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RESEARCH ARTICLE

The Promotion of Cross-Border Medical Tourism in Developing Countries: Economic Growth at the Expense of Healthcare System Efficiency and Cost Containment?

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Abstract:

Background:

More and more developing nations are promoting cross-border medical tourism as a way to enhance economic growth. Major destinations for medical tourism in South and Southeast Asia include India, Thailand, Malaysia and wealthy Singapore. Much has been written on the pros and cons of the growth of medical tourism for both destination and source countries. This article uses a different approach.

Methodology:

Examples from India, Thailand and Malaysia are used to discuss the actual and potential impact of medical tourism on healthcare system efficiency and costs.

Results and Conclusions:

Based on the experience of these three countries, it is argued that the promotion of cross-border medical tourism to enhance economic growth is likely to be at the expense of national healthcare system efficiency as it goes directly against cost containment strategies and measures.

Keywords: Access to healthcare, Cost containment, Healthcare system efficiency, Medical tourism.

INTRODUCTION

Cross-border medical tourism, a subset of health tourism, can be defined as “medical care of short term foreign visitors whose primary purpose for the visit is to seek medical treatment” [1].

More and more developing nations have jumped on (or are jumping on) the cross-border medical tourism bandwagon. In South Asia and Southeast Asia, major destinations for medical tourism include India, Thailand, Malaysia and Singapore. Malaysia established a government-linked corporation called the Malaysia Healthcare Travel Council in 2009 – with the assistance of the Ministry of Health – to promote medical tourism [2]. The MHTC was based on the earlier National Committee for the Promotion of Medical and Health Tourism [3]. Chee notes that the growth of medical tourism in Malaysia and Singapore has been facilitated by active state intervention [4]. The growth of medical tourism in India has generated concern about its impact on access to medical care for local people [5]. The impact of medical tourism on the health sector in Thailand has been evaluated by NaRanong and NaRanong. One of

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these is the movement of health personnel between the Thai public sector and the private sector, and even within the private sector itself [6]. For all the excitement generated by the growth of medical tourism, this article argues that not enough attention has been paid to the following questions:

How would the enthusiastic promotion of medical tourism – as a strategy of enhancing economic growth – by developing nations impact healthcare system efficiency and affect overall national healthcare costs? How would it affect healthcare cost containment efforts?

In any discussion or analysis of the impact of medical tourism on national healthcare system efficiency, it should be pointed out that the citizenship status of patients *per se* actually does not matter. Attracting more foreign medical tourists to come into a particular developing country is *de facto* taking action to increase demand for medical services (likely to be higher end services) from relatively more affluent patients. In effect, it is like encouraging one’s own more affluent citizens to consume more medical services – if we put aside the tourist dollars that are being brought in and also being spent in other sectors of the local economy, for the sake of impact-on-health-sector analysis. It should also be noted that a specific country can serve both as a destination country for foreign medical tourists as well as a source country, *e.g.*, citizens seeking perceived higher quality medical care in neighboring countries (“quality-sensitive” medical tourism) [1]. An example would be Malaysians seeking sophisticated (and more expensive) medical services in nearby Singapore.

METHODOLOGY

One of the major questions for health policy-makers in developing nations would be “How would promotion of medical tourism impact cost containment strategies?” The second major question would be “How would higher demand for higher end medical services affect the various components of the national healthcare system?” (see for example, Pocock and Phua, 2011) [7]. In this article, I use the actual experience of three major destination countries for medical tourism in Asia (India, Thailand and Malaysia) to examine these questions and to support my arguments.

IMPACT OF PROMOTION OF MEDICAL TOURISM ON COST-CONTAINMENT STRATEGIES

The Table 1 below describes different methods of healthcare cost containment (both short term and long term).

Table 1. Healthcare cost containment methods (which may be affected by medical tourism growth).

