

The Characteristics of Medical Centers' Websites in Taiwan

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Abstract: The United Nations Conference on Trade and Development (UNCTAD) estimated that the population surfing on the Internet would be up to 655 million at the end of 2002. It pointed that rush growth population was from the developing countries, especially in Asia. Released from previous data showed the growth rate in Asia will be 44% in the future. In Taiwan, about one third of the people have the experience of surfing on the Internet. We address that the academic medical centers have the capability to promote their service by electronic commerce. Furthermore, the characteristics of medical centers will influence the utilization of websites as a marketing instrument. We conclude that the academic medical centers have the capability to promote their service by electronic commerce.

Key-Words: medical centers, hospitals, websites

1 Introduction

The prevalence of Internet network and global information network is increasing. The United Nations Conference on Trade and Development (UNCTAD) estimated that the population surfing on the Internet would be up to 655 million at the end of 2002 [1]. It pointed that most of the increased population came from the developing countries, especially in Asia. Released from previous data showed the growth rate in Asia will be 44% in the future. In Taiwan, about one third of the people have the experience of surfing on the Internet [1].

Since 1995, all of the people have been enrolled in the National Health Insurance (NHI) in Taiwan. To control the medical expenditure efficiently, the Bureau of National Health

Insurance began to implement global budgeting recently. Global budgeting strictly sets the cap of medical expenditure. It might cause the shrinkage of hospital income. Under this condition, hospitals need to create a new market for increasing revenue. As more and more people surfing on the Internet, the World Wide Web will be an efficient instrument for health marketing.

2 Problem Formation

In Taiwan, hospitals are accredited by Taiwan Joint Commission on Hospital Accreditation and are sorted by academic medical center, regional hospital and community hospital [2]. The major task of academic medical centers is research, teaching, training and critical care, etc.

Compared to other forms of electronic commerce, hospital web sites lag very far behind in their capability [3]. We argue that the academic medical centers have the capability to promote their service by electronic commerce. Furthermore, the characteristics of medical centers will influence the utilization of websites as a marketing instrument.

3 Problem Solution

The sample came from 17 academic medical centers, including 7 public hospitals, 2 private hospitals, and 8 proprietary hospitals.

Of these 17 hospitals, 8 are located in the north, 3 in the middle, 5 in the south, and 1 in the east of Taiwan, as shown in figure 1. In the north, there are National Taiwan University Hospital (NTNU), Taipei Veterans General Hospital

(VGHTPE), YTri-Service General Hospital (TSGH), Mackay Memorial Hospital (MMH), Shin Kong Wu Ho-Su Memorial Hospital (SKH), Cathay General Hospital (CGH), Taipei Municipal Wan Fang Hospital Managed by Taipei Medical University (WANFAN), and Chang-Gung Memorial Hospital (CGMH). In the middle, there are Taichung Veterans General Hospital (VGHTC), China Medical University Hospital (CMUH), and Changhua Christian Hospital (CCH). In the south, there are National Cheng Kung University Hospital (NCKU), Chi Mei Hospital (CHIMEI), Kaohsiung Veterans General Hospital (VGHS), and Chung-Ho Memorial Hospital, Kaohsiung Medical University (KMUH). In the west, there is Buddhist Tzu Chi General Hospital (Tzuchi).

