitals, insurance companies, foreign governments agencies, and co-market with partners such airlines, tour agencies.

### 2) Hierarchy of Health Care Needs

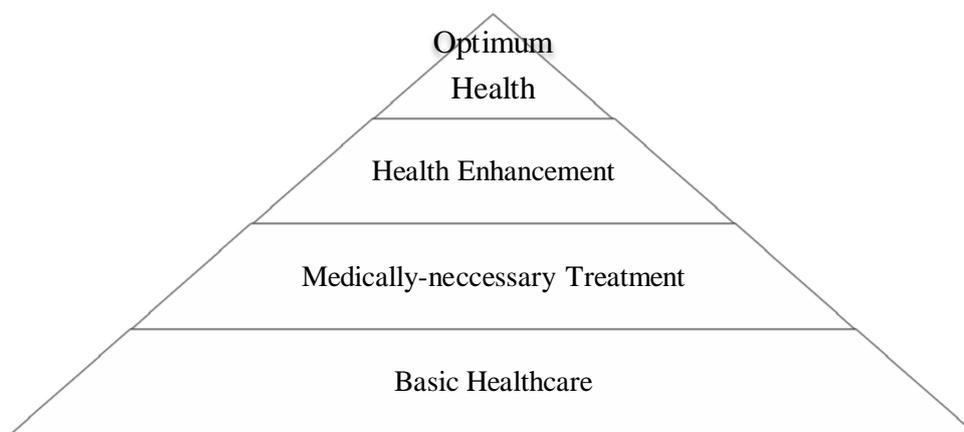


Fig2. Hierarchy of Health Care Needs

Review of the literature on Medical Tourism P. Carrera and R.Vivien. (2012) proposed the hierarchy of health care needs by using the theory of Maslow's hierarchy of need in the main theory. People who have the different level of health care need, they will seek for different form and characteristic of healthcare providers. When analyzed hierarchy of healthcare need in conjunction with the medical tourism can be summarized and comprised of 4 levels as follows.

(1) Basic Healthcare that is medical tourists who want basic medical care such as health checkups, dental care, immunization and preventive screening. Medical tourists who have the health needs at this level will focus primarily on tourism. For medical services, they seek for standard medical service, affordable price, specifically a promotion or special packages and they often choose those health providers that located in the tourism area. (2) Medically-Necessary Treatment that is medical tourists who are required to obtain medical treatment, such as treatment, surgery, and treatment of various diseases. So, medical tourists with the health care need at this level will mainly focus on medical treatment and other relating services. For the issue of tourism, they mostly will take a short trip nearby hospital or choose travel destinations that suitable for their recuperation. (3) Health enhancement that is a medical tourist who needs additional medical service. Whether to remove, to fill, to modify or to surgery some of the body such as Lasik, cosmetic surgery, lose weight, and sex reassignment surgery. A medical tourist who has healthcare needs at this level will mainly consider the conditions of medical services while they will arrange the tourism to be during or after receiving medical treatment. (4) Optimum Health that is the medical tourist who has such fine health condition, but there is a need to maintain good health or to be in a better health condition. This group of tourist would like to have a service like a spa, massage, acupuncture, traditional medicine, detoxification, and holistic healthcare treatment. The focus of medical tourist who has a health care need at this level is primarily for tourism and often uses health care services that located in tourist areas.

### 3) Push-Pull factors in Tourism

This theory states that the factors that affect the rise of tourism consists of two main factors D. Weaver and M. Oppermann. (2000) First is pushed factors that makes people travel out of their home country even more. Which consist of a good economy of home country that make their purchasing power quite high, a society that value or infatuated in tourism, demographic changes such as smaller family size thus making it easier to travel together, the advancement of technology especially communication technology like the internet, the country allow their citizens to travel aboard. Second is pulled factors that attract tourists to come the destination country. Include the good country image, beautifully landscaped, good transportation, no legal limitation, the variety of service, low or affordable cost, peace and stability, and support for government's policy. When applying this theory to medical tourism it can be stated as follows; (1) Push factors consist of long waiting time, high cost, unavailable or forbidden treatment such sex reassignment surgery, and lack of confidence. (2) Pull factors consist of country reputation in both tourism and medical service, variety of medical and tourism service, affordable/valuable cost.

