

Globalization and Industry Competitiveness in Healthcare Services and Marketing

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There is no gainsaying the fact that interaction among different nations has transcended the earlier time-honored concept of imports and exports of traditional commodities. Now we find skilled professionals migrating from one country to another to satisfy the needs of the service sector. Healthcare has been transformed in modern times into a vital service sector industry. The rapid pace at which specialty hospitals are springing up in developing countries like India testifies to this. Patients in one country traveling to another in quest of proper treatment are now growing in number. This is due to several reasons including lack of infrastructure in their own countries and the cost of medical care. Thus, globalization in the healthcare industry is now a fact of life. This paper seeks to portray the scenario with respect to healthcare marketing and the impact of technology on hospitals and competition among medicare centers. Modern equipment for diagnostics and treatment procedures like radiotherapy for cancer patients and dialysis for renal failure help many patients in the process of recovery. It is not surprising that hospitals everywhere advertise their wares in such a context. Telemedicine is also assuming importance and transfer of scanned images from one hospital located in a remote place to another for getting expert opinion is becoming commonplace. Service quality in hospitals has improved because of the high competence of the specialists and the care with which they use modern equipment. Corporate hospitals have adopted online advertising and promotional strategies like offering health packages for medical checkup.

Introduction

With world shrinking into a global village, no country can remain uninfluenced by events in other countries. The remark that “the flap of a butterfly’s wings in Brazil will set off a tornado in Texas” is no longer to be taken as facetious; there seems to be a large measure of truth in it. The term ‘globalization’ has in recent years gained a

vital significance in the current context of greater interaction between different nations, transcending the earlier time-honored concept of exports and imports of traditional commodities. It is very common nowadays to find skilled professionals migrating from one country to another to meet the needs of the service sector.

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Healthcare has now become an important service sector industry. Specialty hospitals are springing up in India, among other developing countries, at a rapid pace. Corporate management of these hospitals is also an established fact. Naturally, competition in various garbs is also coming to the fore. In the healthcare field, globalization has already assumed huge dimensions. The impact of technology on medicare centers and treatment of patients, *per se*, has only spurred the process.

Earlier literature on healthcare industry focused mostly on sectoral aspects but, in recent years, researchers have been highlighting holistic factors (Siriginidi Subba Rao, 2001). Integration of knowledge-based systems with specialized applications was once a dream but has now become a reality, according to Siriginidi Subba Rao. This applies to developments like online marketing (Kevin P Richardson, 2003). In Kevin P Richardson's view, in one multimedia package, the web combines "the depth of print, the flashiness of broadcast, and the segmentation of direct advertising". The web calls on the organizations to raise the level of customer service to the highest point.

Thanks to the use of equipments like laparoscope, endoscopes in diagnostics along with treatment procedures like laser retinotherapy in eye diseases, radiotherapy for cancer patients, and dialysis for renal failure, greater numbers of patients nowadays stand a good chance of getting cured and be on the road of recovery. Service quality in hospitals has registered a marked improvement not only because of the equipment but also the high competence of the medical specialists and the care with which they use the equipment.

With competition entering the scene, corporate hospitals have adopted online advertising and promotional strategies like offering free medical checkup, concessional health packages, holding workshops and seminars to lure the chronically ill patients. These hospitals periodically revise their tariff with suitable benchmarking. Another notable feature is that profitability in the industry has gone up although the middle class in society finds the cost unaffordable. However, factors like medical reimbursement and health insurance schemes come to the rescue of these patients.

Every country, rich or poor, is faced with problems in the healthcare industry. The American scene is no exception. Democratic Senator Hillary Rodham Clinton, points out that the closest economic rivals of the US have mandatory national healthcare systems rather than the voluntary employer-based model in the US. American companies are outsourcing jobs to countries where the price of labor does not include health coverage. Similarly, many new jobs in the service sector and part-time jobs do not include health benefits.

The Senator, writing in *The New York Times Magazine*, makes insightful comments on several aspects of healthcare and globalization. "... war, poverty, environmental degradation and increased world travel for business and pleasure mean greater migration of people across borders. And with people go diseases. The likes of SARS can travel quickly from HongKong to Toronto, and news of a strange flu in Asia worries us in New York. Welcome to the world without borders...the need to act now to address issues of global health is no longer just a moral imperative; it is self-interest".