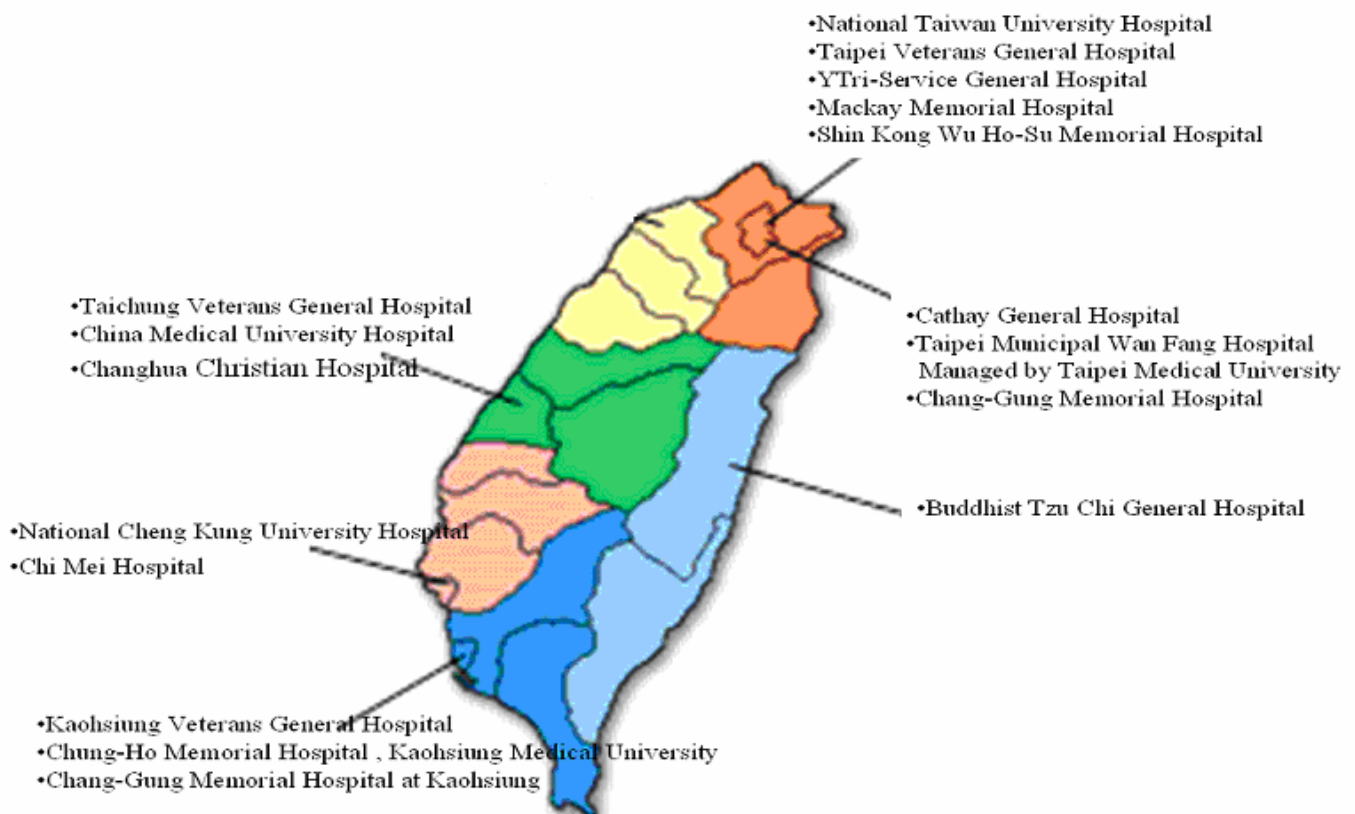


Figure 1. Location of Medical Centers

We collected and analyzed the websites of these hospitals in February, 2006. According to Jain and Barbieri's analytic framework, the health-related websites may include detailed medical/health content, transactional and advertising [4]. The detailed medical/health includes medical information and research. The transactional message includes pharmacies and retail/wholesale. The advertising message includes some information about hospitals and medical centers, organizations and medical practices.

All the web site contents of 17 academic medical centers were sorted according to the analytic framework. The results were shown as table 1. It was found that all of the academic medical centers offered detailed medical/health content, but not transactional and advertising message.

3.1 medical/health content

All the hospitals' website offered medical and research information. For medical information, the website not only offers the information of health and wellness, but also includes online medical help and advice, self-diagnosis. It implies that medical center has been taken the responsibility to teach people how to promote their health.

There were academic information of research, including news of medical research department, medicine symposium, and medicine journal. It showed that the academic medical centers had the ability of medical research.

3.2 transactional messages

All of the hospitals did not offer the message about pharmacies. In our traditional culture, people like to take medicine by themselves. For avoiding encourages people to take medicine without doctors' prescription, there is a strict regulation to prohibit the advertising of pharmacies.

For retail/ wholesale item, only Mackay Memorial Hospital (MMH) offered related message about a special meal package. Nutritionist designed the package and people may order the package on line. In our viewpoints, it is a good idea to promote medical center's product, especially in supplement. Because Chinese people enjoy taking an additional supplement for strengthening their health, the supplement designed and supplied by a medical center would be more acceptable.

3.3 advertising message

All of the hospitals offered advertising information about hospitals, medical practices, and out-of-pocket services.

Hospitals showed their high-technical medical instruments on website, such as Positron Emission Tomography (PET), Magnetic Resonance Imagine (MRI), etc. This kind of advertising will promote their reputation, but not their income.

