

Trade in health services and health systems: does regulation hinder or help? Some evidence from developing countries¹

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Executive Summary

The provision of health services is among the most regulated services sectors in developing (as well as developed) countries. Although regulatory frameworks and their enforcement do vary across countries, regulation generally poses serious barriers to trade in health services. Little is known on the effects of increased trade in health services on domestic health systems. This report addresses these issues through case studies in India and South Africa, both of whom are significant players in trade in health services. These countries are amongst the most important exporters and importers of health services. They also face big challenges in providing adequate health services to their entire domestic population. The two case studies are complementary. The Indian case study focuses on trade in health services via commercial presence and exports of health services via temporary movement of persons. The South African case study is concerned mainly with imports of health services via temporary migration.

Indian case study

India is one of the most active developing countries in trade in health services. This is particularly true for trade via commercial presence and via temporary movement of health professionals. Trade via these modes has grown rapidly in recent times, with increased private participation of the hospital sector (particularly for tertiary care) and a rise in the emigration of health professionals, particularly nurses. It is not clear to what extent this growth has been driven by regulatory changes, nor what are the implications of this growth for domestic health systems.

We examine these issues by collecting primary data as well as by analysing secondary data. While regulation can restrict trade in services in all modes, we argue that regulation

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has played only a marginal role in fostering trade via commercial presence in the Indian health services sector. This is true for both foreign as well as domestic private sector presence, whose growth has been driven by other factors, most importantly rising incomes, increased capital availability, and unmet demand for quality health services by the public sector. Trade via movement of health professionals in India does seem to be affected by current regulatory frameworks (in particular with respect to recognition of qualifications) in foreign countries. Factors which have helped to overcome regulatory barriers in third countries include the establishment of specialised agencies (for nurses) and previous migration flows which may ease the recognition of qualifications process.

Our analysis suggests that the overall impact of increased trade via commercial presence on domestic health systems is likely to be small but probably positive. This is due to a combination of a beneficial impact and limited costs in terms of internal brain drain (from public to private sector) of health professionals. Table E.1 summarises the main types of potential benefits and costs on the health system from an increased commercialization in the provision of health services in India. The Table includes the expected size of the benefits and costs for the country as a whole as well as for the poor in particular.

Table E.1 Potential benefits and costs of increased trade in health services via commercial presence in India

Potential Benefits			Potential Costs		
Type	for all	for poor	Type	for all	for poor
Reduce the patients' burden of public sector structures	Medium	Small	Reduce the quality of and accessibility to health services for the poor	Small	Small
Expand the range and quality of health services	Large	Small	Internal brain drain (poaching of private from public sector)	Small	Small
Help retaining health professionals	Medium	Small	Reduce support for quality public health services	Small	Small
Positive spillovers to public sector (e.g. via exchanges of ideas, knowledge, imitation effects)	Unclear	Unclear	Reduce general public budget (through public subsidies to corporate sector)	Medium	Medium
Use of private sector to reach public sector objectives (e.g. PPP)	Large	Medium	Deteriorating quality of training due to private sector-led expansion	Medium	Medium
Upgrade and expand the health services infrastructures in India	Large	Small			
Expand health training facilities	Medium	Small			
Facilitate expansion of health insurance	Large	Medium			

Source: based on the analysis in the text

Using growth in nurses' emigration as a case study, we also argue that increased migration opportunities for nurses have helped to raise the attractiveness of the nursing profession, which has in turn resulted in rapid growth in demand for nursing education (and a related supply response).

Restricting trade in health services to limit the possible negative impacts would therefore be the wrong response in the case of India. Restricting trade in health services will not address the structural problems of the Indian public health sector, and may actually prevent the possibility of using the increase in trade in health services to tackle some of these structural problems. We identify five groups of **complementary public policies** aimed at using the corporate sector to achieve this objective:

- 1) Facilitating an orderly expansion of the health skill base;
- 2) Increasing the role of the State as financier rather than direct provider of health services;
- 3) Strengthening public-private partnerships;
- 4) Strengthening the health insurance market;
- 5) Scaling up the overall public oversight system.

South African case study

South Africa has been experiencing a steady flow of medical professionals from the public sector to practise in the private sector and out of the country to more lucrative markets abroad. This has generated a situation whereby the vast majority of doctors in South Africa work in the private sector, while the public sector experiences shortages. Historically, this outflow was countered and sometimes exceeded by a parallel in-flow of foreign doctors, largely from the rest of Africa, but also from developed countries further abroad. In 1999, 20% (approximately 6 000) of doctors on the South African Medical Register were foreigners. Since 1994, a large proportion of doctors that migrated to South Africa came from Africa, most of whom went to the public sector.

The inflow of African doctors to South Africa raised concerns about a regional brain drain and prompted the South African Health Professional Council to issue a moratorium on the registration of all foreign doctors in 1996. This moratorium has since been lifted, but the South African Government has undertaken not to recruit doctors from other developing countries, except under government-to-government agreements. The public sector is potentially most vulnerable to such restrictions. We estimate that close to 50% of all public sector doctors are foreign today. Government-to-government agreements are not sufficient to address the 40% vacancy rate (approximately 6 000 vacant posts) in the public sector and the country produces only 1 400 new doctors annually, most of whom end up in private practice or overseas.

The Department of Health's response to tackle the lack of human resources in the public sector and in rural areas has been to coercively directing foreign health professionals to those areas, *de facto* prohibiting foreign health professionals to work in the private sector. This is in contrast to the new Immigration Act, which strives to make it easier for skilled

foreigners to enter the country. Not only do these regulations go well beyond the country's normal immigration laws and requirements in determining the conditions for practising in (and not just entering) South Africa, they are also discriminatory. Foreign doctors are required to work for five years in the public sector before they can practise independently, South African doctors are not. These policies appear to contravene South African GATS commitments. More importantly, they may restrict the entry of qualified foreign health professionals into the country, regardless of their speciality, experience or their reason for entering the country.

These policies represent important restrictions to import of health services via mode 4, which we argue far from solving the problems of South African health systems, are may well aggravate them.

On the one hand restricting import from other developing countries is likely to exacerbate South African public sector's scarcity of resources without improving the skills base in source countries. This is for two reasons. First, South Africa is not the only option available to medical emigrants from the sub-continent. If South Africa slams the door on doctors from Zimbabwe, for example, there is no reason to believe that they will not find their way to the UK, which according to a recent survey is the favoured emigration destination for Zimbabwean doctors. Second, there is growing empirical evidence that the emigration rate of health professionals does not necessarily cause lack of health professionals in source countries.

On the other hand responding to South African health sector problems with regulations that seek to trap resources in the South African public sector may help to address short-term gaps in the public sector, but it will not address the underlying problems. Requiring all foreign doctors to work in the public sector creates the false impression that conditions are better than they otherwise might be and leaves the Department extremely vulnerable to the changing whims of migrant doctors. At the moment, for example, the South African public health system is 'benefiting' from the civil war in the DRC.

South Africa needs to address the root causes of public sector understaffing, which have not to do with migration of health professionals. The analysis suggests at least two ways for doing so:

- *Investing substantially to address the push factors* of the public health sector. This should help redress the staff balance between public and private sectors.
- *Promoting the development of a more competitive private sector* including by encouraging qualified foreign doctors that prefer to work in private practise to enter the country and do so.
- Looking at ways to *increase competition amongst private practitioners*.

Moreover, as we suggest in the case of India, the private sector may be instrumental to assist with public sector delivery in South Africa: historically, the public sector contracted-in individual private doctors on a fee-for-service basis to provide care to the

poor in under-serviced areas; and there is strong evidence of private sector activity in even the poorest parts of the country.

South Africa has also chosen to prohibit immigration from developing countries; this despite the fact that the public sector is already highly dependent on doctors from other African countries and most migrant doctors still come from the continent. There are no simple solutions to this quandary but South Africa's response does little to address the underlying causes of the medical brain drain from other African countries. The analysis above yields a few **policy implications** to find a way out of this dilemma, i.e. allowing South Africa to use immigration of health professionals to improve the provision of health services at home, while not enhancing the drain of health professionals in other African countries:

- 1) South Africa could negotiate a framework agreement within the region and *compensate or assist* those countries from which it receives medical migrants.
- 2) At the same time the country should *open itself up to doctors from the rest of the world*, regardless of development status.
- 3) The South African Government should implement a pro-active and recurrent recruitment drive to *attract foreign doctors from developed countries*.
- 4) *Direct recruitment from developing countries* could also be considered but should ideally be guided by specifications of the conditions under which recruitment and eventual compensation can and will take place.

Conclusions

The case studies indicate that restrictions to trade can limit trade in health services (e.g. South African restrictions to import health professionals from developing countries). On the other hand a liberal environment does not necessarily lead to increased trade if the underlying conditions for effective trade are not in place. This is evident in the case of the Indian health sector which has managed to attract little FDI despite a very liberal regulatory environment.

The case studies strongly suggest there are only small costs and benefits of trade in health services on domestic health systems. The net effects may be positive. Restricting trade in health services will certainly not tackle any of the structural problems of domestic public health sectors. Conversely, allowing such trade might help to tackle some of these structural problems. The impact of trade in health services on health system is likely to be country-specific; moreover, not all developing countries may be equally equipped to take advantage of the potential benefits of trade in health services liberalization and face the possible challenges. However, the principle that a more open regime of trade in health services may be an opportunity rather than a threat for domestic health systems is likely to apply more generally and is reinforced by the evidence presented here.

1. Background of the research

The provision of health services is among the most regulated services sectors in developing (as well as developed) countries. Although there is a wide cross-country variation in regulatory frameworks and in their enforcement, regulation may pose serious barriers to trade in health services. As the opportunity to trade health services internationally has increased over time (and developing countries are increasingly important players in the market), there is a presumption that reducing these barriers would lead to a substantial rise in trade. This would be particularly true for those modes of trade which are subject to the most stringent barriers, i.e. trade via commercial presence (mode 3) and via temporary movement of natural persons (mode 4) (Adlung and Carzaniga, 2001).

For policy-makers interested in the health of their citizens, the important question to ask is what impact this eventual rise in trade would have on health systems. This question is particularly relevant for developing countries, whose health systems are often not able to adequately serve the domestic population. A fairly extensive literature (some of which is summarised in chapter 8) addresses this question, by discussing the possible costs and opportunities of liberalization of trade in health services on health systems. These costs and opportunities often underlie delicate trade-offs between equity and efficiency, between growth and access to health, between private and public sector development. For example, while liberalisation of health services may yield the standard benefits of trade liberalization in terms of efficiency gains and increased investments, it can also worsen or create inequities in the distribution and quality of such services (Chanda, 2002). These trade-offs may represent crucial challenges for policy-makers in developing countries concerned with the level of access to and efficiency of the domestic health sector.

Unfortunately the existing literature does not provide robust empirical evidence on the existence and the size of these trade-offs. Our current knowledge is at best limited to some simple correlations between the increase in trade in health services and some measures of access to or efficiency of health systems. Moreover, to the best of our knowledge the existing literature tends to assume that a country's liberalisation of trade in health services would automatically lead to greater trade for that country. This paper aims to tackle both issues by providing some new empirical evidence from developing countries on two inter-related questions:

- 1) does more liberal trade-related regulation increase trade in health services (and vice-versa)?
- 2) What is the evidence on the benefits and costs of increased (or decreased) trade in health services on developing countries' health systems?

The first question has been neglected by previous studies, which have tended to concentrate mainly on the second question. The latter is the most controversial and possibly most relevant question, and thus we also devote more space to it. If for any of

the two questions the answer is “not much”, then the net effect of trade in health services liberalisation is likely to be negligible.

We focus on mode 3 and mode 4 trade (and to a lesser extent to mode 2, i.e. medical tourism), as these are the two most important forms of trade in health services and those where barriers are highest. We address the two questions through two case studies, which involve two of the most significant developing countries’ players in trade in health services: India and South Africa. These countries are amongst the most important exporters and importers of health services; they also face significant challenges in providing adequate health services to their entire domestic population. The first case study looks at Indian health systems and exploits their large variability across states within India (health policy is mainly managed at the state level) to explore the effects of trade in health services on domestic health systems. The other case study, carried out by Matthew Stern, focuses on the increasingly important South-South trade in health services via movement of people. In particular it analyses the effects of the restrictions on imports of health professionals by South Africa on the domestic health system.

We try wherever possible to interpret the available evidence in a dynamic rather than in a static way. For example, suppose that an increased presence of foreign hospitals was associated with large numbers of health professionals moving from the public to the private sector, would restricting foreign investments be a good response? In order to answer this question it would be necessary to understand what would happen to the internal brain drain were foreign investments restricted. If the internal brain drain turned into an international one in response to the lack of opportunities at home, then constraining foreign investments may not be the right response.

2. Trade in health services and health systems in India

2.1. Introduction

Six years ago in an extensive review of India's health systems, the World Bank considered them to be at a crossroads (Peters et al., 2002). The "unfinished agenda" of the country's severe health problems required the development of robust health systems, especially for the poor segments of the population, historically unable to access effective health services. Today the Indian health sector continues to be at a crossroads. Notwithstanding substantial achievements, e.g. longevity doubling from 32 years in 1947 to 66 years in 2004, infant mortality rate (IMR) falling by over 70% between 1947-1990; smallpox and guineaworm completely eradicated and leprosy and polio almost eliminated (MHFW, 2005), a large proportion of the population still dies from preventable infections, pregnancy and child-related complications. Although India accounts for 16.5% of the global population, it contributes to a fifth of the world's share of diseases: a third of the diarrhoeal diseases, TB, respiratory and other infections and parasitic infestations, and perinatal conditions; a quarter of maternal conditions, a fifth of nutritional deficiencies, diabetes, and the second largest number of HIV/AIDS cases after South Africa (MHFW, 2005).