Hillary Clinton is also forthright about the way modern developments have affected the world and the people inhabiting it. “Our changing life styles also contribute to behavior-induced health problems. We can shop online; order in fast food; drive to our errands; and entertainment—movies, TV, video games, and music—is one click away. The physical activity required to get through the day has decreased while the pace and stress of daily life has quickened affecting mental health”. About her own country, she sarcastically says “our system rewards clinicians for providing more services but not for keeping patients healthier”.

Objective of the Study

The objective of the study is to highlight globalization in healthcare marketing and to bring out the competition currently prevalent in healthcare industry. Several countries including the United States, Britain, Singapore, Thailand and India are very much under the sway of this phenomenon. The aim is also to focus on how this globalization process has been accelerated by developments in technology such as computers and computer aided devices, internet, and telemedicine.

Role of Computerization in the Decision Making Process by Physicians and in the Elimination of Errors

In the last decade, computers have rendered the task of hospital administrators and physicians much easier. Computers have become very common these days in hospitals where they are used for a variety of purposes like registration, fixing appointments with doctors, maintenance of medical records, allotment of rooms, billing, accounting and other administrative

purposes. Apart from them, safe medical care requires a degree of individualization that is impossible without computerized decision support. For instance, over 600 drugs need adjustment of doses for multiple levels of renal dysfunction, a task that is poorly performed by the human agency but can be done accurately by a computer. Computerized decision support can improve in this way the performance of a physician or surgeon (David W Bates and Atul A Gawande, 2003).

Failures of communication, particularly those resulting from inadequate handwritten prescriptions, are the common factors contributing to the occurrence of adverse effects. Many serious laboratory abnormalities requiring urgent action can be identified and communicated to doctors automatically by information systems thereby reducing time delay in giving appropriate treatment. Another key to improving safety will be improving access to reference information. Information on a wide range of textbooks, reference on drugs, and tools for managing infectious diseases is available in computers.

In the case of a critically ill patient, such large volumes of data are collected by the monitors that it will be difficult to sift through them and detect problems. However, if monitoring of information is computerized, application software can perform this task looking for relationships and trends, and highlighting them. This process can permit doctors to intervene before adverse effects set in. Globalization plays a crucial role in all these developments and naturally with a large number of hospitals coming up in different countries, competitiveness has taken a keen edge.

A remarkable possibility is the fruition of the dream of computer scientists—a million ordinary PCs working in tandem on a problem can outthink even the most expensive supercomputer. Personal computers competing with supercomputers, is it possible? What has recently emerged now is something very unique: 2.5 million PCs have been “enlisted for an omnibus effort to discover promising drug formulations for the treatment of cancer, anthrax, and smallpox”.

Narrating how these developments are transforming the medical scene, a keen observer, Steven Johnson says: “thus far, the smallpox grid has generated 44 really interesting leads—small molecules that could potentially be turned into a drug”. Founder of a US company called United Devices, Ed Hubbard notes that the smallpox research has been the most fruitful to date. The advantages of distributed computing are many. Futurologists envisage a situation when analysis of the effects of global warming or modeling solutions for the problem of Third World debt will be possible with the collaboration among a large number of PCs.

Machines ganging up to destroy humanity is a scenario that is frightening. But the alternative future is the one where computers join together to keep the humans alive. Indeed, global competitiveness in the healthcare industry may one day see the distributed computing network finding a cure for cancer and other dreaded diseases. In other words, competitiveness will gradually dissolve into cooperation and collaboration. This is certainly a promising future.

Role of Websites

Health Care Organizations (HCOs) were slow to jump on the Internet marketing bandwagon. The media had a lot to do with the acceptance of online marketing by HCOs. Hospitals rushed to put basic websites on the Internet when the administrators realized that consumers were looking for healthcare information online. Pharmaceutical companies were surprisingly slow to adopt this marketing technique primarily due to security considerations. But they are now in the forefront of building customer relationships via the Internet. The Internet is no longer a platform for just displaying brochures, service descriptions, and lists of physicians. People are gradually becoming aware of the potential of the web for information, advice, decision support tools, interactivity transactions and healthcare delivery.

Once these customers are online, the healthcare marketers are able to convert these ‘browsers’ into ‘prospects’. Many successful sites are converting these prospects into ‘customers’ by luring them into their call centers and specific service lines like cardiology, oncology or orthopedics (Richard K Thomas, 2003).