VGHTPE, VGHTC and VGHKS were established by the Veterans Affairs Commission, Executive Yuan, R.O.C. These hospitals's mission is providing medical service for veterans. Now, they also provide services for other people. It was interesting that they had their own websites. And there were no links between them.

CGMH is different from other medical centers. Formosa Plastic Group Chairman and President established it. In memory of their father, the hospital was named Chang Gung Memorial Hospital. After the hospitals were established in Taipei and Linkou, the CGMH developed other hospital in Keelung, Taoyan, Chiayi, and Kaohsiung. So, these six hospitals were all on the same homepage.

The advertising of medical practice included the message of symposium conference, journal, and research. These related messages on website will demonstrate their ability of teaching, researching, and training.

Of these 8 proprietary hospitals, 6 hospitals included organizations message on their websites. MMH's website had the message about childhood burn, premature baby, and hospice foundations. SKH's website had the message about Taiwan Shin-Kong Medical Club. CGH's website had the message about Cathay Life Insurance and news of bank. CGMH's website had the message about retirement home for the elder in the 80-hectare park area Chang-Gung University, Chang-Gung Biotechnology, and Formosa Group Enterprises, etc. Tzuchi's website had the message about DA-AI TV and Buddhist Compassion Relief Tzu Chi Foundation Taiwan. Obviously, these hospitals and organizations on the same websites belong to the same foundation or enterprise group.

All the hospitals offered the advertising message of "out-of-pocket" services. This message included the medical cosmetics, weight control, health examination, etc. Recently, overweight became a hot issue. Many people control their weight by unhealthy approach. It is

necessary for the medical centers to provide the weight-control service. Taiwanese value their health and NHI offers free health examination service, but not for all people. People between 40 years old and 64 years old may receive the free service once per three years. People over 65 years old may receive the free service every year. Clearly, the health examination service was offered for persons fewer than 40 years old.

Three hospitals (CMUH's, CMH's and KMUH's) offered "san-fu-tie". It is a kind of Chinese medical care. It is interesting that all of these hospitals were located in the middle and southern part of Taiwan. According to Lee's study [20] found that people living in the middle and south of Taiwan had higher probability to utilize Chinese medicine. So, hospitals located in other areas did not have such a message on their websites.

4 Conclusion

We concluded that the academic medical centers had the capability to promote their services by electronic commerce and the properties of medical centers would determine the content of their websites.

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Table 1. Contents of academic medical centers' websites

Hospital	Health-related websites							Out-of-pocket Services
	Detailed medical/Health content		Transactional		Advertising			
	Information	Research	Pharmacies	Retail/Wholesale	Hospitals	Organizations	Medical Practices	
NTUH _N	X	X			X		X	X
VGHTPE _N	X	X			X		X	X
TSGH _N	X	X			X		X	X
MMH _N	X	X		X	X	X	X	X
SKH _N	X	X			X	X	X	X
CGH _N	X	X			X	X	X	X
WANFANG _N	X	X			X		X	X
CGMH _N	X	X			X	X	X	X
VGHTC _M	X	X			X		X	X
CMUH _M	X	X			X		X	X
CCH _M	X	X			X		X	X
NCKU _S	X	X			X		X	X
CHIMEI _S	X	X			X		X	X
VGHKS _S	X	X			X		X	X
KMUH _S	X	X			X		X	X
CGMH _S	X	X			X	X	X	X
Tzuchi _E	X	X			X	X	X	X

NTUH: National Taiwan University Hospital VGHTPE: Taipei Veterans General Hospital TSGH: YTri-Service General Hospital MMH: Mackay Memorial Hospital SKH: Shin Kong Wu Ho-Su Memorial Hospital CGH: Cathay General Hospital WANFANG: Taipei Municipal Wan Fang Hospital Managed by Taipei Medical University CGMH: Chang-Gung Memorial Hospital VGHTC: Taichung Veterans General Hospital CMUH: China Medical University Hospital CCH: Changhua Christian Hospital NCKU: National Cheng Kung University Hospital CMH: Chi Mei Hospital VGHKS: Kaohsiung Veterans General Hospital KMUH: Chung-Ho Memorial Hospital, Kaohsiung Medical University Tzuchi: Buddhist Tzu Chi General Hospital

N: North M: Middle S: South E: East