In such a scenario the demand for health services is immense, a large majority of which is unmet by public health systems, which are often understaffed, mal-distributed and ineffective. With rising incomes, greater availability of technology and a quickly expanding health professionals' base, this could represent a very appealing market for the private health sector, both foreign and domestic. Moreover, the high and expanding reputation of Indian health professionals abroad and the ever rising shortages of health professionals in developed countries had led to a fairly large migration of Indian doctors and nurses abroad. The implications of this growth in trade in health services on Indian health systems are yet to be understood. We assess the extent to which regulation is responsible (or not) for such apparent increased trade in health services, and we explore the implications of this increased trade on health systems. Finally, we consider whether and how regulation could use increased trade in health services to the benefit of the health systems. We consider only trade via commercial presence (defined regardless of its domestic or foreign origin) and via temporary movement of health professionals. The discussion on the former inevitably takes into account some trading via consumption abroad (e.g. medical tourism) as well, but we do not explicitly analyse it. This focus is able to capture the vast majority of Indian trade in health services.³

We employ a mix of primary data collection through qualitative interviews and analyses of a variety of secondary data at the states as well as at the country level. We have consulted a number of sectoral practitioners (in Ministries as well as in health related organizations) and health experts using ad hoc questionnaires with a mix of open and closed ended questions. The list of people interviewed is reported in the Appendix. A

³ Telemedicine is the major form of trade which is excluded here. Although there are signs that this form of export is expanding, this is still a minor component of Indian trade in health services and one which has not been mentioned in the consultations as having any significant impact on domestic health systems.

note of caution is in order. Adequate data to systematically test our hypotheses are hardly available; however we believe that the combination of qualitative evidence (sometimes based on a collection of several anecdotes) and secondary data analyses may shed some important light on most of the hypotheses we consider. This allows us to be fairly confident about the conclusions we draw.

2.2 The Indian healthcare industry

Indian healthcare spending represented between 4.8% and 5.2% of GDP in 2004 depending on whether one considers GDP at market prices (4.8%) or at factor costs (5.2%). This places India in the lowest third of countries for share of health spending relative to GDP and well below the average value of health spending (6% of GDP).⁴ This figure is relatively low even by developing countries' standards. The average value for countries with GDP per capita below US\$3000 per capita in 2003 was 5.5% of GDP, with India located in the bottom 40% of countries. Such a relatively low level of spending is mainly determined by low public health spending, which stood around 1% of GDP in the first years of 2000. This puts India in the bottom 5% of countries (against an average of 3.5%).

The majority of the health spending is by private households, which accounts for almost 70% of the total, while the government is responsible for less than one fourth (24%) (Figure 2.1). Private sector spending is dominated by out of pocket expenditures (OoP) at the point of service delivery, representing over 97% of total household expenditure. This indicates that insurance markets are not developed and that there is a vast use of non government facilities (as most of the services in public structures are provided free of cost). As State governments hold most of the public sector's responsibility on health matters, public health service delivery is mainly delivered through the states. Thus their spending represents the bulk of public health spending.

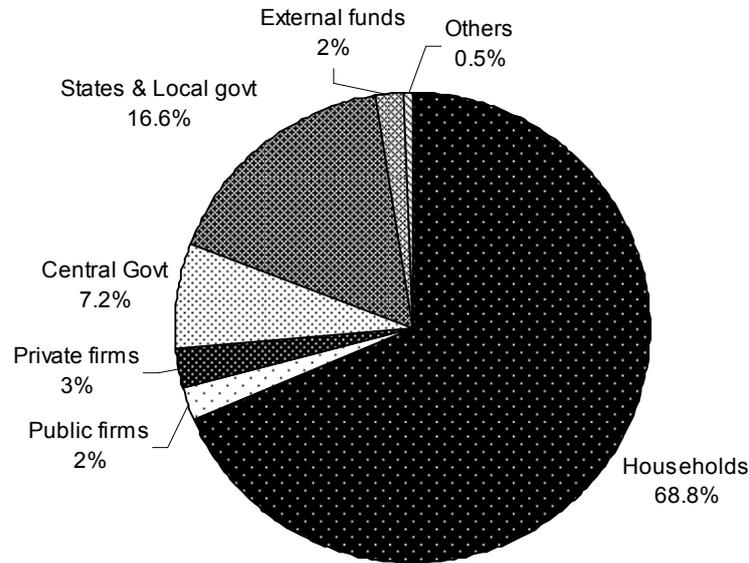
Despite the relatively low spending, India's healthcare industry is huge by international standards due to the sheer numbers of its population. The healthcare delivery market is estimated at US\$ 18.7 billion and employs over four million people, making it one of the largest service sectors in the economy today (Chanda, 2007).⁵ Although exact data on private sector's presence is hardly available, the evidence indicates that the bulk of health provision is private and its share is growing rapidly. At the time of Independence for instance, only 8% of total medical institutions in the provinces were privately operated. At the end of the nineties estimates indicated that 93% of all hospitals were private and 64% of beds nationwide (Peters et al, 2002).⁶

⁴ Source: Author's calculation based on WHO online data.

⁵ According to India Brand Equity Foundation (IBEF), the health sector is expected to grow further with the total national healthcare spending to rise to 5.5% of GDP, or US \$60.9 billion by 2009 (Chanda, 2007).

⁶ There is a danger of significant measurement errors in the data. For instance, according to Chanda (2003) that more than 60% of hospitals and more than 35% of hospital beds are private. The point remains that the private sector plays a fundamental role in health service provision in India.

Figure 2.1: Share in total healthcare spending in India, 2001-02



Source: National Health Account 2003

The distribution of hospitals (as well as health resources) is skewed towards urban areas. Somewhat surprisingly this urban bias is more accentuated for the public sector: over 80% of its hospitals are urban (vis-à-vis 70% of private hospitals).⁷ The rural-urban divide (determined by dysfunctioning or absent health systems in rural areas) represents one of the most acute challenges of the Indian health system. A recent facility survey in eight districts found that 88% of the towns have a facility compared to only 24% in rural areas, with two-thirds of human resources concentrated in urban areas (MHFW, 2005). It is estimated that around a quarter of people (essentially from rural areas) in the states of Madhya Pradesh and Orissa could not access medical care due to location reasons (MHFW, 2005).

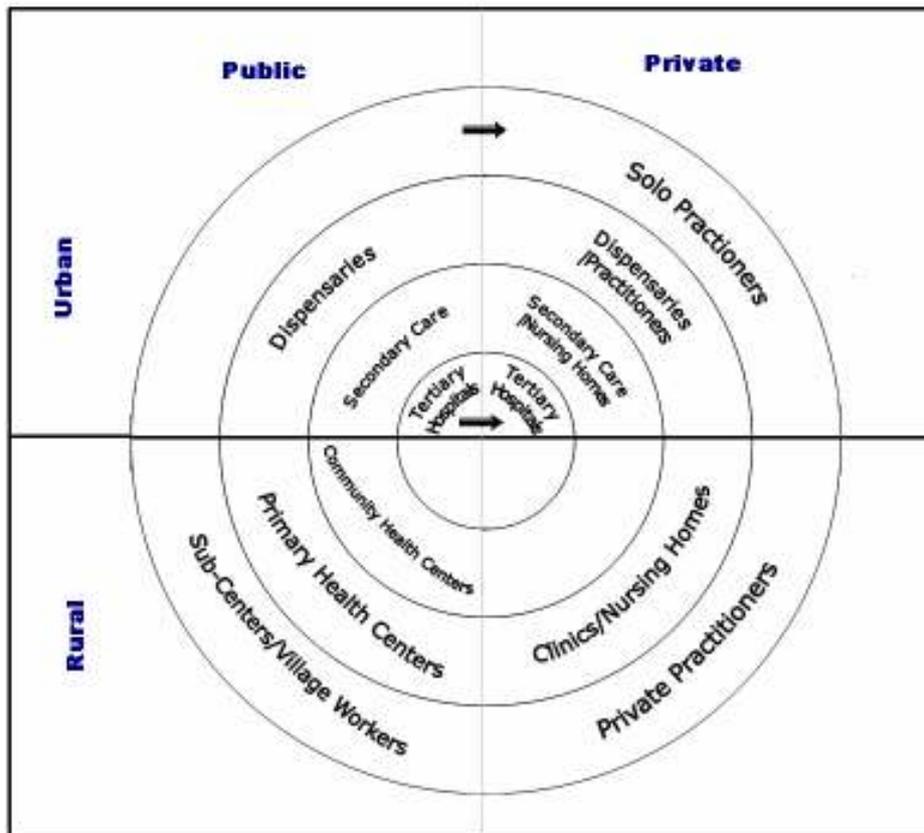
Estimates suggest that between 80% and 90% of all allopathic doctors (around 450,000) operate in the private sector (Duggal, 2000; Chanda, 2003). Moreover, many public sector doctors work also in the private sector. These shares are similar for the Indian systems of medicine.⁸ A large number of Indian health providers operate in the informal sector as well. Conservative estimates put the number of nonqualified rural medical practitioners at 1.25 million (Peters et al., 2002) - while the majority of qualified solo practitioners practice in urban areas. Untrained practitioners, faith healers, traditional birth attendants, priests, and local medicine women and men largely cater to the rural areas. Therefore private healthcare delivery is highly fragmented with over 90 percent of private healthcare being serviced by the unorganised sector (Technopak, 2007).

⁷ Source: National Council of Applied Economic Research, 2000.

⁸ The Indian systems of medicine include Ayurveda, Unani, Siddha, Homoeopathy, Yoga, Naturopathy and Amchi. However we limit the analysis to the allopathic system, which as allopathic treatment is the dominant type of care provided and as this system involves the bulk of trade in health services.

The private sector operates at all levels of the Indian healthcare system, i.e. primary, secondary and tertiary health care. Figure 2.2 shows the repartition of the public and private health sectors between rural and urban location and across levels of care. We note that the private sector operates in both rural and urban areas, usually filling the gaps of an absent or ineffective public sector. From the evidence we gathered, the movements of personnel occur especially within urban areas, usually from public to private practice. This involves particularly tertiary care and solo practitioners (see below for a more detailed treatment of these flows).

Figure 2.2 The organization of Indian health systems



Source: Author's elaboration

There are two types of private sectors in India that can be identified through Figure 2.2. One is the corporate sector, which mainly operates through large tertiary hospitals, mainly in urban areas. The other is the fragmented universe of small and micro health enterprises (including the vast numbers of solo practitioners), which operate in both urban and rural areas and represent the large majority of the private sector in India. We are mainly concerned with the first type of private sector, since it is the type whose effects are analogous to that of foreign investments. In India, and in developing countries in general, foreign investments in health services are likely to focus on tertiary hospitals

(and to a lesser extent secondary hospitals).⁹ Other types of health services, such as ambulatory care, primary health care and secondary health care outside the main urban areas, would require widespread localised knowledge of the markets and high transaction costs for foreign investors (but this is true for large domestic investors as well). In large developing countries with a wealthy section of the population, like India, the tertiary health care sector has potentially high returns due to economies of scale and a relatively low demand elasticity with respect to price. Moreover, large foreign groups could have a competitive edge in securing capital and utilize sector-specific know how. Thus throughout the analysis we consider foreign and domestic corporate presence interchangeable.

2.3 The impact of trade-related regulation on trade in health services

Commercial presence

India has a very liberal regulatory framework towards foreign investment in the hospital sector. FDI is currently permitted up to 100 percent under the automatic route, which means that no prior government approval is required.¹⁰ This liberal regulatory environment is in line with other findings: in a survey of several large private hospitals in India (both foreign and domestic), Chanda (2007) reports that respondents did not cite any major regulatory hurdles with regard to the setting up of hospitals. This indicates that neither de jure nor de facto regulatory barriers to trade via commercial presence are operating in India. Notwithstanding this, foreign presence in the Indian hospital sector is very limited. Although a (small) number of large hospitals have foreign participation, Chanda (2007) finds that there are only three proper FDI in India.¹¹

This new legislation entered into force in 2000, when FDI in hospitals was permitted only under the Foreign Investment Promotion Board (FIPB) route, thus requiring prior approval of the FIPB. This change in regulation has further lowered the barriers to foreign investments in the hospital sector, but it has not generated any significant influx of FDI in the sector. Even foreign participation through joint ventures is quite limited. According to the Department of Industrial Policy and Promotion there have been 90 projects between 2000 and 2006 approved in India for a total FDI amount of \$53 million. However, the majority of them are diagnostic centres with only 21 projects in the hospital segment (Chanda, 2007).

⁹ We follow the GATS definition of health services here therefore do not consider health insurance services (where foreign presence is important) as part of the health sector. However, we do cover health insurance services below as complementary services to health.

¹⁰ This is the case as long as the Indian subsidiary of the foreign company files with the regional office of the Reserve Bank of India within 30 days of receipt of inward remittances and file the required documents along with form FC-GPR with that Office within 30 days of issue of shares to the non-resident investors (Reserve Bank of India, 2007).

¹¹ The Department of Industrial Policy and Promotion (DIPP) considers a larger number of hospitals as FDI. According to experts' opinions gathered by Chanda (2007), most of them are FDI approved on paper, but may not have brought in capital through the FDI route but rather through other sources of foreign financing available under existing regulations, following approval of their projects

This evidence points towards the marginal role played by regulation in fostering trade via commercial presence in the Indian health services sector. A liberal regulation is associated to limited foreign investment, and pro-FDI regulatory changes have not been associated to a significant influx of FDI. Therefore the factors constraining foreign investments in the sector need to be of non regulatory nature. Chanda (2007) argues that these factors are often sector-specific: low returns, high capital intensity, and long-term commitments are not the most attractive combination for foreign investors. In a country like India, where high growth sectors such as IT, finance, and retail guarantee higher profit rates, the hospital sector may not be an attractive option for foreign capital.

However, the same factors do not seem to constrain domestic corporate investments to the same extent. These investments are substantial and increasing quite rapidly. According to our consultations there are over 50 medium-large private hospital groups in India, all of which have started their operations in the last 20 years.¹² They supply hospital services to the majority of the Indian (mainly) urban upper class and to an increasing share of the (mainly) urban middle-class. The growth of the corporate sector is related to that of domestic incomes and the increase of non-communicable diseases, which raises the demand for corporate hospital services.¹³ Understanding the reasons why constraints operate for foreign but not for domestic investments is beyond the scope of this work, but one suggestive explanation emerging during the interviews was that there may be a reputation capital attached to investing in the hospital sector in India. This may enhance the status of the investor within India and enhance the returns on other investments. As this is very context-specific, foreign investors may not perceive it to same extent as Indian ones. For the purpose of this study, it will suffice to say that the barriers that constrain foreign investments relatively more than domestic ones are not regulatory.