Healthcare Systems in Developing Countries

A great deal of attention must be given to the improvement of healthcare in the developing countries. In the current scenario, global health goals will be met only if health systems in these countries get urgently needed investment and support. This is what a recent World Health Organization (WHO) Report points out, and rightly so. There are yawning gaps in healthcare between the developed and

developing countries. The WHO Report, 2003 released in December 2003 underscores the critical need for much larger investment in health systems. This aspect is well brought out by an example: a baby girl born in Japan has a life expectancy of 85 years, while a girl born in Sierra Leone at exactly the same time has a life expectancy of just 36 years. “These global health gaps are unacceptable”, says the Director General of WHO.

The Declaration of Alma-Ata on Primary Healthcare “challenged the world to embrace the principles of health for all as the way to overcome gross health inequities between and within countries”. Indeed, the task of turning these principles into reality depends on a renewed effort by all international health agencies.

Some recent events point to lessons that should be learnt well. They include health challenges like acute respiratory syndrome, HIV/AIDS, polio eradication and tobacco use. Efforts by public health authorities in different countries have no doubt saved millions of lives and prevented large numbers of people from suffering disability. A blend of financial aid and targeted improvements in health services contributed to this.

There is no doubt that competitiveness in the healthcare industry in this era of globalization has made for several improvements in the developing nations. In fact, the WHO goal of universal access to HIV/AIDS treatment has set a concrete target of providing care for three million people in the poorest countries by the year 2005. This is a demonstration of how the principle of equitable access can be put into practices, according to health watchers.

Critical shortages of healthcare workers, inadequate information on health, funding shortages and the need for more government leadership aimed at ameliorating the lot of the poorest people may seem to be almost insurmountable problems, but international support can overcome them in a big way.

The Asian Scene—Singapore Example

A small country like Singapore attracts each year more than 200,000 people seeking medical services, which cover a wide range from health screening and rehabilitative services to specialized treatment of different parts of the human anatomy like the eye, heart and brain. Other diseases like cancer and their treatment also come into this range.

Here also, competitiveness has acquired much notice. The medical experts in Singapore paint a glorious picture of the hospital facilities available there. In their view, the patients “share a common confidence in a system that emphasizes safety and pushes the boundaries of excellence”. A vast pool of medical expertise, and the availability of state-of-the-art diagnostic and treatment facilities are all factors which have made Singapore the preeminent center for healthcare in the Asia Pacific region, claim the experts (Simply Singapore, Brochure).

They also cite a recent case history where the patient Ram Panjabi, given only six months to live by doctors elsewhere, made a remarkable recovery in a Singapore hospital. Diagnosed as a liver cirrhosis victim, he was advised a liver transplant without which he could not survive for more than six months. Resigned to his fate, he began winding up all his businesses

around Asia, thinking of returning to India and spending his last days with his family. Luckily for him, one of his doctors in London referred him to a liver transplant surgeon in Singapore. A few weeks later, Panjabi had the operation done on him successfully and gained a new lease of life.

“The medical team is on par with the best in the world”, he declares. The nurses took care to explain what each medication meant, a refreshing departure from what patients normally experience. “Having confidence in the healthcare provider is half the battle won”. The comforts and level of attention were like those in a five star hotel. After shaking hands with death, he treasures the gift of life he has received. Now at 70, he leads a stress free life, maintains a strict diet and exercise regimen to safeguard his health. In addition, he does some swimming exercise as well.

Competition on a global scale makes the healthcare providers advertise their offerings in a persuasive fashion. A number of such providers, including the Raffles International Patients Centre, point to the friendly and trained customer service which helps patients in the matter of appointments and referrals to appropriate specialists, hospital admission, follow-up care, transportation and accommodation. The National University Hospital proclaims, “We put our patients FIRST” with able assistance from a pool of 3,000 professional staff.

An advanced nonsurgical fat reduction treatment called ‘Liposonic Plus’ to break down and remove deep unwanted fat deposits is advocated by another organization in Singapore. This will obviate the need for undergoing a surgical procedure. The three steps involved here are: ultrasound, vacuum therapy, and

Lymphatic Drainage. A state-of-the-art Centre for spinal rehabilitation called ‘Back and Neck Center’ claims that it is the only center of its kind in South and South-East Asia.

Industry competitiveness in the context of globalization is again illustrated by India now becoming the second largest source of Foreign Direct Investment (FDI) into the United Kingdom from Asia in terms of projects and jobs generated. India ranks among the UK’s top ten FDI markets. A keen observer of the scene notes that “the year 2003-2004 continued to witness recognition by Indian companies that the UK is the ideal business investment location of choice in Europe, and second only to the US globally”.