Type of Cost Containment Method	Examples
Short Term Direct Control	Staff numbers – <i>e.g.</i> controlling the numbers of healthcare professionals Levels of remuneration Price controls – <i>e.g.</i> fee schedules negotiated between provider associations and third party payers
Short Term Indirect Control	Positive lists or negative lists (medical products) – to encourage more cost-effective use of pharmaceuticals, diagnostic tests, medical procedures Restrictions on sales promotion/advertising – to avoid increasing demand for services that are not medically necessary
Medium Term Direct Control	Construction and extension of facilities – <i>e.g.</i> limiting the number of hospitals and hospital beds Installation/purchase of expensive equipment – <i>e.g.</i> through Certificate of Need legislation
Medium Term Indirect Control	Prospective payment – <i>e.g.</i> Diagnostic-Related Groups (DRGs) to discourage unnecessary hospitalization or unnecessarily prolonged hospital stays Prepaid capitation – to avoid perverse incentives to maximize revenue through providing more services than medically necessary
Long Term Direct Control	Human resources planning – making entry into health professions more difficult to control overall numbers Specialist training – restricting the number of specialists
Long Term Indirect Control	Disease prevention and health promotion– keeping the focus on prevention Public education – educating the public to practice healthy lifestyles, and to seek care from GPs first
Cost-sharing by Patient	Co-insurance, deductibles, <i>etc.</i> – to increase cost-sharing by patients to discourage care-seeking that is not medically necessary, and to seek cheaper alternatives

*Adapted from Phua KL, Phua KH. Health Economics. Penang, Malaysia: Penerbit Universiti Sains Malaysia 2009.

It is apparent that the enthusiastic promotion of medical tourism will go against many of the healthcare cost containment methods listed above. Cost containment strategies include the following:

- Controlling the overall numbers of healthcare professionals (especially specialist doctors).
- Controlling levels of remuneration.
- Price controls, *e.g.* fee schedules negotiated between healthcare providers and third party payers.

- Lists of approved medical products such as pharmaceutical drugs, *e.g.* a National Formulary of essential and cost-effective drugs.
- Restrictions on advertising of medical services.
- Controlling construction and extension of facilities, including limiting the number of hospital beds.
- Controlling installation/purchase of expensive new medical technology.
- Encouraging prospective payment schemes (such as Diagnostic-Related Groups or DRGs) for hospital care.
- Encouraging prepaid capitation to remunerate individual healthcare professionals.
- Public education, *e.g.* educating the public to seek care appropriately (such as going to General Practitioners rather than specialist doctors for minor health problems).

Numbers and Remuneration of Providers

For cost containment to work, the overall numbers of providers and their levels of remuneration need to be taken into account. This is especially true of specialist doctors. However, simply due to the interaction of supply and demand, increasing demand for healthcare services as a result of an influx of foreign medical tourists will result (in the short run) in higher prices and higher levels of remuneration for healthcare providers (cost incurred depends on the P X Q equation where P refers to “price” and Q refers to “quantity” of service supplied). This is likely to be especially so for specialties and services that experience demand from foreign medical tourists, *e.g.*, cardiologists, orthopedic surgeons (who perform hip and knee replacements) and plastic/reconstructive surgeons (for cosmetic surgery to enhance personal appearance) [8]. The demand for surgical services from foreign medical tourists who enter Thailand – including the demand for plastic surgery and gender reassignment surgery (more commonly called “sex change operations”) – has resulted in an increased number of plastic surgeons and facilities [9]. It has also been noted that facilities offering services to foreign medical tourists tend to have very high nurse-to-patient ratios [10]. Although this may improve quality of care, it could also be an overuse of nursing resources, thus lowering technical efficiency and also adding to overall healthcare costs.

Price Controls

Increased demand as a result of incoming foreign medical tourists will put pressure on and affect the stability of fee schedules negotiated between provider associations and third party payers such as national health insurance bodies. There will be pressure from provider associations (such as the national medical association and the private hospital association) on the regulatory authorities to permit providers to charge higher prices for services supplied to foreign patients. But the ensuing two-tier system of fees may give rise to other problems such as preferential treatment and queue-jumping for the higher-paying foreigners [11]. A counter-argument proposed by some advocates of medical tourism is that a two-tier fee system need not be a problem since some of the earnings generated from foreign medical tourists can be used to cross-subsidize care provided to local patients. However, the evidence for this is lacking except possibly for Cuba [12, 13].

Lists of Approved Medical Products

Efforts to encourage more cost-effective use of pharmaceuticals, diagnostic tests, and medical procedures, *e.g.*, generic medications, avoidance of routine use of high tech imaging systems, and finding substitutes for more expensive medical procedures, will be affected. This is especially so in a fee-for-service environment where the use of high tech imaging systems even for minor health problems, and use of certain medical procedures can generate more revenue for providers such as doctors and hospitals [14]. The prescribing of more expensive proprietary drugs instead of cheaper, bioequivalent generic drugs in response to patient demands will not be maximizing technical efficiency.