As the effects of the corporate presence in the hospital sector on domestic health systems are analytically analogous to those of foreign presence, it is worth asking what factors drive this presence in India. One way of tackling this question is to look at the cross-state variation in private sector presence. Although the regulatory framework does not vary across states, the presence of the private sector in the hospital sector varies markedly across states. This is true using both the number of for profit establishments in the health sector per 10,000 population and the number of private hospitals and nursing homes per 10,000 population (Table 2.1). The former indicator varies between a minimum of 0.63 (Orissa) and a maximum of 6.09 (Delhi); the latter ranges between 0.03 (Bihar) and 2.02 (Haryana). Such a high variability along with homogeneous regulation across states suggests that again other factors than regulation drive private investment decisions by the private sector.

¹² The first Indian private group to establish a hospital in the country was Apollo, which set up a hospital in Hyderabad in 1988.

¹³ Not only these diseases increase the need for healthcare, but they also tend to affect the wealthiest segments of the population, which is the demander of the corporate hospital services.

Table 2.1 Private sector presence in the health sector across states (2001 circa)

	For-profit est. per 10,000 population	Private hosp. and nursing homes per 10,000 pop
Andhra Pradesh	1.51	0.13
Assam	1.20	0.04
Bihar	2.41	0.03
Chhattisgarh	2.13	0.53
Delhi	6.09	0.39
Goa	3.58	NA
Gujarat	2.65	0.74
Haryana	0.86	2.02
Himachal Pradesh	3.38	NA
Jammu & Kashmir	1.06	NA
Jharkhand	0.97	NA
Karnataka	3.17	0.34
Kerala	2.84	0.48
Madhya Pradesh	1.35	0.13
Maharashtra	3.80	0.47
Orissa	0.63	0.08
Punjab	3.20	0.39
Rajasthan	0.85	0.09
Tamil Nadu	2.12	0.19
Uttar Pradesh	2.09	0.07
Uttaranchal	1.82	NA
West Bengal	1.63	0.15
India	2.16	0.21

Source: Report of Controller and Auditor General of India, Union Government (Direct Taxes) and Ministry of Health & Family welfare, Govt. of India.

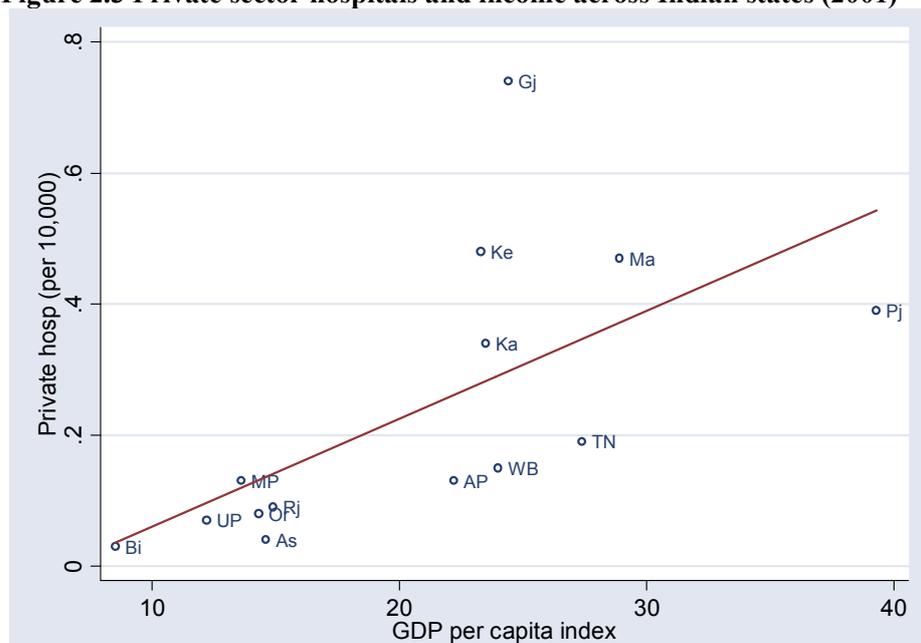
The variability in private sector presence across states is not surprising as the private sector is profit seeking and thus tends to follow effective demand for health services, which varies vastly across states. Figure 2.3 shows the simple relation between the density of private sector hospitals and nursing homes and a measure of real GDP per capita. The former is a proxy for the presence of corporate hospitals in the state, while the latter tries to capture effective demand for private health services (assumed as a function of disposable income).¹⁴ The clear positive relation between the two variables suggests that demand side factors are likely to be an important determinant of private sector involvement (just as in other sectors). This is in line with the disproportionate presence of private sector hospitals in metro areas and other large cities (where market potential is higher) across the country, where virtually all private tertiary hospitals in the country are located. Per capita income may be capturing other supply side states' characteristics as well, such as governance, infrastructure and manpower. Our

¹⁴ We exclude Haryana from the analysis as it is an outlier (exceptionally high value of private hospitals and nursing homes vis-à-vis relatively high income). The inclusion of Haryana does not change the picture significantly anyway.

consultations suggest that this is indeed the case: private hospitals tend to locate where inputs are more easily available.

The analysis so far indicates that the location of the corporate hospital sector is influenced by other factors than formal (*de jure*) regulation. But is informal (*de facto*) regulation acting as a barrier to private sector presence? Unlike *de jure* regulation, *de facto* regulation could vary across states. There is plenty of anecdotal evidence (also collected during our fieldwork) indicating that the enforcement of the administrative rules required by states to open a private practice differs hugely across states. For example the usual procedures to open a private nursing home in states such as Bihar and Uttar Pradesh appear to be less burdensome than in states such as Maharashtra and Kerala. This is true also for other sub-sector of health, such as nursing education. In an attempt to facilitate the creation of much needed nursing colleges in certain states which lack qualified nurses, such as UP, the Indian Nursing Council (INC) has somewhat relaxed the requirements for opening a nursing college. This has not spurred the creation of any new nursing college in UP as the main bottlenecks lie with other factors, such as the unavailability of qualified nursing teachers in the state.

Figure 2.3 Private sector hospitals and income across Indian states (2001)



Source : Author's calculation based on Report of Controller and Auditor General of India, Union Government (Direct Taxes), No. 12A of 2002 and Reserve Bank of India

The available evidence suggests that neither formal nor *de facto* regulation seem to act as a barrier to trade in health services via commercial presence in India. Obviously, a restrictive regulatory framework could significantly constrain foreign investments in the sector, but this is not the case for most of the health sector in India. The only partial exception somewhat related to health services is insurance services, which include health insurance as well. Foreign participation into any insurance company is limited to 26% by current regulation – although there are plans to raise this cap. This puts an effective

barrier to the extent to which health insurance services can be imported in India via FDI.¹⁵

Temporary movement of health professionals

India has been one of the most active sending countries of health professionals abroad. Indian physicians have been migrating to English speaking countries (mainly the UK and the US) for several decades to respond to health workforce shortages in destination countries. India is the largest source country for physicians in the largest physicians' importing countries. Over 10% of total UK physicians' workforce and 5% of US workforce is Indian (Table 2.2). Indian medical professionals occupy the highest positions in world renowned clinics like the Mayo Clinic and a number of other prestigious institutions in the US (Kumar and Simi, 2007).

Table 2.2 The share of India in the International Medical Graduates in the Physician Workforces of the 4 major recipient countries¹⁶

United States		United Kingdom	
Source Country	No. of IMGs (% of workforce)	Source Country	No. of IMGs (% of workforce)
India (Rank 1)	40,838 (4.9)	India (Rank 1)	15,093 (10.9)
Philippines	17,873 (2.1)	Ireland	2,845 (2.1)
Pakistan	9,667 (1.2)	Pakistan	2,693 (1.9)
Canada		Australia	
Source Country	No. of IMGs (% of workforce)	Source Country	No. of IMGs (% of workforce)
United Kingdom	2,735 (4.0)	United Kingdom	4,664 (8.6)
South Africa	1,754 (2.6)	India (Rank 2)	2,143 (4.0)
India (Rank 3)	1,449 (2.1)	New Zealand	1,742 (3.2)

Source: Mullan (2005)

Physicians' migration from India towards developed countries is not a new phenomenon, although in recent years such migration has been rapidly increasing (except to the UK in the last two years, as we describe below). For instance, the stock of Indian physicians in the UK has almost doubled between 1999 and 2004, representing an increasing share of the total physicians' workforce in the country (Figure 2.4). The increase has mainly been driven by growing demand for physicians in the UK, while there have been no regulatory changes during that period. However, a sudden change in UK immigration rules introduced in 2006 makes it mandatory for a non-European doctor to have a work permit to train at the UK's National Health Service (NHS). But the concession of the work permit is conditional to an economic need test (i.e. the position could not be filled by a local doctor). This creates a clear hurdle to train and practice in the UK for Indian doctors relative to the previous situation when all doctors were allowed to come on a permit-free training visa. The new rules are expected to lead to a drop of between 3,000 and 5,000 non-European applicants (mostly Indians) to specialist-training medical posts

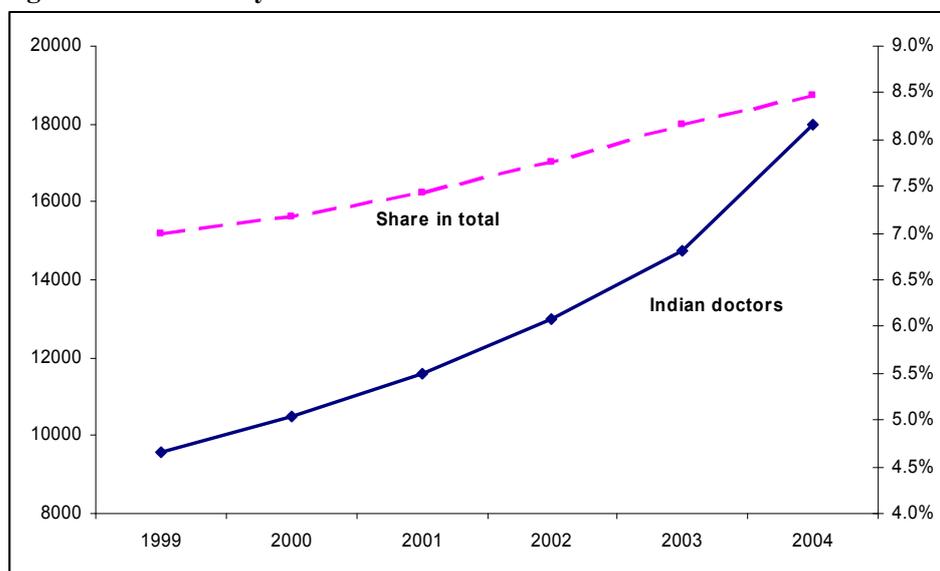
¹⁵ The possible effects of such a restriction are discussed below.

¹⁶ In US IMGs also include US citizens who have gone abroad for medical education and returned to the country to practice

per year (although they do not apply to Indian and non-European doctors already working or studying in the United Kingdom) (Lall, 2008).

India has been increasingly exporting nurses as well. This follows from the rapid growth in the demand for nurses in developed countries, but also probably from the elastic supply response the production of nurses in India (see below). Again, UK data illustrate the point quite vividly. From being virtually an insignificant source of new nurses in 1999 (when only 0.2% of new nurses were from India), India has become the largest source of new foreign nurses to the UK in 2005 with 11% of new nurses being sourced from India (Table 2.3).

Figure 2.4 Indian Physicians in the UK



Source: UK Register of doctors

Table 2.3 New overseas-trained nurses registered per annum in the UK 1998-2005

	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
India	30	96	289	994	1833	3073	3690
Philippines	52	1052	3396	7235	5594	4338	2521
S. Africa	599	1460	1086	2114	1480	1689	933
Australia	1335	1209	1046	1342	940	1326	981
Nigeria	179	208	347	432	524	511	466
In new overseas	0.8%	1.6%	3.4%	6.6%	14.4%	21.8%	32.2%
In total new	0.2%	0.5%	1.3%	4.0%	6.0%	9.7%	10.7%

Source: UK Nursing and Midwifery Council

These data on out-migration of health professionals (especially nurses) suggest that there seem to be some multiplier effect from previous to subsequent migration flows. This

may be the case for various reasons. First, as an increasing number of health professionals from India migrate towards a certain destination, this may make the qualification recognition process for new Indian migrants smoother. Second, as more Indian health professionals settle down in a destination, they provide networks which can help reduce transaction as well as relocation costs for perspective Indian migrants.

This line of argument is supported by the fact that during the period considered in Table 2.3, there has not been any significant change in regulatory requirements for entering the UK nursing market. Notwithstanding this, the number of Indian nurses migrating to the UK has skyrocketed during that period. A complete analysis of the reasons behind this growth is beyond the scope of the study, but we can advance some hypotheses about the main reasons. One plausible explanation is that as the gap between demand and supply of nurses widens in developed countries, specialized agencies are being set up to facilitate the recruitment and immigration process. In particular, a number of agencies have recently started their operations in India, acting both as information broker (matching demand of nurses in developed countries with supply of nurses in India) and as a facilitator of the recognition and immigration processes.¹⁷ Another explanation may have to do with past migration flows of nurses acting to reduce transaction costs as argued above.

It is interesting to note that these explanations are partially related to the facilitation in overcoming regulatory hurdles, such as recognition and immigration process. Therefore unlike trade in health services via commercial presence, trade via movement of health workers is likely to be restrained by current regulatory frameworks. Box 1 describes the number of procedures that a perspective foreign nurse needs to follow in order to register as a nurse in the US. It is evident that the process is quite cumbersome and an agency facilitating the various steps may be key to make these regulatory barriers less biting.