This extends very well in the field of biotechnology. The Bio 2004 conference in Bangalore during July 2004 enabled many scientists and industrialists from the UK to have a first hand knowledge of the progress made by India in this area. The theme ‘Biotechnology for a Billion People’ captured the fancy of the visitors and delegates. The aim of the UK delegation’s visit was to explore business opportunities in India. The members were impressed with the facilities and capabilities of the companies they visited. Over 60 international speakers took part in the conference held at the Indian Institute of Science, Bangalore. Over 200 exhibitors displayed items in the Tradeshow. They included Sartorius, Panacea Biotec, Novozymes, Biocon, Ranbaxy, Strand Genomics, and many others. Biocon was described as a fairytale company by a delegate Tim Cook.

London Technology Network (LTN), a not-for-profit government-funded initiative, enables technology intensive

companies all over the world to engage with London's universities. LTN's technology consultants are experienced industry practitioners specializing in life sciences, hardware, software, product engineering and informatics. LTN has recruited over 100 'Business Research Fellows' from London's top university departments to help in this partnering activity. Not only that. These Fellows have been provided with technology transfer training by experts from leading companies and research centers. A wide range of industry needs across multiple therapeutic, biomaterials, bioinformatics, nano-bio medical device and diagnostic platforms is covered along with agri-food and environmental research (British Commercial News (BCN), 2004).

There are other interesting features related to globalization. A growing number of companies are using their presence in North America and Europe for sales, marketing, business development, account management and regulatory support. Other activities are then being carried out in a country with lower direct costs. A White Paper 'Making Globalization a Force for Good' released by the UK Government calls for a "pro-development approach that allows poorer countries greater flexibility in opening their markets, as part of their broader plans for tackling poverty". Observers feel that the White Paper comes at a "pivotal moment for the international trade agenda". The White Paper underlines the close cooperation between government departments and stakeholders to tackle the challenges of globalization. Issues like climate change, trade and environment also figure in the document.

Canada is now on its way to implement suitable legislative and regulatory changes

to honor a commitment for combating the global AIDS pandemic by amending patent law and allowing producers of generic antiretroviral drugs to export copies of brand name drugs to HIV-stricken countries. The famous medical magazine *Lancet* notes that "generic producers are frantically shopping for raw materials, and ramping up production lines and drug approval applications, so they can start copying and then exporting the patented medicines to poor countries" (Wayne Kondra, 2003). A former Canadian politician and current UN chief AIDS envoy told a pan-African AIDS conference that Canada should step forward to break a "patent logjam" which prevented generic firms from producing patent-protected drugs for poor countries with health emergencies.

However, there are stumbling blocks here. The lobby groups for brand name firms have publicly embraced the plan but they may press officials drafting the legislation to guarantee certain amendments to the law, according to the article in *Lancet*. This is just to ensure that generic antiretrovirals are not funneled back into the lucrative North American and European markets. The Canadian illustrates how globalization has many ramifications in the context of healthcare industry competitiveness.

Closer home, brands like Novartis sell imported drugs for diseases like cancer and they cost a lot of money. They are beyond the reach of the vast majority of patients. Recently, Indian pharmaceutical companies like Dabur have come out with drugs at much lower prices but with the same generic formulae. They are equally efficacious in the treatment, according to oncologists. No doubt, this is a boon to patients in the middle class segment of society.

It is not surprising that competition among the global healthcare providers is now very keen in such areas as translating the concept of a clinical information network into action. This is visualized as a “many layered sequencing of perhaps dozens of separate IT initiatives, all building toward the goal of locking efficiency and patient safety into the processes of physician ordering and diagnostic duties”. A survey of trends in information systems points to the clinical IT end game of physician-oriented computer order entry being placed in a different light. Its complexity and long implementation time makes the cost prohibitively high (Roy L Simpson, 2004).

Clinical decision making with the aid of information network requires a measure of sophistication and prerequisite capabilities to make it successful. The latter includes such steps as barcoding systems for administering medicines at the bedside of patients and new infrastructure to support wireless communication between data systems and mobile computers carted around by clinicians.

South-East Asia’s largest private hospital, Bumrungrad International (BI) in Bangkok, is listed on the Stock Exchange of Thailand. It has entered into an agreement with the Advanced Medicine and Research Institute (AMRI) for managing the latter’s existing facilities in Kolkata. This is an example of collaboration also coming into the picture.