## III. RESEARCH METHODOLOGY

Research have conduct both qualitative and quantitative research for this study. Personal interview and questionnaires were used as qualitative and quantitative tools

respectively. The research framework described in figure 3. Researchers have synthesized and integrated theory of the competitive advantage of the nation with hierarchy of healthcare need theory and tourism push-pull factors theory. A conceptual framework for this research by using the competitive advantage of the nation factors in diamond model as independent variables which are factors condition, demand condition, related and supporting industry and firm strategy, structure and rivalry. The study found that medical tourists who have the different level of health care needs decide to use a different medical tourism service. Therefore, the researcher took the hierarchy of health care needs as a mediator variable in the framework of this research.

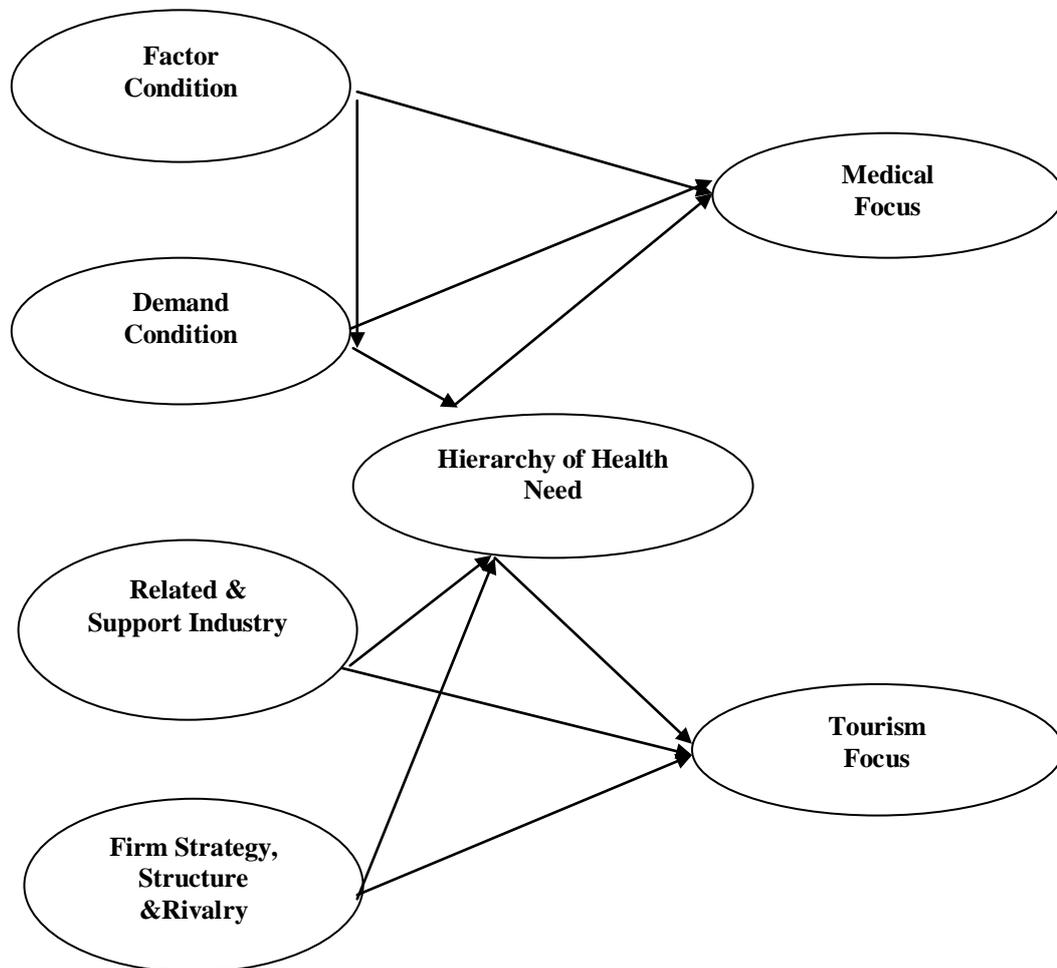


Fig 3 Research framework

Researchers have integrated push-pull factors in tourism theory with factor condition and demand condition of a diamond as the independent variable. Dependent variables in this research framework are groups of medical tourists who are motivated and decided to use a different medical tourism. This study found that it can be divided into two groups (1) Medical focus tourists who come to Thailand to receive medical treatment as the main purpose. (2) Tourism focuses tourist who comes into Thailand to travel as the main purpose.