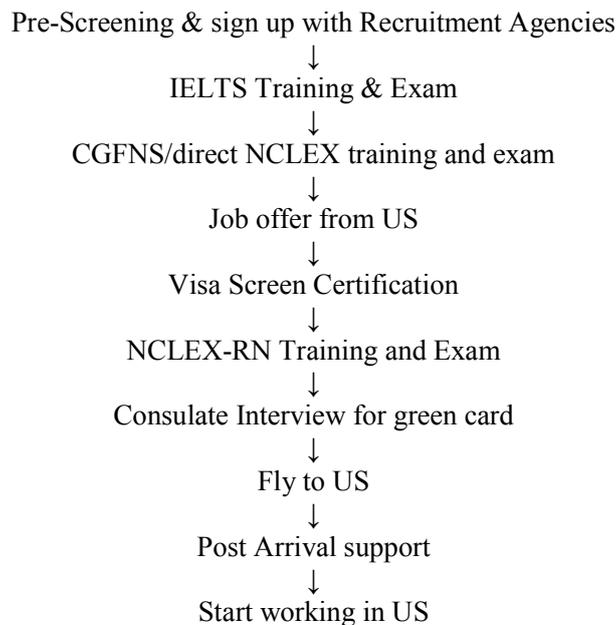
Qualification requirement appears to be the most stringent regulatory barrier to the movement of Indian healthcare professionals. The findings of a survey with overseas healthcare recruitment agencies run by Kumar and Simi (2007) across India suggest that the problem arises mainly because of multiplicity of tests. For example, in order to become a qualified nurse to get a job in a US hospital a candidate has to go through a minimum of three tests – CGFNS, NCLEX and mandatory language tests. The majority of the nurses fail to qualify all the three tests in one attempt. This creates a problem when a passing certificate of a particular test is valid for a shorter time period. If the remaining tests are not cleared within the stipulated time period, then a candidate may have to take the test again, which she has already cleared. Negotiating the mutual recognition agreement (MRA) with destination countries may be a key move towards increasing the free movement of healthcare professionals.

Such a regulatory barrier seems to apply to an even greater extent to immigration of foreign health professionals into India. The fact that India does not recognize health professionals' qualifications from all of the other developing countries is regarded as one

¹⁷ These include agencies such as All About Staffing (India) Private Limited, Fortis HealthStaff Limited, India International Technical Recruiters, Nurses Anytime, Modi Health (Kumar and Simi, 2007).

of the main barriers to the entry of foreign doctors into the country. There are even examples of Indians who earned their medical qualification in former soviet countries and China and could not practice in India as their qualification was not recognized.

Box 1: Steps to be followed in becoming a Registered Nurse in the US



Source: Kumar and Simi (2007)

2.4 The impact of increased trade in health services on Indian health systems

2.4.1 Commercial presence

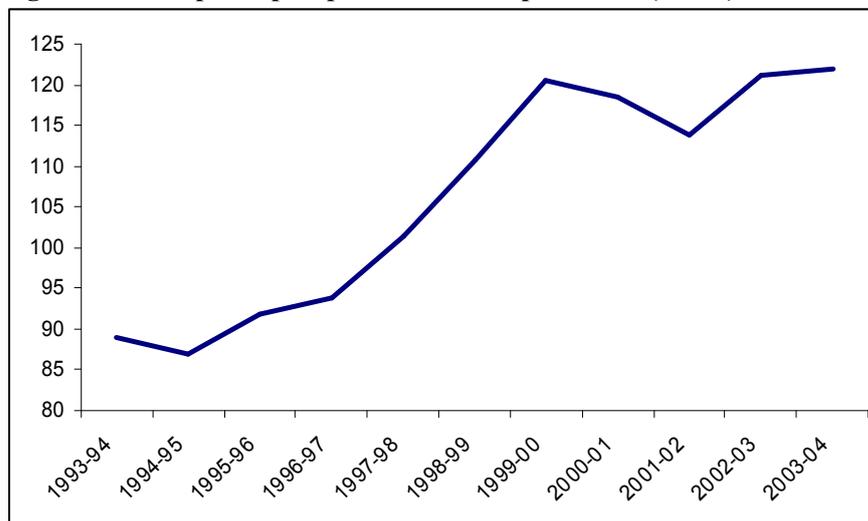
As noted above, India has not experienced any important growth in trade in health services via foreign investments. However, the domestic corporate sector has expanded notably and its impact is likely to be equivalent to that of a growing foreign sector. We follow the discussion in chapter 9 and analyse the possible benefits and costs of this increased corporatisation of the hospital sector on Indian health systems.

The possible benefits

One of the most compelling arguments for the involvement of the corporate sector in health services provision is that it may *serve a segment of the population that was using public sector services before*. This seems to be the case in India, where the tertiary corporate hospitals are treating most of the urban upper class and an increasing share of the urban middle class. Clearly neither all the patients nor all the treatments provided by the corporate sector were previously provided by the public sector. First, some of the patients were previously seeking healthcare assistance abroad. Second, the introduction

of sophisticated health services in corporate hospitals may have induced an increase in the demand for treatment from patients, who previously would not have asked for it.¹⁸ Our consultations suggest that both of these cases have occurred in India to a significant degree (with the latter possibly being more important). However, the increased relevance of corporate hospitals is likely to have helped reduce the burden of patients on urban public sector hospitals. This along with an increase in real per capita public health expenditure (Figure 2.5) may mean more resources devoted to the poorer sections of the population. Such a focus may be in line with two recent government policies: increased resources for the rural health sector through the National Rural Health Missions (NRHM) scheme; and increased resources to under-served areas through tax holidays for private sector setting up hospitals in tier-2 and tier-3 cities.¹⁹

Figure 2.5 Real per capita public health expenditure (in Rs.)



Source: National Account Statistics

The Indian hospital corporate sector has helped *expand the range and quality of health services* available in the country. Sections of the population have access to treatments for which they previously had to seek healthcare abroad (mainly US and Europe). As one of the interviewed put it, now in India heart surgeries are ‘commoditised’, with the rate of success in the large corporate hospitals practically identical to that in developed countries.²⁰ These benefits are mainly felt by the wealthier classes, who can get the same

¹⁸ There are several reasons that may explain this health seeking behaviour. First, as a certain treatment was not available in the country, patients and even doctors may not have been aware of it; second, the introduction of expensive equipment by private hospitals may provide incentives for them to induce patients to over-use the equipment; third, to the extent that patients have more trust of corporate hospitals than they used to have of public hospitals, this may lead them to seek treatment more often than before.

¹⁹ These are smaller towns than the metro areas where most tertiary private hospitals concentrate.

²⁰ The person interviewed cited that while in US hospitals the rate of success is 99.8%, in large Indian corporate hospitals this rate is 99.6%.

quality of treatment of developed countries in India. However, by bringing down the costs of some advanced surgeries, this commoditization has allowed some poor to benefit as well. For instance, the Karnataka government has introduced a subsidized insurance scheme that allows farmers to receive heart surgeries at the world class private hospital Narayana Hrudayalaya. One of the reasons why the scheme is financially viable is the relatively low cost of the surgery faced by the hospital (due to economies of scale and efficiency in managing processes). This import substitution (and to some extent export development via medical tourism) for more sophisticated treatments bears also a direct economic benefit in that it has increased employment opportunities in the Indian health sector.

There is some evidence that such opportunities have helped *retaining health professionals* (especially doctors) in the country and have also spurred some return migration, thereby reducing the size of the brain drain in India. For example Chanda (2007) finds that 5-10% of doctors working in foreign funded corporate hospitals in India have overseas work experience and there is growing interest among overseas Indian doctors to return. While this is likely to have had an impact on the urban density of doctors, the impact on access to health services by the poor is likely to have been limited, as the corporate hospital sector does not tend to serve the poor.²¹ There may be possible positive effects in terms of access to and efficiency of the health system to the extent that the presence of more super-specialty doctors has positive spillovers to the national health system (e.g. through exchanges of ideas, public speeches, etc.). However, it is very difficult to ascertain whether such spillovers are actually operating in India.

In the same vein the consultations suggested that it may be very hard to untangle any potential *positive spillovers* from the development of a strong private health sector on public health systems. There are claims that demonstration and competition effects are operating from the private to the public sector (e.g. circulation of tacit knowledge, increase in quality of public sector services spurred by better quality private sector services). However, it is not clear as to why such effects should be operating in India considering that only very few health professionals migrate from the private to the public sector and that the public sector is not really exposed to competition from the private sector (as the two cater for different markets). One policy issue in this respect is whether incentive structures in both public and private sectors can be tilted to stimulate the generation of such positive spillovers (see next section).

To the extent corporate sector is more efficient in providing health services than the public sector, the latter may try to use the former for reaching public sector objectives.²² If this can be done effectively, then an increased presence of the private sector may help increase the efficiency of, and the access to health services as well. For example, there are cases of relatively successful *Public-Private Partnership* (PPP) in the hospital sector in India, whereby private tertiary hospitals allocate a share of their beds to treat public

²¹ The instances where it does serve the poor and their relevance are analysed below.

²² The greater efficiency of most corporate hospitals compared to public hospitals can be explained by at least two factors: greater accountability and greater flexibility in the allocation of resources in the private sector.

sector patients free of cost in exchange for subsidized inputs, such as land. There is an increased tendency by states to use this form of cooperation especially for tertiary care. Notwithstanding the potential reach of these forms of collaboration, there is a sense that they need to be revamped and their oversight needs to be substantially strengthened if they are to increase access for the poor and efficiency for the states (see next section for possible policies to achieve it).

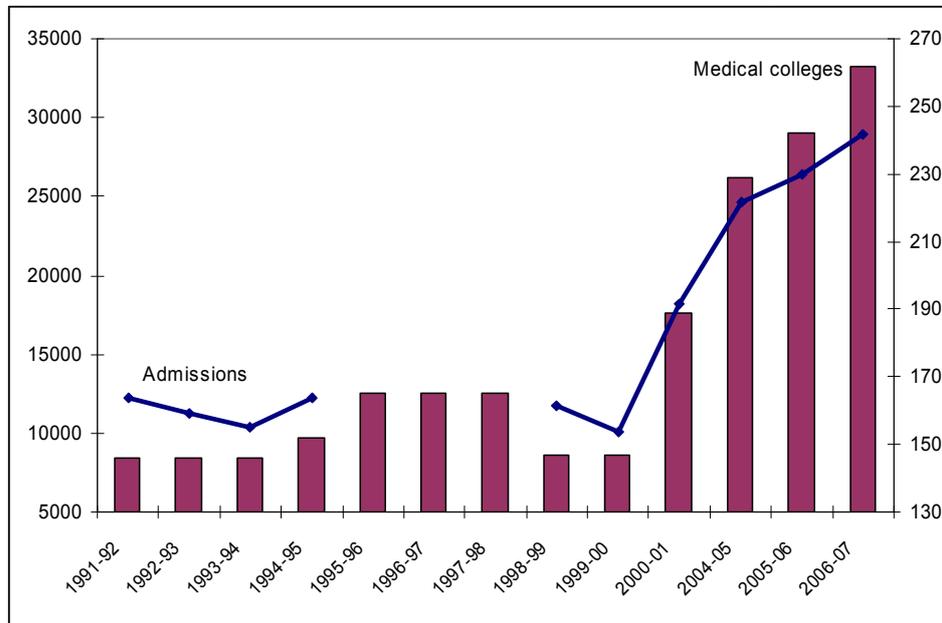
It is often argued that foreign (and domestic private) investments have been instrumental to *upgrade and expand the health services infrastructures* in India. This is likely to be even more relevant for the future. Chanda (2007) estimates that some 800,000 beds are required over the next five years to raise Indian infrastructure status in healthcare to the level of 1.85 beds per thousand persons (from the current level of 1.03) achieved by better performing Asian countries. This would translate into a total investment of \$78 billion in health infrastructure, which is beyond the reach of public sector investments alone. Thus Greenfield and domestic private investments would be essential. Moreover, investments are also needed beyond the metros to expand access to healthcare. However, extra bed capacity in the private sector does not directly benefit those patients who cannot access (due to distance and/or costs) treatment in those facilities. Again, a possible way to utilize these extra resources for public sector objectives may be through PPP.

The same line of argument holds for health related infrastructure as well, in particular *health training facilities*. The increase in private sector involvement in this sector has determined a massive growth in medical as well as nursing education facilities. Medical colleges have almost doubled between 1999-2000 and 2006-07 (from 147 to 262) and most of the new colleges (around 100) are private (Figure 2.6). This has allowed trebling the number of admissions over the same period. The growth of nursing colleges has been even more impressive: from 187 Bsc. awarding nursing colleges recognized by the INC in 2004 to 580 in 2006. Again, most of the new colleges are private (source: INC). Chanda (2007) estimates that an additional 800,000 physicians are required over the next 10 years. This growth would require the involvement of the private sector. The increased privatization of the health education sector may also reduce the public subsidy to the private sector through public training of physicians working in the private sector. However, there are risks involved with the mushrooming of private health training facilities which we will deal with later in this section.

Finally, increased commercial presence in the hospital sector has impacted significantly on another health related services sector – *health insurance* - which in turn may have a positive dent on Indian health systems. Health insurance premium collected in 2005-06 registered a growth of 35% over 2004-05, with private players registering a growth of 77% over and public players a growth of 25%. Total numbers are still fairly low, with private voluntary health insurance currently covering around 21 million individuals; and, all types of organized health financing arrangements (including health insurance) covering around 110 million individuals or 11% of the population (Berman et al., 2006). To the extent that efficient health insurance markets may help rationalise the health systems, may make them more accountable and may help increase access to health

services for the poor, their development may be good news for the health sector at large (more on this below).

Figure 2.6 Number of medical colleges and admissions to colleges, 1991-2007



Source: Central Bureau of Health Intelligence (2007)

The possible costs

The most used argument against foreign direct investments in the hospital sector is that they could contribute to the creation of a two-tier health sector in the country, with a high quality corporate sector serving wealthy patients and the rest of the market served by low quality public health systems. This perception is well established in India. And our consultations confirmed it at least for the urban areas: Indians who can afford it (not necessarily wealthy) usually choose to be treated in large private hospitals; while the rest of the population relies on (often) under-staffed and lower quality public hospitals. However, the relevant question here is to what extent the quality of and accessibility to health services for those who cannot afford private treatment²³ has deteriorated following the increased corporatisation of health services. We shall argue in this section that such quality and access have not been significantly affected by the increased corporatisation of health services in India. There are two questions underlying this argument.

The first is whether the public health sector has been negatively affected by the development of the corporate hospital sector. Two sets of arguments suggest that this may be the case: better paying corporate sector poaches scarce human resources from the

²³ These are not necessarily poor according to the statistical definitions of poverty; however for ease of exposition we'll term them poor.

public sector (*internal brain drain*) and the availability of a high quality corporate sector may decrease the support for a strong public health sector. Let us analyse them in turn.