Restrictions on Advertising

Restrictions on sales promotion and advertising, to avoid generating demand for services that are not medically necessary, are likely to be affected too. In fact, in Malaysia, restrictions on advertising by healthcare providers have been reduced in the push to promote medical tourism [15].

Any system of profiling providers – to identify those who are significantly above the norm in terms of the carrying out of particular medical procedures – may be negatively affected (once again, especially in a fee-for-service environment where the economic incentives encourage greater supply and thus higher financial gain for high volume providers).

Facilities and New Technology

Overall healthcare costs are affected by construction of new facilities (especially hospitals) and the adoption of new technology. Regulation of the construction and extension of healthcare facilities by public sector authorities (to limit the number of hospitals and number of hospital beds) will be made less effective because of political pressure from those who benefit economically from an influx of foreign medical tourists. If demand for healthcare services increases significantly because of the presence of foreign medical tourists, it will be difficult to resist pressure to grant permission to increase the number of hospital beds/hospitals in the private sector and the “upgrading” of existing facilities.

The push to promote medical tourism will have a major impact on the purchase and installation of expensive new medical technology, a major driver for healthcare cost inflation. Thus, in the case of Malaysia, in order to attain “world class” service levels, the private healthcare sector is allowed to import medical technology with little restriction. They can also enjoy tax deductions for doing so. Thus according to the Malaysian Industrial Development Authority [16].

Companies that establish new private healthcare facilities or existing private healthcare facilities undertaking expansion/modernisation/refurbishment for purposes of promoting healthcare travel are eligible to apply for an income tax exemption equivalent to Investment Tax Allowance (ITA) of 100% on the qualifying capital expenditure incurred within a period of five (5) years. The allowance can be used to offset against 100% of the statutory income for each year.... For the purpose of ITA, qualifying capital expenditure in relation to private healthcare facilities means capital expenditure incurred on buildings, plant and machinery, medical devices and other facilities used in Malaysia solely for the purpose of the qualifying project of assessment.

This contrasts with the Malaysian public sector where there are restrictions on the import of new medical technology through technology assessment. The availability of new medical technology also enhances the attractiveness of the private sector for healthcare professionals who are currently working in the public sector, thus contributing to the further outflow of personnel from the public sector to the private sector.

Provider Payment Schemes

Prospective payment using Diagnosis-Related Groups (DRGs) are unlikely to be applied to foreign medical tourists. There is evidence from the USA that prospective payment for healthcare services helps to contain costs to some extent (by reducing hospitalization and by discouraging prolonged hospitalization), although the experience of Europe is less clear [17]. However, in a fee-for-service environment, hospitals generate more revenue per patient if more patients are hospitalized and if patients remain longer within the hospitals as inpatients. Thus the incentive system favors prolonged stay (although this may not be medically necessary) rather than early discharge.

As mentioned earlier, fee-for-service as a method of provider payment gives rise to the incentive to supply a greater volume of services and also more expensive services in place of less expensive services. It increases the risk of supplier-induced demand [18]. Foreign medical tourists are more likely to be handled using the fee-for-service method. In general, medical tourism tends to focus more on clinical care than disease prevention and health promotion. There are exceptions of course, e.g. physical examination packages aimed at medical tourists. Nevertheless, even in the case of physical examination, hospitals prefer to market very extensive packages (e.g. the so-called “executive” or “premier” health screening packages in Malaysia) that include a broad range of diagnostic tests to foreign medical tourists. Some of these diagnostic tests may not be medically indicated for normal or low risk patients.

Rational Care-Seeking by Members of the Public

Another way to control healthcare costs is to promote more rational use of healthcare resources by members of the public. For example, the public can be educated to practice healthy lifestyles, and to seek care from GP clinics for minor health problems first (before seeking care from specialists at hospitals). However, medical tourism encourages an influx of patients who are encouraged to seek care at tertiary level institutions such as hospitals first. In the case of Thailand, they can even be whisked directly from the airport to a tertiary level healthcare institution which looks more like a resort than a traditional hospital [10].

IMPACT ON VARIOUS COMPONENTS OF THE NATIONAL HEALTHCARE SYSTEM

The various components of a national healthcare system include the following:

- Technology.

- Facilities.
- Human Resources.
- Financing and other economic costs.
- Governance and health policy.