1) Sample, population and data collection

The population of the qualitative research is the administrator of the private hospital, clinic, cosmetic surgery, dental clinic, wellness institution, spa house, holistic

treatment providers, massage service, and providers. While the population of qualitative research are foreigners who have both healthcare service and tourism in Thailand. In this research, the sample was collected from Bangkok, Chiang Mai, Pattaya, and Samui and Phuket for both qualitative and quantitative research. Firstly, researcher have collected qualitative compiled, analyzed and summarized. Secondly, quantitative research were collect throughout the country.

#### 2) Research limitation

Concept limitation, this research focus only on medical tourist who come to Thailand and have both healthcare service and take a tour in our nation for a while and go back to their home country Therefore, it exclude those who are expatriate, retirement, and exchange student or officers. Scope limitation, this research aims to study of motivation and decision on medical tourism service which only limit in the nation of Thailand.

#### 3) Research Tools

This research uses in-depth interviews as a research tool to collect data from international marketing officer of healthcare service providers in Thailand. The content of the interview was divided into two major components. First part questions asking for his/her opinions toward factors and motivations that make foreigners come for medical tourism in Thailand and for his/her company. Second part questions asking about organization strategy, structure, and marketing direction. Questionnaires were used as a quantitative tool to collect data from foreigners who come to have healthcare service and taking their journey in the Kingdom of Thailand.

### III. RESULTS

#### Qualitative Result

The synthesis and integration of three theory; (1) Competitive advantage of the nation theory (Diamond Model), (2) Hierarchy of healthcare need which adapt from Maslow's hierarchy of need theory, and (3) Push-Pull factors in tourism theory can be applied to medical tourism business. Thus the result of this study shown that motivation and decision of medical tourism depends on the major purpose of the journey, which can be divided into two groups (1) Medical focus tourist, who come for medical treatment as a main purpose. This group includes those who are in the level of medically-necessary treatment and health enhancement in a hierarchy of healthcare needs.

This medical tourist group will focus primarily on medical factors, including the speed of the service, reputation of the hospital, expert of physician and therapist, medical standards at the international level, modern medical technology, a wide range of medical services, available and legal medical treatment, the privacy of the service, excellent of care, and affordable/valuable price. Other factors that affect the motivation and decision of this group are distance that not too far to be an obstacle, affordable travel price, climate that suitability for rehabilitation.

Furthermore, having additional services such as interpreters, visa extension, money exchange will help facilitate and create quicker procedure for medical treatment. Coordination with the insurance company, home country hospital, were also key factors affecting the consideration of medical tourism services of this group. (2) Tourism focuses tourist who comes for tourism as the main purpose. This group includes those

who are at the level of basic healthcare and optimum health in a hierarchy of healthcare needs. This medical tourist group will focus primarily on tourism factors, including good country image, famous and beautiful landscape, suitable weather, the convenience of a hotel, the availability foodservice, a place of recreation, entertainment service, affordable cost of travel and living, no political situation, The society and culture of service and hospitality.

However, there is a new finding in this study. The lifestyle transformation level expands from the optimum level treatment. This group of tourists wants to change their lifestyle by harmony their physical and mental with nature. Services include weight loss by changing lifestyle, the synchronization between the bodies, mind, and nature, body detoxify and emotions detoxify. The treatment takes approximately 5-7 days. They usually make sightseeing nearby the healthcare service. The significant factors for this medical tourist group are the variety of services, the reputation, and the reference from the world class person.