The internal brain drain argument does not seem to play a strong role in India for a number of reasons. First, as represented in Figure 2.2, the eventual ‘poaching’ is predominantly limited to the urban hospital sector, particularly for tertiary hospitals. The core business of corporate hospitals is specialty treatments (e.g. cardiology, nephrology, oncology).²⁴ Therefore these hospitals tend to require experience in specialty disciplines, which are typical of tertiary care. A doctor (or a nurse) working in a rural primary health centre and used to treat relatively uncomplicated cases is unlikely to have the set of skills needed by the corporate sector. Our consultations suggest that this mainly applies to urban secondary hospitals as well. Second, better paying corporate sector does not seem to exert much attraction for public sector nurses. This is because job security is perceived to be higher and work pressure is perceived to be lower in the public relative to the private sector.²⁵ On the other hand the wage differential between the public and private sector for nurses (about 1:2) is not as large as for doctors (about 1:5 to 1:15).²⁶ This means that the only possibly relevant internal brain drain is that of doctors in urban public tertiary hospitals. As a matter of fact Ghosh (2008) reports that in the past five years, more than 50 faculty members of the one of the premiere public medical institutions, All India Institute of Medical Sciences (AIIMS) have left the institute mainly towards the better paying domestic corporate sector. Is this limited internal brain drain a real problem for Indian health system? A closer look at the evidence would suggest otherwise.

First, as argued above there is a certain degree of crowding out of the public sector by the private sector. Some of the patients treated by the corporate hospitals were previously (or would have been) treated by public sector hospitals. This means that urban public sector hospitals, especially tertiary, have less workload than it would have been the case without the corporate sector. However, our consultations suggest that the number of patients treated in urban public sector hospitals is rapidly increasing over time causing an overburden on under-staffed structures. The root problem here does not seem to lie with corporate poaching resources but rather with an inefficient referral system. For instance our interviews suggested that a substantial share of patients treated in a large public tertiary hospital could have been easily treated by public dispensaries or smaller hospitals. Second, since tertiary care is the most expensive part of health services and given that the corporate sector may be more efficient than the public sector in dealing with it, there may be an argument for the government to progressively abandon the direct provision of this form of care using the private sector to treat its patients (see next section).

²⁴ For instance Chanda (2007) finds that 100% of large private hospitals she surveyed had a cardiology and 97% had a nephrology department.

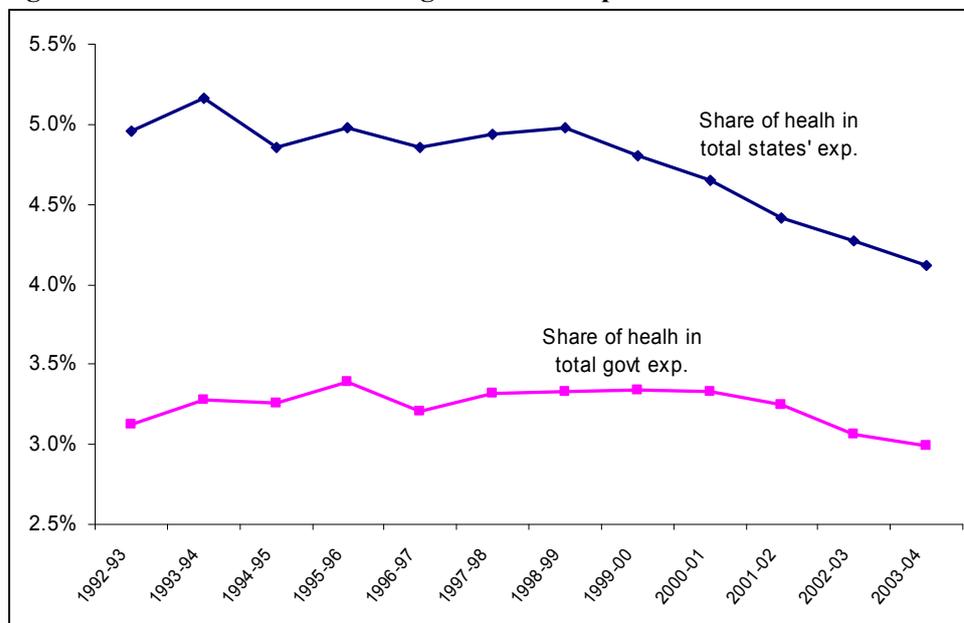
²⁵ One of the experts interviewed indicated that one of the leading public hospitals recently received over 15,000 applications for an advertisement of 300 nurses’ vacancies.

²⁶ These data on wage differentials are based on our consultations as well as Chanda (2007) and Ghosh (2008).

The real understaffing problems of the public health sector in India are in rural areas and in certain low-income states, such as Bihar, UP and Madhya Pradesh. The root causes of such problems do not seem to have anything to do with an increased corporate presence in the health sector or even with the private sector presence altogether. They appear to be rather linked to those deep seated conditions which prevent the general development of these areas (e.g. poor governance, low accountability, low skill base).

Figure 2.7 seems to be in line with the idea that the increased corporatisation of health services in India may be associated with a *lower support for a strong public health sector*. Although per capita health expenditure has increased over the past years, the share of health in total central and state governments' expenditure has decreased since the end of the nineties. This is a period associated with a fairly strong growth in the corporate sector.

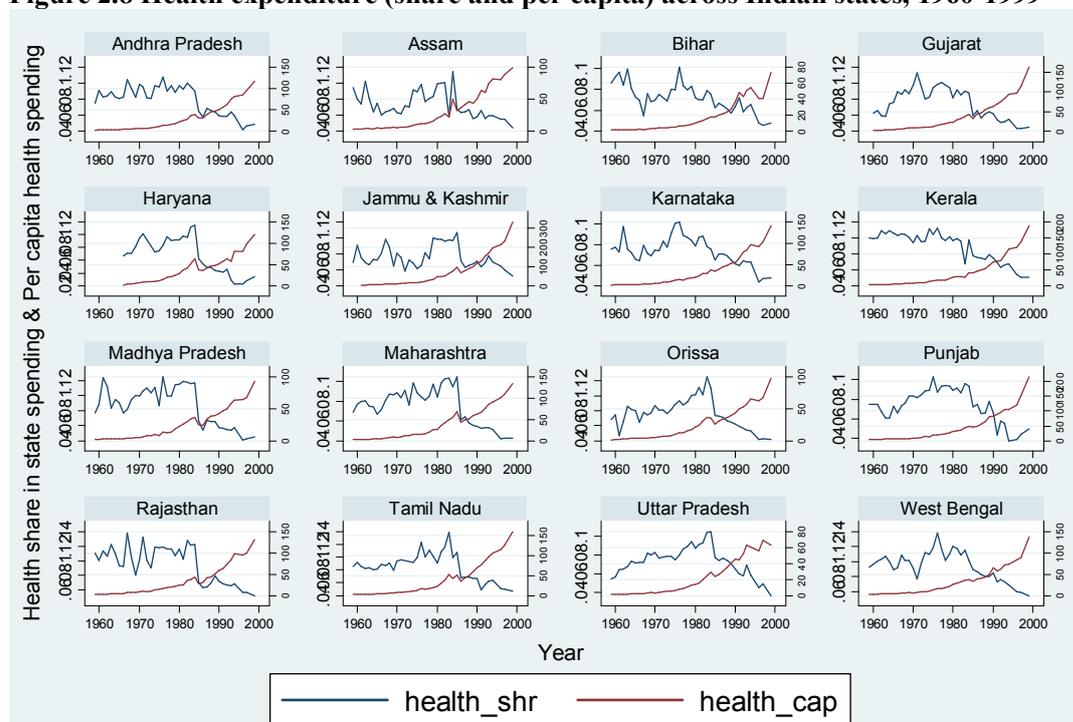
Figure 2.7 Share of health in total government expenditures



Source: National Account Statistics

However, health share in total public expenditure has been steadily decreasing since mid-1980s for the large majority of Indian states (figure 2.8). This is not consistent with the idea that the corporate sector presence (which is very different across states) may have been driving this relative fall in health expenditure. On the other hand health expenditure per capita has been steadily growing since the 1960s in all the states, potentially guaranteeing more resources to health systems across the board.

Figure 2.8 Health expenditure (share and per capita) across Indian states, 1960-1999



Source: EOPP Indian States database

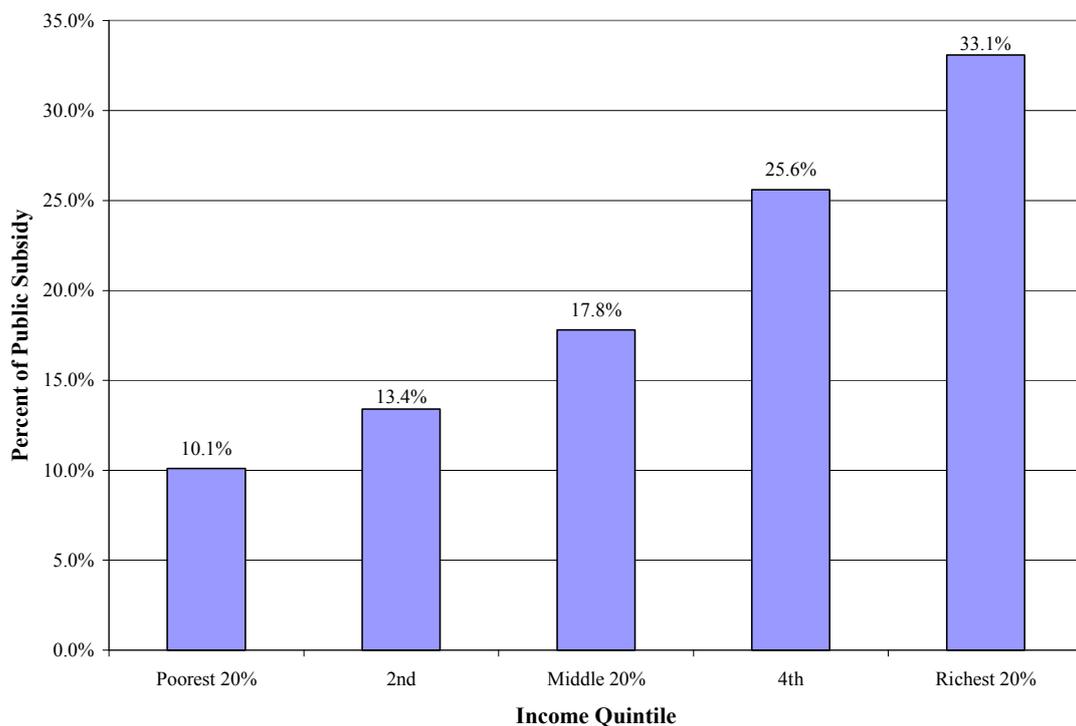
Thus it is unlikely that increased commercialization of health services may have perverse effects on public health sector in India; and if these effects do exist they are most probably quite small. But even if negative effects existed and they were important, would a weaker public health services sector be bad news for the poor's access to health services? Obviously a strong public health system has been fundamental to guarantee relatively equal access to quality health services in many advanced countries. However, as argued in section 2, many developing countries' public health systems have not been effective at delivering quality health care to their citizens, especially to those who can least afford it. India is not exception in several respects. The low level of public health spending is skewed towards curative care that mostly benefits the better-off economic segments, with preventive health services that would mainly benefit the poor being neglected (Berman et al., 2006)²⁷. It is estimated that secondary and tertiary care take up about one half to two-thirds of the public expenditure whereas the public health programs, education and research (26 percent) and primary care (12 percent) account for the remaining one-third. The bulk of public spending on primary health care has been spread too thinly to be fully effective (Berman et al., 2006; Peters et al., 2002)²⁸. Public

²⁷ The allocation of public budget to preventive health care has increased in the most recent budget, although the total figure (Rs. 80 billion) remains fairly minor relative to total health spending.

²⁸ In addition it is estimated that recurring expenses such as staff salary constitutes more than 85 percent of all primary care budget in substantial number of states in the country.

expenditure on curative services is also regressive. It is estimated that for every Rupee spent on the poorest fifth of the population the government spends about Rs 3.3 on the richest fifth (figure 2.9). The relative ineffectiveness of the public sector in delivering quality health services is probably at the basis of the high utilisation rates of private sector health services. In 2004 60% of total inpatient treatments (i.e. requiring hospitalisation) were carried out by the private sector - up from 40% in 1995/96 (source: NSSO, 2004). This share is fairly high even among the poorest quintile of the population (44 percent).

Figure 2.9: Public Expenditures on Curative Care, by Income Quintile



Source: Peters et al. (2002)

Rather than on public health systems, the increased corporatisation of the health sector may in fact have a negative impact on *general public budgets* as such. This is due to the amount of public subsidies that the private health sector receives in various forms on the grounds of its contribution to the public health sector. Two of the most frequent forms of such subsidies consist of public land conceded for free or at highly subsidized rates in exchange for free treatment of public sector patients; and waivers on import duties on health equipment granted to not-for-profit health trusts. Given the relatively weak oversight system in place, the general consensus is that these agreements do not operate effectively, thus generating an avoidable burden on public resources.

The possible costs of an increased commercial presence may also be determined by health related sector, such as health education and training. In this sector the mushrooming of nursing colleges and training hospitals is raising concerns on the deterioration in the quality of human resources.

Table 2.4 summarises the main types of potential benefits and costs on the health system from an increased commercialization in the provision of health services in India. The Table includes the expected size of the benefits and costs for the country as a whole as well as for the poor in particular. As discussed above, both benefits and costs are likely to be fairly negligible for the poor. If anything, they may be slightly positive.

Table 2.4 Potential benefits and costs of increased trade in health services via commercial presence in India

Potential Benefits			Potential Costs		
Type	for all	for poor	Type	for all	for poor
Reduce the patients' burden of public sector structures	Medium	Small	Reduce the quality of and accessibility to health services for the poor	Small	Small
Expand the range and quality of health services	Large	Small	Internal brain drain (poaching of private from public sector)	Small	Small
Help retaining health professionals	Medium	Small	Reduce support for quality public health services	Small	Small
Positive spillovers to public sector (e.g. via exchanges of ideas, knowledge, imitation effects)	Unclear	Unclear	Reduce general public budget (through public subsidies to corporate sector)	Medium	Medium
Use of private sector to reach public sector objectives (e.g. PPP)	Large	Medium	Deteriorating quality of training due to private sector-led expansion	Medium	Medium
Upgrade and expand the health services infrastructures in India	Large	Small			
Expand health training facilities	Medium	Small			
Facilitate expansion of health insurance	Large	Medium			

Source: based on the analysis in the text

Given the most likely benefits and costs of the corporatisation of health services in India, regulating more effectively rather than restricting private sector's operations seems to be the most appropriate strategy to maximize the benefits of the growth in this type of trade in health services. We'll turn to this strategy in some more detail in the next section.