That hospitals in India have now become a preferred destination for patients from many countries including the Middle East during the last few years is dramatically illustrated by some case histories. The Narayana Hrudayalaya in Bangalore operated successfully on children (who were literally beyond hope of recovery) from Pakistan and given a new lease of life. The Madras Medical Mission Hospital in Chennai has been performing heart operations on patients coming from Afghanistan and other countries. Frontier Lifeline, another cardiac medical center in Chennai is also doing much to help patients from several countries (Table 1).

Table 1: Patients from Foreign Countries Treated in Frontier Lifeline Hospital, Chennai During the Peirod February 2004 - June 2006

Sl.No.	Country	Feb'04 to March'06	April'06 to June'06	Total
1	Iraq	91	24	115
2	Kenya	48	7	55
3	Sri Lanka	50	1	51
4	Guyana	19	19	38
5	Fiji	27	4	31
6	Bahrain	25	6	31
7	Uganda	25	3	28
8	UAE	22	3	25
9	Bangladesh	19	4	23
10	Maldives	14	3	17
	Total	340	74	414

Source: Frontier Pulse, Vol. 3, No. 2, June 2006.

Table 2: Cost Comparison for Some Procedures (in US\$)			
Procedure	US	India	Thailand
Heart bypass	1,30,000	10,000	11,000
Knee Replacement	40,000	8,500	10,000
Hysterectomy	20,000	3,000	4,500
<i>Source: Medical Tourism Com. LLC, 2006.</i>			

Recently, the Apollo Hospital in Chennai did an operation that can be termed as a ‘revolution in surgery’. A 42-year-old Bangladeshi woman underwent a lumbar disc replacement surgery and could walk for the first time in five years. The Chairman of the Apollo Hospital, Dr Pratap C Reddy, points out: “People belonging to two categories of nations—Afro-Asian countries which did not have adequate facilities and nations devoid of human resources despite having infrastructure—need India’s assistance in healthcare”. The cost factor also counts a lot in this scenario (Table 2).

The essential interdependence and interconnectedness of all countries in the global village that is the world today implies a lot of teamwork for meeting the emerging challenges. According to the World Health Organization (WHO), there are five such challenges: 1. Poverty is deadlier than any disease; 2. Urbanization brings progress but also densely populated cities with inadequate water and sanitation, improper waste disposal, chemical contamination, and other physical hazards; 3. Globalization promises to increase the availability of services and products to improve health, but it can at the same time spread harmful things to both health and the environment; 4. Global environmental change leads to damage through climate change, ozone layer depletion, biodiversity reduction, and

ecosystem degradation; and 5. Disasters (natural or human-induced) offset years of development and cause poverty and renewed vulnerability.

It is obvious that each of the mentioned issues has an impact on healthcare, primarily in terms of access. Poverty, ethnicity, race, and social standing—all of them—determine the quality and degree of healthcare people receive all over the world. In this context, the area of nursing care in hospitals needs to be toned up. With 12 million nurses and midwives worldwide, nursing is healthcare’s largest constituency. And this means that nursing must be at the forefront of finding and developing global solutions to healthcare access, according to a section of the medical community. There is so much of substance in this view (Roy, 2003).

Telemedicine is the road to better quality healthcare, points out an expert. “Yet, millions do not benefit from this know-how because we do not adequately or routinely apply telecommunications and information technology to the practice of medicine”, he says. Telemedicine links allowed a neurosurgeon at Bethesda Naval Hospital to receive MRI (Magnetic Resonance Imaging) data and conduct a real-time examination of a combat pilot stationed aboard an aircraft carrier in the Persian Gulf. This pilot was having trouble controlling his plane when he reached

a certain level of acceleration. The neurosurgeon diagnosed a herniated disk in the cervical area of the pilot's spine and the pilot was brought back to the US for treatment. After operation, the pilot was back in action within months instead of being grounded indefinitely.

Hospitals in India are also now employing telemedicine links to transfer scanned images from one place to another for the opinion of expert surgeons. Narayana Hrudayalaya in Bangalore, among others, has been at the forefront of this type of work. When one considers all these developments, industry competitiveness in healthcare becomes more pronounced. Ultimately, hospitals as part of the healthcare industry would like to maximize their profitability and sometimes, the humane aspect of healing vis-a-vis the cost factor does not get the attention it requires.

Conclusion

Competition in healthcare marketing has become very pronounced in recent years and hospitals in several countries are adopting several strategies to attract patients. The high quality and low cost packages offered by medical centers in some developing countries prove to be a draw

for patients from even countries like the US, and UK. Innovations in technology such as online advertising and provision of telemedicine links have spurred these efforts all over the world. ❁

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