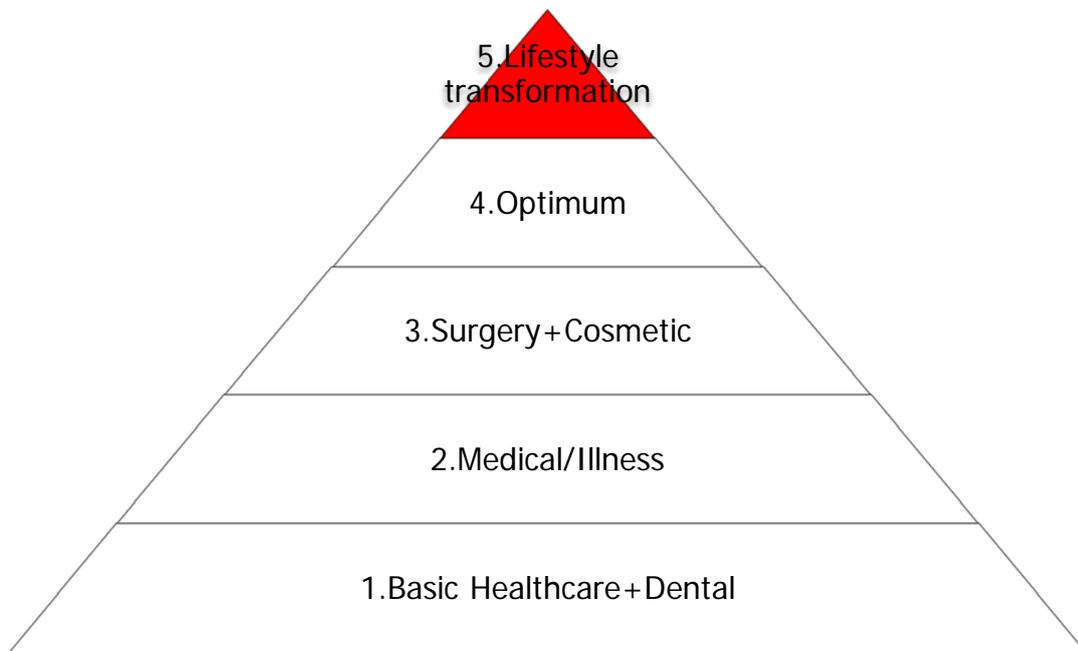


Fig 4 Hierarchy of Medical Tourism Health Care Needs

**Quantitative Result**

(1) Factor Loading and reliability

A researcher using STATA to test the construct validity of the instrument in order to conceptualize the latent variable. Factor analysis was performed to describe variability among observed, correlated variables in terms of a potentially lower number of unobserved variables called factors. The results of principal component factors in Table 1 indicated that scales were not only reliable but also valid for the factors under the study as Country Factor1, Country Factor2, Healthcare Factor1, Healthcare Factor2, Healthcare Factor3, Related-Business Factor and Marketing Factor

Variable	Items/Statements	Factor Loadings	Common -ality	Variance	Cronbach's alpha
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<b>Country Factor1</b>	C1: The beauty of the landscape and attractions.	0.8018	0.6429		
	C2: The warmth of the climate for relaxing.	0.7792	0.6072		
	C3: Appropriateness of the living cost.	0.6436	0.4142		
	C4: The stability and security in the country.	0.7914	0.6263	0.5584	0.8568
	C5: The austerity of the law in the country.	0.7184	0.5161		
	C6: Thailand culture with services mind.	0.7384	0.5452		
	C7: Reputation of Thai food.	0.7465	0.5573		
	C8: Distance of travel to Thailand.	0.8230	0.6773		
<b>Country Factor2</b>	C9: The affordable cost for the trip.	0.8033	0.6453	0.6902	0.7708
	C10: The ease of travel to Thailand.	0.8648	0.7479		
<b>Healthcare Factor1</b>	H1: The period of waiting for treatment shorter than the home country.	0.7206	0.5193		
	H2: Cost of medical service cheaper than home country.	0.6322	0.3997		
	H3: Variety of health services, some of which are not available in the home country.	0.6508	0.4235	0.4636	0.7043
	H4: Treatment is legal.	0.6743	0.4547		
	H5: The confidentiality of the treatment.	0.7216	0.5207		
	H6: The quality and standards of the service provider.	0.7717	0.5955		
	H7: Reputation and expertise of the service provider.	0.8742	0.7642		
	H8: Modern of technology and medical equipment.	0.7629	0.5820	0.5876	0.7736
<b>Healthcare Factor2</b>	H9: The quality of service is good and friendly.	0.6820	0.4651		
	H10: The hospital/Clinic offers accommodation during their treatment.	0.6972	0.4861		
	H11: The available of healthy food /Halal food.	0.7483	0.5600		
	H12: Reference from world class or well-known person.	0.8417	0.7085		
	H13: Results of treatment (Testimonial)	0.8717	0.7599	0.6771	0.8769
	H14: Advice from a doctor / Agency / acquaintances	0.8325	0.6931		
	H15: After treatment service	0.8151	0.6644		