2.4.2 Temporary movement of health professionals: the case of nurses

The large out-migration of Indian health professionals may have a number of effects on the general economy (e.g. remittances, increased trade and investment linkages) as well as on domestic health systems (e.g. strain on domestic capacity, return migration, increased demand for health professionals' education). For the purposes of this case study we are mainly concerned with the effects on health systems. In particular, we focus on the most controversial of these effects: that on domestic supply capacity. Some of the evidence reviewed in Chapter 8 suggests that the stock of emigrants in a certain profession in the source country may be associated with increased production of that type of professionals in the country. We collect some evidence on nurses' availability that seems to indicate that this channel may be dominating (over the short-term loss in domestic capacity) in India as well.

The sheer size of nurses' out-migration described above is a new phenomenon; Indian nurses, especially from Kerala, have historically migrated mainly to the Gulf countries. However, more recently UK, the US, and other developed countries, have become increasingly popular destinations, attracting thousands of new Indian nurses every year. This trend is different from Indian doctors' migration, which has historically been quite substantial. We would argue that such a rapid growth in migration opportunities for Indian nurses is associated with an increase in the attractiveness of the nursing profession as well. This in turn has been generating a more than proportionate increase in nurses' production and thus in domestic availability.

Kumar and Simi (2007) note that the possibility of migrating and earning good wages in the Gulf countries as a nurse since 1960s has acted as a powerful incentive for young girls from Kerala to become a nurse. The nursing diploma has been considered as a passport opening the world not only to the nurse herself, but also to her relatives. Hence, young students from Kerala filled up "the nursing schools all over India with the intention of migrating after graduation" (Kumar and Simi, 2007, p. 14). Kerala has historically generated the largest numbers of registered nurses per 1000 population. To be sure, other social factors, such as culture, customs and religion (e.g. nurses are predominantly Christians) are likely to have played an important role in creating a favourable environment for the nursing profession in Kerala. This is true for southern states in general, which have higher density of nurses in the population (see Table 2.5 below). However, the migrating opportunity is likely to have boosted the status of nurses in Kerala before than elsewhere. Families encouraged this female migration since it is very consciously regarded as a privileged opportunity to increase social mobility.

Table 2.5 Density of nurses and nursing schools in Indian states

State	Nurses (per 1000) ^a	State	Nursing schools (per million) ^b	Δ 2004-06	Δ 2005-06
Tamil Nadu	2.49	Karnataka	11.02	7.02	3.49
Kerala	2.19	Mizoram	5.92	1.77	0.86
Punjab	1.70	Kerala	5.89	3.47	2.76
Gujarat	1.60	Punjab	4.18	1.60	0.58
Mizoram	1.35	Andhra Pradesh	3.58	1.93	1.23
Himachal Pradesh	1.24	Goa	2.78	2.78	2.07
Orissa	1.20	Meghalaya	2.28		0.33
Andhra Pradesh	1.07	Tamil Nadu	2.20	0.80	0.59
Karnataka	0.99	Arunachal Pradesh	1.63		-0.04
Maharashtra	0.80	Sikkim	1.61		
Haryana	0.70	Manipur	1.47		-0.04
Rajasthan	0.58	Delhi	1.32	0.22	0.01
West Bengal	0.53	Rajasthan	1.23	0.58	0.27
Assam	0.37	Haryana	1.17	0.60	0.27
Tripura	0.19	Chandigarh	0.94	-0.07	-0.03
Delhi	0.17	Himachal Pradesh	0.91	0.13	-0.01
Bihar	0.11	Maharashtra	0.88	0.40	0.22
Uttar Pradesh	0.10	Tripura	0.87	0.57	-0.01
		Madhya Pradesh	0.81		0.11
		Orissa	0.71	0.60	0.35
		Gujarat	0.59	0.25	0.13
		West Bengal	0.49	0.21	0.14
		Assam	0.48	-0.02	0.03
		Nagaland	0.39	0.39	-0.02
		Uttar Pradesh	0.32	0.17	0.11
		Bihar	0.18	0.03	0.03

a. Refers to 2004; b. Includes both GNM and Bsc training institutes recognised by the INC; refers to 2006
Source: Indian Census (various years); Indian Nursing Council

More recently, the spreading of the migration opportunity throughout the country appears to have had a similar effect in many states, where the status of nurses, which used to be rather low in India, has changed substantially. Nursing is now considered as an attractive profession, predominantly among women. This is reflected in the increased demand for nursing education. For example a large nursing college in Delhi used to receive about 15 applications for each seat in 1998; by 2007 this ratio had become about 50:1. This increased attractiveness of the nursing profession has been accompanied by a mushrooming of training institutes offering from general nursing and midwives (GNM) training to bachelor and post-graduate courses in nursing. Table 2.4 provides some evidence of this trend. Again, southern states, including Karnataka, Kerala, Andhra Pradesh and Tamil Nadu are at the forefront of this boom. In Karnataka for instance the number of nursing schools per million population has almost trebled between 2004 and 2006; in Andhra Pradesh it has more than doubled over the same period. Interestingly, this phenomenon involves some other states as well, which are reported as increasingly exporting nurses abroad. These include Punjab, Haryana and Goa. The high (and

growing) numbers of institutions in some north-eastern states (e.g. Mizoram and Meghalaya) are instead likely to be related to the ‘export’ of nurses to Indian metro areas, and Delhi in particular. The incentives at work are analogous to those provided by the migration abroad (i.e. increase in the demand for nursing education related to the increase in the return on the educational investment). On the other hand at the bottom of the table we find non nurses exporting states, such as Bihar and UP.²⁹

Unfortunately we do not have data on migration abroad to test these hypotheses, but the data and the qualitative information gathered through the fieldwork point to the direction of a positive association between out-migration of nurses and increase in the nurses’ stock in the country. This growth in the production of nurses is reflected in the aggregated data: in 1995 there were almost 560,000 nurses and midwives in the country with a ratio of 0.61 per thousand population. In 2005 this ratio stood at 0.82 (with over 900,000 registered nurses and midwives), with an increased rate of growth in the more recent years. This is still below the world’s average of 1.27 per thousand, but India is clearly on a catching up path.

This does not prove that out-migration has been beneficial for domestic supply. Migration may just be a consequence of the increase in the production of nurses; moreover migration may further contribute to the maldistribution of nurses in the country (across states and between rural and urban areas); finally, the nursing boom may negatively affect the quality of the newly trained nurses (and there is some anecdotal evidence of this). However, there appears to be no sign of harmful effects of out-migration per se on domestic availability of nurses. If anything, migration may be an opportunity for enhancing the profile of the nursing profession, as well as earn some foreign exchange by exploiting a comparative advantage of a labour abundant economy like India. Again, the possible negative impacts of out-migration on domestic capacity are likely to be related to structural issues of the system, such as the lack of adequate incentives for health professionals to locate in rural areas, or the lack of oversight capacity by professional regulatory bodies. Tackling these issues is going a longer way in improving domestic health systems than restricting out-migration.

2.5 Making complementary policies work for better health systems

Many years of fairly ineffective public health service have opened the space for increased trade in health services in India. The idea of restricting it to limit the possible negative impact of this increased trade seems to be flawed for two main reasons:

- Its overall impact on domestic health systems is likely to be limited, and if anything it is probably positive.
- More importantly, restricting trade in health services is not going to tackle any of the structural problems of the Indian public health sector; in fact it could prevent

²⁹ The little increases in schools’ availability in those states may have been facilitated by the relaxation of requirements for opening a nursing schools, as mentioned above.

the possibility of using trade in health services to tackle some of these structural problems.

What are the types of policies that could achieve this objective? We mainly base the discussion on policies aimed at using the increased corporatisation of the health sector to improve the performance and equity of health systems. This is because this is likely to be the mode of health services trade which may have the largest impact on domestic health systems.

There are a number of policies that Indian governments could adopt to maximize the net benefits of increased trade in health services. We group them into five categories:

- 1) Facilitating an orderly expansion of the health skill base;
- 2) Increasing the role of the State as financier rather than direct provider of health services;
- 3) Strengthening public-private partnerships;
- 4) Strengthening the health insurance market;
- 5) Scaling up the overall public oversight system.

Facilitating an orderly expansion of the skill base

Although the stock of health professionals has been growing in recent years, maldistribution creates major gaps in its availability throughout the country. This is particularly true for rural areas and for some states, as discussed above. Moreover there is a fast growing demand for human resources for accommodating the needs of a growing corporate sector as well as for seizing export opportunities abroad. Given the increasing and unmet demand for health related education, the major impediment to the expansion of the health skill base in India seems to lie in supply side constraints. The government may address some of these constraints through specific regulatory measures.

There is a widespread concern that requirements for both medical and nursing training institutions are too rigid. Chanda (2007) notes that the Medical Council of India has outdated guidelines on the setting up of medical schools. Only government or trust hospitals can set up such education facilities. This prevents corporate hospitals from setting up medical schools (unless they form separate trusts). Moreover, a rigid system of fees that medical schools can charge is pre-imposed by regulation. This system does not make medical training a financially viable undertaking. The idea underlying these restrictions is that medical education needs to be a subsidized activity, as it generates substantial positive spillovers. But returns to this activity are increasingly appropriated by individuals (through private practice and high wages for doctors in private institutions), and there are not sufficient resources to subsidise all the needed expansion in doctors' supply. Thus relaxing these regulations to reflect the changing nature of the medical education system and to involve the private sector seems to be a crucial step. Chanda (2007) argues that some guidelines for setting up medical colleges and training schools are also inappropriate, such as on the amount of land required, the number of

classrooms, and on their size. The approach is based on quantity of infrastructure and volume rather than value and does not focus on quality and functional excellence.

Likewise, the Indian Nursing Council has some restrictive regulations, which are also seen to be arcane, such as requirements on land and infrastructure (e.g. a 500 seater auditorium and 3-5 acres of contiguous land), which are difficult to fulfill in first tier cities (Chanda, 2007). However, there is some evidence that the INC has tried to make these requirements more flexible, especially in more needy states.

As argued above, the expansion of the health professionals' base crucially carries the risk of deteriorating the quality of the workforce. This is a very important challenge in the current Indian context and would need to be addressed by strengthening the oversight capacity of the responsible institutions, but also by making regulations more flexible to involve high quality private sector. This would also involve a higher homogenisation of educational standards across states.

There may also be the option of involving foreign educational institutions in the expansion of Indian health related training capacity. There has been some interest by some foreign universities to set up nursing training facilities in India. More liberal regulation along with sounder oversight systems may allow to use renowned foreign expertise to improve the quality of teaching methods and to overcome financial constraints in expanding training facilities.

Increasing the role of the State as financier rather than direct provider of health services

Given the higher efficiency of the corporate relative to the public sector in delivering health services in India, the Indian government could increasingly outsource to the corporate sector parts of the health services it provides. This could particularly be the case for those expensive services which the corporate sector is already providing, such as tertiary and super-speciality care services, but could be applied to most curative services. Along with secondary care, tertiary services take up most of the public health budget, thus even moderate efficiency gains in tertiary care may result in large savings in public resources. Such savings may allow the states to redirect resources towards areas where market failures lead to a sub-optimal allocation of resources, such as primary health care, and in particular preventive health care. This focus would also be in line with a more efficient and effective allocation of public resources (see Filmer et al., 2002).

However there are at least two necessary conditions for such a strategy to be effective: the improvement of the oversight system on health services provision and the design of financing mechanism to guarantee more equitable access to health services. Tertiary care services are characterised by asymmetric information and imperfect measurability, therefore a strong oversight system is needed to guarantee that the hospital provides the services required with the desirable quality. Moreover, the high cost of these services requires the devise of effective mechanisms to guarantee equitable access to services. These mechanisms may include systems of cross-subsidisation of service provision (e.g.

from rich to poor patients) as well as insurance systems based on effective risk-pooling mechanisms (e.g. from healthy to unhealthy customers).

Strengthening public-private partnerships

Considerable efficiency gains could be obtained by the Indian public health sector also through partnering with the private sector. The rationale behind it is based on two conditions which seem to be applicable to the Indian context: hospital services require high fixed costs (in terms of land acquisition, capital equipment, infrastructure), which often impair the private sector's ability to set up hospitals; and the corporate sector is usually more efficient than the public sector at providing health services.

Box 2 The Chiranjeevi Yojana scheme in Gujarat

The scheme was launched as a one year pilot project in December 2005 in five backward districts in Gujarat and covers all below poverty line (BPL) families. It aims to improve the rate of institutional birth delivery of BPL families so to decrease maternal and child mortality rates. The scheme involves a combination of incentives given to public sector health workers to increase the number of deliveries via public health centres and the use of a panel of private providers to provide maternity health services to the families covered under the scheme. The financial incentives to public sector doctors are given for each delivery after the first 30 in a month at PHC and after the first 50 at Community Health Centres. The private providers instead are directly reimbursed by the state a fixed rate for deliveries carried out by them.

The Block Health Officer is responsible for the identification and empanelment of the private gynaecologists. After the private practitioner agrees to join the scheme, a Memorandum of Understanding is signed between him/her and the district health authorities. District Project Management Unit (DPMU) handles all documentation work for the scheme and they are also custodians of all the documents. The DPMU is also responsible for reporting the progress of the scheme to the State Health Directorate and for making the payments to the empanelled Gynaecologists through the Chief District Health Officer (CDHO) and Drawing and Disbursement Officer (DDO).

The Medical Officers and the Auxiliary Nurse and Midwife (ANM) of the respective Sub-Centres undertake the responsibility of motivating the community (BPL families) to take the benefit from the scheme. The client avails the services of the scheme from the empanelled practitioners. Every month, the empanelled providers present their filled in vouchers and claim their reimbursement. The entire document for the reimbursement is submitted at DPMU, which initiates the process of payment, which is made after the approval of CDHO and DDO.