Medical Tourism Promotes the Adoption of Advanced Technology

Technological advances are a major driver contributing to rising healthcare costs. Hence, France, Germany, Canada and England use technology assessment as a tool for cost containment [19]. However, the adoption of advanced technology in certain developing countries is being spurred by the growth of medical tourism. This is clearly shown in the case of hospitals such as Bangkok Hospital and Bumrungrad International Hospital in Thailand that generate a high percentage of their revenues from foreign medical tourists [14, 20]. Medical tourists expect a level of technology that meets the standards found in their respective countries. This also applies to “price-sensitive” medical tourists from more developed nations who travel to less developed nations for care [1]. Thus, hospital administrators have to respond accordingly. In fact, hospitals that wish to attract foreign medical tourists often proudly mention the availability of advanced technology within their premises in their promotional material.

Medical Tourism Promotes the Building of More Tertiary Level Facilities of Perceived Higher Quality

In many developed nations, there is a push to reduce the number of hospital beds in order to deal with rising healthcare costs. There is also a related push to favor outpatient care or shorter stays in hospitals. However, the growth of medical tourism pushes in the direction of the construction of more private hospitals, and increase in the number of beds. The construction of more tertiary level facilities of perceived higher quality (from the point of view of patients) is also favored. Hospital care has two basic components, i.e., clinical care and “hotel services”. Hotel services such as size and type of room, room amenities (e.g. availability of cable television), personalized meals (in the case of patients whose medical condition does not require them to stick to special diets), nail salons and resort-like physical surroundings do not contribute to quality of clinical care but only to patient comfort. However, they contribute to overall costs [21].

In some developing countries, hospital beds and services in government-linked facilities may also be made available to medical tourists, e.g., in Malaysia, those of the University of Malaya Specialist Centre and *the Institut Jantung Negara* (National Heart Institute). Would this reduce access to care for locals (especially less affluent ones) through queue-jumping?

Medical Tourism May Affect Patterns of Human Resources Availability (Numbers and Distribution)

In healthcare, both numbers (overall numbers of healthcare professionals) and distribution (with respect to specialty, geographical distribution and public-private placement) matter. According to Manuel Dayrit when he was serving as Director of the Human Resources for Health department of the World Health Organization (quoted in Chinai and Goswami, 2007) [22].

.... initial observations suggest that medical tourism dampens external migration but worsens internal migration It does not augur well for the health care of patients who depend largely on the public sector for their services as the end result does not contribute to the retention of well-qualified professionals in the public sector services.

Thus, the promotion of medical tourism may help to reduce the emigration of health personnel while, at the same time, increasing the outflow from the public sector to the private sector, or even from one part of the private sector to another part (the part that serves foreign medical tourists). The latter is evident in Thailand, a major country for medical tourism [6].

Since healthcare facilities that cater to medical tourists tend to be found in the larger cities, geographical maldistribution of healthcare professionals could be further exacerbated.

Distribution with respect to specialty could also be affected, e.g., more doctors specialize in plastic surgery as a result of demand from medical tourists.

Dual practice – allowing public sector doctors to also work (under certain conditions) in the private sector – has been introduced in some developing countries in order to tackle the problem of outflow of doctors from the public sector. However, this may result in absenteeism as doctors can earn more by treating fee-for-service patients in the

private sector as compared to treating patients in the public sector on salaried status [23].

One positive effect of medical tourism could be enhancement of the credentials of local health personnel. For example, local doctors may be spurred to earn foreign credentials (such as basic and advanced degrees or US board certification) so as to enhance their credibility in the eyes of foreign patients.

Medical Tourism Encourages the Fee-for-Service Method of Provider Payment and also Increases Certain Kinds of Economic Costs

How do medical tourists pay for services received in foreign countries? Chances are they would pay out-of-pocket as this is the most convenient method and also because most traditional indemnity insurance plans do not provide coverage for treatment overseas (except under certain conditions such as emergencies or for medical evacuations). Even if programs like Singapore's Medisave (a type of Medical Savings Account) allow price-sensitive Singapore citizens to be treated more cheaply in selected medical facilities in nearby Malaysia, the mode of payment is still fee-for-service, with all its perverse incentives [24].

Medical tourism is sometimes accompanied by foreign direct investment in the hospital sector. This will increase the number of hospitals and hospital beds, again contributing to higher overall healthcare costs. In Malaysia, the promotion of the "Iskandar Malaysia" economic development zone (directly across from the island nation of Singapore) has been accompanied by the appearance of more foreign-owned hospitals and medical facilities to cater to medical tourists.