Variable	Items/Statements	Factor Loadings	Common -ality	Variance	Cronbach's alpha
<b>Related Business Factor</b>	R1: The available of public transportation	0.6496	0.4220	0.5705	0.7476
	R2: The hospital/clinic has picked up service	0.8371	0.7007		
	R3: The entertainment and recreation nearby hotel / hospital.	0.7320	0.5358		
	R4: Hospital/Clinic is located near the tourist attraction	0.7896	0.6235		
<b>Marketing Factor</b>	MKT1: International branches.	0.8451	0.7142	0.7392	0.8824
	MKT2: The contact with the hospital / doctor in the home country.	0.8779	0.7707		
	MKT3: The cooperation between the government and the health service.	0.8863	0.7855		
	MKT4: International exhibition or trade fair	0.8285	0.6864		

Table 1 Factor Loading and Reliability

## (2) Model testing: Linear and ordered probit regression

As shown in Table2, a summary of the linear testing. In the model found that Country Factor1, Country Factor2, Healthcare Factor1, Healthcare Factor2, Healthcare Factor3, Related-Business Factor and Marketing Factor variables are significant. Correspondingly, the robustness testing confirm that each variable is significant by using order probit regression.

	Linear	OProbit
country1	0.9022 ***	1.6907 ***
country2	0.4048 *	0.8169 **
health1	-1.0796 ***	-2.0395 ***
health2	0.9138 ***	1.8399 ***
Health3	-0.4517 **	-0.7421 *
Relate	0.9672 ***	1.7304 ***
Market	0.7756 ***	1.4498 ***
Constant	1.6308 ***	
cut1		0.1871
cut2		1.8667 ***
cut3		3.4263 ***
N	220	220
RSS	84.4980	
log likelihood	-206.9075	-196.3277
F-test	15.6099 ***	
Chi-square		91.9570 ***
R <sup>2</sup>	0.3401	
Psuedo-R <sup>2</sup>		0.1898

Table 2 Linear and ordered probit regression

## V. DISCUSSION

According to the literature review and the interview, there are issues to be the concern. (1) Although Thailand is the leader of medical tourism in the world, but there are only a few medical tourism agencies in the nation. (2) There are still gaps in the medical tourism cluster that need to be a fill-in such as transportation, interpreter, and food service provider. (3) The connection between medical providers and tourism providers not as good as it should. Thus, the opportunity was lost in many cases.

## V. CONCLUSION

The study found that medical tourists who come to Thailand can be divided into two major groups, which are medical focus tourist and tourism focus tourist. The first group, the medical focus tourist, mainly emphasizes on medical treatment and other factors related to medical services while less focus on tourism factors. In contrast, tourism focus tourist, mainly pay attention to tourism factors while less focus on medical or healthcare factors. This finding will enable healthcare providers, a travel service provider and other related businesses as well as government agencies to formulate the policy, set marketing plan, and operational plans in effectively satisfy the needs of each medical tourist group

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## REFERENCES

- [1] D. Weaver and M. Oppermann. (2000), "Tourism Management", *John Wiley & Sons, publishers, Milton, Brisbane*.
- [2] Deloitte Center for Health Solutions (2008), Medical Tourism; Consumer in Search of Value", *Deloitte Center for Health Solutions Journal*.
- [3] E. Cohen (2008), "Medical Tourism in Thailand", *AU-GSB e-journal*, 24-37
- [4] Tourism Authority of Thailand (2012) "Project study to increase the market potential for groups of medical tourist"
- [5] M. Porter (1990), "The Competitive Advantage of Nations", *Harvard Business Review Journal*
- [6] Office for National Statistics (2013), "Survey of private hospitals and nursing homes 2012", *the Ministry of Information and Communications*.
- [7] P. Carrera and R.Vivien. (2012), "Why do patients engage in medical tourism?" *Maturitas Journal*, 73,
- [8] SCB (2011), "Insights impact on private hospital business", *Economic Intelligence Center Journal*, February 18-22
- [9] Van der Geer, J., Hanraads, J.A.J., Lupton, R.A. (2010), "The art of writing a scientific article", *Journal of Science Communication*, 163, 51–59.