The scheme has been successful in increasing institutional birth delivery and reducing both maternal and child mortality rates and it has now been extended to the entire state. The success of the scheme relies in an efficient mix of dissemination of information via public health workers, reliable and timely payments to private and public practitioners, and effective oversight systems.

Source: Bhat et al. (2007) and own consultations

These partnerships need to be developed at the state level and a number of states have already started to experiment various forms of PPP. The most common form has been

one involving state's subsidy to a corporate hospital for land acquisition in exchange for a share of beds being reserved for free to public sector patients. The evidence on the success of this form of PPP is at best mixed. The problems range from non-compliance by the private hospitals in terms of share of beds to poor quality services provided to public sector patients. These issues point again towards the importance of reliable enforcement mechanisms coupled by strong oversight systems to guarantee the success of these initiatives. The Chiranjeevi Yojana scheme in Gujarat is considered to be a successful example of a PPP that has been able to fulfil these two conditions (see box 2).

Provided the right incentives to the private sector, PPP may be used also to increase access in under-served areas. For example unused or dismissed public structures could be made available to private providers to deliver health services guaranteeing part of the services to low income groups at subsidised rates, which the state would be paying for. This form of agreement is being used by Delhi state for cardio-surgery services through two dismissed hospitals that will be managed by the private sector after competitive bidding. Interestingly the criteria for the bid will be based on the maximum number of operations delivered at subsidised rates by the private sector rather than by the number of beds. The problems with such arrangements in under-served areas may be that the returns on the investment by the private sector may be particularly low (as the market potential is low). Thus the government may need to provide a system of extra-incentives, such as tax holidays, to attract private providers in these areas.³⁰

Strengthening the health insurance market

The development of the private voluntary health insurance (PVHI) market is a new phenomenon in India and one that could help increasing the efficiency and possibly even the equity of Indian health systems. Formal pre-paid, risk pooling arrangements which underlie PVHI markets are typically a more equitable form of health spending, but currently account for less than 5% of total health spending in India (Berman et al, 2005). There are around 15 companies in this market, including two health insurance companies. Most of these companies are the product of joint ventures between foreign and domestic firms, with the former providing some capital and more importantly know-how to the latter. The regulatory cap of 26% equity held by a foreign company implies that all these companies are domestically owned.

Berman et al (2006) identify at least two ways through which the growth of PVHI markets may benefit health systems in India. First, to the extent that PVHI finances not just private health facilities but also public facilities, it can help in building accountability in the management of these public facilities. This in turn would have a positive effect on the quality of care in the public sector. Second, although the development of PVHI may primarily benefit the wealthier sections of society who are able to pay, the way in which PVHI is developed can have significant consequences for financing other parts of the health care system. For example, PVHI can replace public resources currently being spent to cover the better off sections of the society. As figure 2.9 illustrates, the top

³⁰ The last budget included some provision for tax holidays to private hospitals locating in tier-2 and tier-3 cities.

quintile receives the largest relative share of public health spending in India, and a large fraction of this spending is accounted for by hospital services. If the latter (or part of it) could be covered through PVHI, then the development of PVHI could make it possible for government to reallocate its health spending towards the poor.

We believe that there may be a third reason for the government to foster PVHI markets in India. That is related to the fact that a larger market may stimulate the entry of more players and increased competition in the health insurance market may benefit the public sector in its role as financier of health services. For example there is evidence that by exploiting the competition in the private insurance market, some state governments have been able to obtain relatively low premium for health insurance products for the poor from private insurers.

There are several ways in which the government may aid the development of PVHI. First, the growth of health providers would need to be more regulated to create some common standards across providers. For instance there is a wide variability in treatment costs across health institutions and there is no reliable mechanism to rate hospitals. Second, there is a need of reliable publicly available data on morbidity levels (possibly segmented by geography and socio-economic status), which would help pricing the schemes more efficiently. Third given the specificity of the health services sector, the development of an ad hoc regulatory framework would help address some of the constraints to the growth of health insurance (which is now regulated within the broad non-life general insurance market). Finally, liberalising the insurance market, for instance by raising (or eliminating) the foreign equity cap may help increase the involvement of foreign players, which in turn may help raise the standards of the industry.

Scaling up the overall public oversight system

Underlying the success of all of these policies is the need for revamping and scaling up the entire oversight system of health services provision in India. This has been mentioned in other parts of the study and would involve both regulatory and capacity oriented interventions. The former would be needed for instance to update and streamline the regulation on the mandate and competences of the institutions responsible for the oversight and to make the enforcement framework more effective. More importantly, the capacity of the entities responsible for the oversight would need to be sensibly scaled-up. There is a sort of consensus on the lack of resources and competence that these organisations face in carrying out their oversight activities. To the extent that the policies described above would allow possible savings of resources, part of these may be channelled towards this objective.

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3. Moving Medics: A case study of South Africa

3.1 Introduction

Like most developing countries, South Africa experiences a steady flow of medical professionals from the public sector to private practise and out of the country to more lucrative markets abroad. This ongoing haemorrhage of qualified professionals has serious and adverse effects on the reach, cost and quality of health care provision, particularly in rural and poor areas of the country. Historically, this outflow was countered and sometimes exceeded by a parallel in-flow of foreign doctors, largely from the rest of Africa, but also from developed countries further abroad.

The South African Government has responded to these problems with regulations that seek to trap resources in the South African public sector. These regulations are intended by design, to limit the movement of private doctors, both into and out of the country. But they do not address the underlying cause of these flows: salaries and working conditions in the public sector have deteriorated relative to the private sector. South Africa's response is not unique. It is informed by short-term public health considerations rather than the long-term development of the sector.

The purpose of this case study is to understand the reasons for and the impact of South Africa's increasingly restrictive approach to the inward movement of health professionals. The study begins with a review of the South African health care industry, focusing on the availability and profile of medical professionals in both the private and public sectors and the movement of health professionals into and out of the country. Section 3 reviews past and current policies, laws and regulations affecting the temporary (and permanent) entry and employment of health professionals in South Africa. The study concludes with an evaluation of the impact of the current regulatory framework, and possible changes to it, on health care capacity, efficiency and delivery.

3.2 The South African health care industry

South Africa has a modern and well-resourced private health care sector coupled with an under-resourced and over-stretched public health care system. This, according to Pick (1995:2), gives rise to a number of obvious imbalances: "In South Africa the health sector is subject to an imbalance between primary care providers and specialists, a concentration of health personnel in urban areas, and a relative neglect of training in public health, health policy, health management and rehabilitation" (Pick, 1995:2).

3.2.1 Expenditure on health care

In 2003/04 total expenditure on health care reached 8.7% of GDP (McIntyre et al, 2006). This is particularly high for most countries, and well above the developing country average of 5.5%. Moreover, whereas the public sector accounts for more than half of total health care expenditure in most developed and developing countries, in South Africa

private sector expenditure exceeds that in the public sector. By 2003/04, private intermediaries captured 62% of total health care expenditure (McIntire et al, 2006).

Most private sector expenditure takes place through medical schemes. These schemes therefore have a strong bearing on the cost and scope of private medical care purchased and supplied in South Africa. “Access to private health insurance or medical scheme cover remains probably the best single indicator of the distribution of health care resources in South Africa.” (Soderland, 1998: 3). Medical schemes spend very little in public health facilities.

But even poor South Africans, who are generally not covered by medical schemes, are increasing their use of private sector services. Recent household data shows that by 1999, 46.2 per cent of South Africans utilised private health care, compared to 38% in 1995. Rural (poorer) residents recorded a larger drop in public health care utilisation than urban residents (McIntire et al 2006).

Thus, despite the large contribution from Government, spending is highly inequitable. As noted by Cleary and Thomas (2002: 4): “while the overall level of resources is likely to keep expanding in the short- to medium- term, most of this expansion is likely to benefit the private sector. The public sector will find itself increasingly constrained in its ability to meet existing needs, let alone new burdens generated by HIV/AIDS”.

3.2.2 Supply and distribution of health professionals

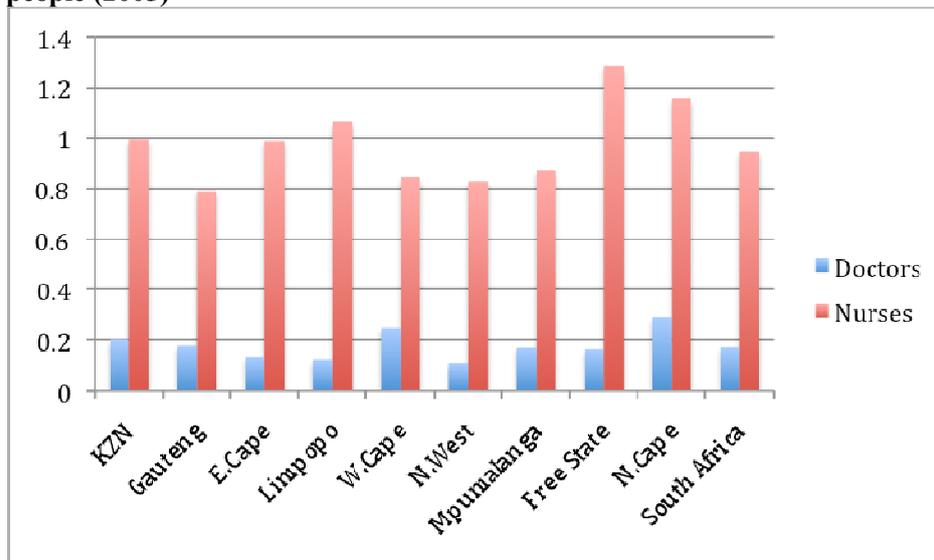
High levels of disparity in health expenditure strongly influence the number and distribution of health professionals in South Africa. Although the total number of health workers in South Africa is low, compared to OECD countries, this is not in itself a major problem. At 0.77 physicians per 1000 total population South Africa compares favourably with countries of similar incomes. Moreover, the number of registered doctors has been growing at about 5% a year for most of the past decade, far in excess of the population growth rate of 2.5%.

What is problematic is that the overwhelming majority of doctors work in the private sector, while the public sector experiences extreme shortages. There is a severe “misdistribution and mismanagement of adequate number of personnel” (Van Rensburg, 1999:210). In 1980, 53% of doctors worked in the public sector, and in 1990, 41% (Pick, 1995). By 1998, 73% of all general practitioners, 75% of specialists, 93% of dentists and 94% of psychologists worked in the private sector (Van Rensburg, 1999). There is no more recent data available on the public-private split of health personnel (Wadee and Khan, 2007) but consultations indicate that the situation has probably changed little since 1998.

There are also strong regional disparities. Figure 3.1 below show the distribution of doctors and nurses across South Africa, but only in the public sector. The Free State Province, for example, has a smaller population than both Mpumalanga and the North West, but it has substantially more nurses than both of these areas. Interestingly, there is

no clear urban-rural divide within the public sector. The rural Northern Cape has three-times as many doctors per 1 000 people than the neighbouring and probably less rural North West; while the urban heartland of Gauteng has far less doctors per 1 000 people than Kwa-Zulu Natal and the Western Cape.

Figure 3.1: Distribution of medical practitioners in the public sector by province, per 1 000 people (2005)



Data source: Department of Health (2006)

There are a number of possible explanations for this apparent misdistribution of resources. First, doctors follow markets. This explains the much higher concentration of professionals in the urban private sector. But as explained by Van Rensburg (1999: 210), doctors also create markets: “once the market is saturated there is evidence that services tend to become supplier generated and often sustained by over-servicing”. These ‘perverse incentives’ impede the reallocation of excess supply to the rural and public sectors and support the very high degree of specialisation in the South African private sector, particularly in elective surgery.

Secondly, South African medicals schools, doctors and hospitals are strongly biased towards high-cost and specialised care. “Although the quality of health sciences education and training is excellent, their relevance and appropriateness requires serious examination...increasing specialisation and super-specialisation has led to an aggravation of the existing geographic, racial and public-private sector inequalities. This specialisation is marked by a predominance of older, high-technology specialities, with a comparative scarcity of newer specialities in preventative medicine and community health” (Pick, 1995: 3).

Thirdly, deteriorating service conditions in the public sector have driven doctors and patients to the private sector. Soderland (1998) shows that private sector doctors outnumber public sector professionals in the richest districts, (first three quartiles), but the two are evenly matched in the poorest quartile of districts. Similarly, private doctors

outnumber public ones in rural areas. “Private sector distribution issues thus seem to mirror public sector ones, and the common perception that the distribution of private sector doctors is more skewed than that of the public sector appears incorrect. Indeed, the market for private doctors in poor areas can probably only be sustained in the presence of poor levels of public sector services provision” (Soderland, 1998: 28).

Fourthly, existing resources in the public sector are poorly managed, leading to severe shortages in some areas and surpluses elsewhere. For example, the South African health care model for nurses recommends a workload of 25 patients in an eight hour shift. But according to the 2000 public health care survey (Lehman, 2002), it is common for some nurses to see just 6 patients per shift, and others 60. This has little to do with the efficiency rate of individual nurses, “rather, workload is quite fundamentally determined by dramatic structural differences, such as location, size, staffing levels, infrastructure and resourcing” (Lehmann, 2002: 123).

Finally, HIV/AIDS poses a significant new challenge to human resource development in the health sector. “Unlike other sectors, though, health is faced with a double burden, having to cope with increased morbidity and mortality in its own ranks, but also having to shoulder the impact of a rapidly increasing disease burden in the general population” (Lehmann, 2002:123). The disease is having a dramatic impact on the health and morale of health workers, particularly in the public sector.

The Government has undertaken efforts to improve working conditions in the public sector. The Department of Health allocated an additional R500 million in 2003/04, rising to R1 billion in 2005/06, to improve the conditions of service for doctors in rural areas (National Treasury, 2004). They have also introduced a system of community service whereby all South African doctors are required to work for a year in the public sector before they can register for ‘independent practice’. Together, these initiatives have contributed to an increase in the number of doctors (including specialists) in the public sector from 10 884 in 2001/02 to 13 411 in 2006/07 (National Treasury, 2008). But despite these efforts, 5 700 out of 15 500 general medical posts and 3 400 out of the 7 000 posts for specialists are currently vacant (interview with Department of Health).