The experience of India shows that as the private hospital sector grows with rising numbers of medical tourists, it will lobby for economic advantages such as cheap land, loans and tax breaks from the government – thus increasing these kinds of economic costs for the nation. Turner pointed out that hospitals in India enjoy reduced tariffs on imported medical equipment. They also indirectly enjoy public subsidies and other kinds of support in the form of government spending on infrastructure and special economic zoning laws [14].

As more and more developing countries jump on the medical tourism bandwagon, they are increasing competition and *de facto* going against the theory of comparative advantage. This theory posits that an individual nation should specialize in the production of a good (or service) in which it has a comparative advantage *vis-à-vis* another nation, and trade with the other nation for other goods, to the overall benefit of all. However, certain economists believe that if different nations (such as the USA *versus* India, and Germany *versus* Hungary) specialize on the medical procedures they have a comparative advantage in, medical tourism would still be a boon to individual nations [25].

Medical Tourism Affects Governance and May Distort Health Policy in a Less Economically Rational Direction

The growth of medical tourism will affect governance and health policy-making sooner or later. It can be in a positive direction, *e.g.*, hospitals getting pushed to acquire the American JCI (Joint Commission International) accreditation or, in the case of Malaysia, less expensive substitutes such as the MSQH (Malaysian Society for Quality in Health) accreditation.

But it can also be in a more capital-intensive direction such as the MHTC's indirect support for the adoption of advanced medical technology by Malaysian hospitals (through its selection program in order to qualify to serve foreigners).

When public hospitals start treating foreign patients and begin to view such patients as a way to increase revenue, they may pay more and more attention to foreign patients at the expense of domestic patients, *e.g.*, preferential treatment for foreigners in the form of queue-jumping.

The relaxation of advertising restrictions on providers is likely to accompany the growth of medical tourism [15]. This can be considered a negative effect on governance as it will increase demand for healthcare services that are not medically necessary, *e.g.* some types of cosmetic surgery.

Is it possible that the growth of the private sector may reduce the political pressure for universal health coverage on the part of the government [26]? This may occur if this growth is at the expense of the public sector (*e.g.*, outflow of experienced specialists from the public sector) such that the middle classes seek care in the private sector instead of the public sector first - because they no longer have confidence in the quality of healthcare services provided in the public sector.

Finally, the seeking of medical care in countries like India is not without risk for foreign medical tourists. For

example, improper prescribing and consumption of antibiotics in India has resulted in the appearance of various drug-resistant pathogenic bacteria [27]. Foreign medical tourists may be infected by these through the nosocomial route. When these tourists return to their home countries, the more complex treatment for their infections would add to total healthcare costs.

CONCLUSION

Chee [4] noted that the rapid growth of medical tourism in countries like Malaysia has been due in part to the active encouragement of the state (partly in response to the Asian economic crisis of the late 1990s which had a negative impact on the private hospitals). Similarly, the governments of more and more developing nations are actively promoting medical tourism. There is the expectation that this would enhance economic growth. Phua argued that sometimes governments do act in contradictory ways, *i.e.*, proclaiming that “rising healthcare costs” is an issue of concern while, at the same time, introducing public policies that may actually contribute to the problem [28]. Based on this analysis of how the promotion of medical tourism often goes against healthcare cost containment strategies, this appears to be another example of national authorities acting in a contradictory manner. Pachanee and Wibulpolprasert call this “policy incoherence” [29]. Policy-makers working in the area of health policy must also realize that the active promotion of medical tourism may have significant consequences on the various components of the national health system, *e.g.*, the movement of skilled and scarce human resources from the public sector to the private sector. Or even from one part of the private sector to a narrower part of the private sector as in Thailand [6]. It is not possible to compartmentalize the health sector into a part that serves locals and into another part that serves foreigners only. Affluent locals (patients) will gravitate to certain medical facilities if they perceive these to be of higher quality. Providers will also move to work in facilities where they can earn higher incomes, enjoy better working conditions and have access to more advanced technology. In other words, policy-makers may not be able to “have their cake and eat it too” when it comes to medical tourism as a source of economic growth in relation to cost containment/enhancing efficiency of the national healthcare system [30].

CONFLICT OF INTEREST

The author confirms that this article content has no conflict of interest.

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