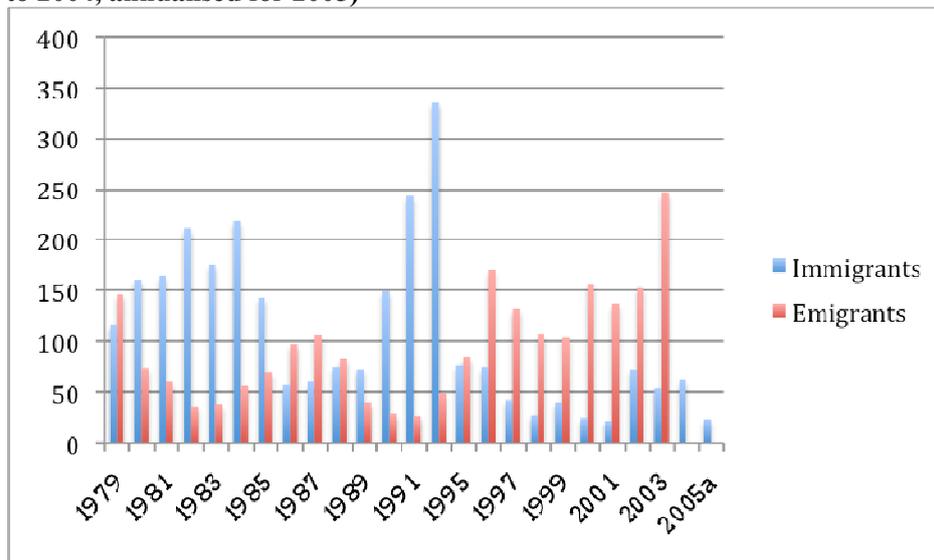
3.2.3 Emigration of health professionals

Health professionals are extremely mobile and large numbers of South African doctors and nurses work abroad. “There are 600 South African doctors registered to practice in New Zealand, and 10% of Canada’s hospital-based physicians are South African graduates. In the UK 6% of the total health work force is South African” (Padarath, 2003: 14). “By 2001 nearly as many South African trained doctors were working in five OECD countries as in the public sector” (McIntire et al 2006, pg. 439).

Official figures grossly underestimate actual outflows - many emigrants do not report their intention to leave South Africa permanently. Government statistics show that about 150 doctors emigrated, per year, from 1995 to 2003 (author’s calculation based on data from various StatsSA reports). Yet survey data of medical graduates indicates that

around 40% (600) of new graduates leave the country once qualified (Reid, 2002) and that 65% plan to emigrate within 5 years (SAMP 2008). About half of all practising doctors claim that there is a high likelihood that they will emigrate within the next five years (SAMP 2008).

Figure 3.2: Immigrants and emigrants of medical doctors – official statistics (actual for 1979 to 2004, annualised for 2005)



Data source: Statistics South Africa (various). South Africa stopped reporting data on emigration from 2004 and on immigration from mid-2005

Emigration is attributed to a range of push and pull factors. Working conditions and remuneration in the South African health sector are generally lower than those in industrialised countries, particularly in the public sector; the risk of work-related infection from HIV/AIDS and other communicable diseases is much higher (Padarath, 2003); the qualifications, training and experience of South African medical professionals are internationally recognised; South Africa shares a common language with the major importing countries; and young doctors and nurses have easy access to the UK market.³¹ Socio-economic conditions also play a role: approximately 96% of all emigrants cite high levels of crime and violence as their main reason for leaving (Padarath, 2003).

This leads SAMP to conclude that emigration is set to continue, and probably accelerate: “the profession is characterised not by a groundswell of discontent, but a tidal wave of unhappiness and dissatisfaction with both economic and social conditions in the country: (SAMP 2008, pg. 2). Interestingly, place of residence and income level have little impact on the SAMP survey results. All medical professionals, whether wealthy or not, urban or rural, are grossly dissatisfied with working conditions in South Africa and the majority want to leave. This would seem to apply to doctors in both the public and private sectors.

³¹ The UK provides a working visa to adults younger than 30 from most commonwealth countries.

3.2.4 Immigration of health professionals

In 1999, 20% (approximately 6 000) of doctors on the South African Medical Register were foreigners (Lehmann, 2002). This would indicate that the inflow of foreign doctors has probably matched, possibly exceeded, the outflow of South African doctors over the last few decades³². Since 1994, a large proportion of doctors that migrated to South Africa came from Africa. And many African migrants went to the public sector. See Table 1 below. The main reason for the migration of health professionals to South Africa is financial (Padarath, 2003). The average income of a junior doctor in Ghana or Lesotho is US\$200 a month, compared to US\$1 242 in South Africa (Martineau, 2002:4).

Table 3.1: Foreign doctors in the South African public service (1998)

Source	Number	Share of total
Central Africa	472	29.4%
Cuba	333	20.7%
Asia and USSR	326	20.3%
Western Europe	194	12.1%
Eastern and Middle Europe	131	8.2%
Southern Africa	86	5.4%
Pacific Rim	22	1.4%
Northern Africa	20	1.2%
South America	9	0.6%
North America	9	0.6%
Australia and New Zealand	5	0.3%
Total	1607	100%

Source: Van Rensburg (1999)

The inflow of African doctors to South Africa has raised concerns about a regional brain drain and prompted the South African Health Professional Council to issue a moratorium on the registration of all foreign doctors in 1996 (Padarath, 2003). This moratorium has since been lifted, but the South African Government has undertaken not to recruit doctors from other developing countries, except under government-to-government agreements.³³

The public sector is potentially most vulnerable to such restrictions. In 1998 a quarter of all public sector doctors were foreign (Van Rensburg, 1999); this is probably close to 50% today (Interview with the Department of Health). Most of these doctors are from Africa and from Cuba (there are still 150 Cuban doctors practising in South Africa under a government-to-government agreement).

³² Using the historically high emigration rates of today, it would take 15 years to offset the number of foreign doctors currently practising in South Africa.

³³ Specifically, this restriction applies to the 130 developing countries that are members of the G77, the largest intergovernmental organization of developing states in the United Nations. This effectively prevents South Africa from recruiting doctors from all of Africa and most of Asia (including Singapore) and Latin America.

The South African Government has recently concluded additional government-to-government agreements with Iran and Tunisia. Already, 34 Iranian doctors have been deployed in the country and 240 Tunisian doctors have been shortlisted for appointment in the public sector in 2008. But these agreements are not sufficient to make a dent in the 40% vacancy rate (approximately 6 000 vacant posts) in the public sector and the country only produces 1 400 new doctors annually, most of whom end up in private practice or overseas.

The Foreign Workforce Management Programme (FWMP) of the National Department of health has been tasked to plug this gap. The greatest challenge they face is the self-imposed restriction on the recruitment of doctors from other developing countries. In 2007, for example, the South African Government placed a general job advert in the British Medical Journal and received around 1 000 responses. But just four of the applicants were from Britain; with all of the rest coming from India, Pakistan and South East Asia. Furthermore, on an annual basis, the FWMP turns away hundreds of qualified Asian and African doctors (Department of Health). The Rural Health Initiative demonstrates that there are more ways to recruit doctors from developed countries (see Box 1).

Despite existing restrictions the FWMP managed to place 430 foreign doctors in the South African public service in 2007 and a further 100 in the first 10 weeks of 2008. A small number of these placements are transfers and extensions of existing employees, but most are new immigrants and the majority are from other African countries. To enable the FWMP to do its job and to keep the public sector above water, exceptions and exemptions have been found and migrant African doctors are fast becoming the mainstay of the South African primary health care system.

Box 1 The Rural Health Initiative

The Rural Health initiative (RHI) is a South African-based NGO established in 2005 to provide support to doctors and other healthcare workers in rural parts of the country. This includes an active recruitment campaign to attract and assist foreign doctors in obtaining employment in South African hospitals. They are now part of a Joint Venture with the South African Academy of Family Practice and the Foundation for Professional development. In 2007, approximately a quarter of all foreign doctors entering the country and almost all doctors from developed countries were recruited by the RHI.

The RHI acknowledges that the system and regulations governing the entry of foreign doctors into the country has improved markedly over the last few years. They work closely with the FWMP within the Department of Health to assist with the processing and placement of applicants and have 'seconded' two dedicated staff members to the Health Professional Council of South Africa (HPCSA) to expedite registration.

According to the RHI, the entire recruitment process from application to arrival takes between 3 and 6 months. This is not unreasonable by international standards and one of the main attractions of South Africa, to foreign doctors from countries recognised by the HPCSA as of equivalent standard, is the fact that full registration (for public sector work) can be obtained relatively quickly and without setting new exams. RHI is consequently able to attract significant numbers of largely European doctors to South Africa through participation in recruitment fairs and the placement of advertisements abroad. Most of these doctors are either young and looking for a new and challenging work experiences; or retired and looking to make a contribution in rural Africa.

The majority of foreign doctors placed by RHI do intend to return home after 2 to 3 years but they make a critical contribution in the hospitals and districts in which they work. RHI estimates that of the 1 400 South African doctors that graduate each year, half leave the country, most of the rest enter private practice and just between 60 and 70 eventually end up in rural public hospitals. RHI, on the other hand, currently places over 120 foreign doctors in rural hospitals every month.

Could more be done? RHI is the only South African NGO or agency actively recruiting foreign doctors from abroad for public sector positions and their activities are largely restricted to the UK. They believe that there is no shortage of foreign doctors willing to work in the South African public sector, given the right support and incentives, and that more could be done to attract doctors from other part of the world. Government, too, could play a more active role in supporting direct recruitment initiatives.

See www.rhi.org.za for more on the activities of the RHI.

3.3 Regulation and policy

Until recently, the South African Government paid little attention to the private health care sector (Soderland, 1998). Doherty (2002b) argues that if the private sector is left unregulated, it can infringe on public sector objectives. For example, the reduction of coverage to high-risk individuals by private medical schemes in the 1990s resulted in a large new burden on the public sector. Similarly, the large increase in private beds outside of the main metropolitan areas drew staff and fees away from public sector clinics. This is set to change. A barrage of new legislation and regulations could have a dramatic impact on the shape and future of private health care provision in South Africa.

3.3.1 The New National Health Act

The National Health Act of 2004 governs all aspects of the national health system. Its main objective is clear: "to regulate national health and to provide uniformity in respect of health services across the nation by establishing a national health system which encompasses public and private providers of health services and provides the population

of the Republic with the best possible health services that available resources can afford” (Department of Health, 2003:8). Equity and resource considerations are paramount and the Act provides the Minister of Health with unprecedented responsibility and authority to regulate public and private suppliers in order to achieve these objectives.

Much of the Act focuses on the public sector. The prescribed functions and responsibilities of the state (chapter 1), national departments (chapter 3), provincial health departments (chapter 4) and districts (chapter 5) are generally uncontroversial. Similarly, general rights and duties covering treatment, information, research, confidentiality, and health records in both the public and private sectors (chapter 2) seem reasonable. Chapters 8, 9 and 10 cover the control of human products, research and compliance issues, which are not the focus of this study.

Chapter 6 deals with the classification and operation of ‘health establishments’. Upon the implementation of the Act, all professionals and hospitals will require a ‘certificate of need’: to establish, construct, modify or acquire any form of health establishment; to increase the number of beds in a health establishment; to acquire prescribed health technology; or to provide prescribed health services. Existing practises and hospitals may continue to operate for a year after the Act takes effect without such a certificate.

The ‘certificate of need’ will, by design, impose significant restrictions on the operations of private health providers, particularly in well-serviced urban centres. The extent to which this will limit further expansion, and trade, is at the discretion of the Department of Health. For example, although the Director General of Health is required to consider four main factors in the issuance or renewal of these certificates, these are very broad and qualitative, and may be supplemented by any number of 11 sub-criteria (paragraph 41). In terms of paragraph 44, the Minister may (and is clearly expected to) issue supplementary regulations to govern this process. The objectives of these regulations are specified in the Act, but it is left to the Minister to devise and quantify the criteria. This would seem to give the Department plenty of room to manoeuvre.

The main and stated objective of the ‘certificate of need’ is to promote the equitable distribution and rationalisation of health services and health care resources (paragraph 41.3.b and repeated in paragraph 44.1.a). It is difficult to speculate on how this will work in practice, largely because so much is left unspecified in the Act. Instead, the location and tenure of all health care providers in South Africa now rests in the hands of the Director General of Health, or upon appeal, the Minister. Moreover, once issued, a ‘certificate of need’ will be valid for a prescribed period that shall not exceed 10 years.

The only aspects of the Act that deal directly with international trade are those governing the movement of foreign professionals. The Forum of Statutory Health Professional Councils is established (paragraph 55) and will include representatives from all statutory health professional councils and the government. This Forum is required to advise the Minister of Health on the recruitment, evaluation and registration of foreign health care professionals. The Minister may then institute any new regulations to “prescribe

circumstances under which health care personnel may be recruited from other countries to provide health services in the Republic” (paragraph 57.f).

3.3.2 Policy and guidelines on the recruitment and employment of foreign health professionals

In April 2006 the Department of Health published a specific policy document to ‘regulate the recruitment, employment, migration and support towards residency status of foreign health professionals’ in South Africa. (Department of Health 2006, pg. 2). The policy holds no punches. It makes clear the intentions of the DoH to ‘deploy’ professionals from abroad to under-serviced or remote areas of South Africa and it makes it very difficult for doctors to enter and work in the country under any other condition.

The policy document sets down a number of general principles for the recruitment and migration of foreign doctors. Whereas registration with the Health Professional Council of South Africa (HPCSA) is a pre-requisite for employment in South Africa; the HPCSA cannot consider applications for examination or registration ‘prior to documentary evidence that the application is supported by the National DoH’. This evidence takes the form of a ‘letter of invitation / employability’ from the Foreign Workforce Management Programme (FWMP) of the DoH and “no foreign health worker may depart to South Africa to practice his or her profession or to seek employment without a formal FWMP-letter of endorsement (serving as an invitation” (DoH 2006, pg. 2).

No specific information is given on what the FWMP requires in order to make this determination. The document does however give some clue as to what the DoH is thinking: “where there is an adequate supply of trained SA health professionals, recruitment from abroad and/or the continuous employment of foreign health professionals should be duly managed and applications for permanent residence should be well motivated, especially promotion level posts on level 11 and higher” (DoH 2006, pg. 4). In particular, employment in urban areas will only be considered under ‘exceptional circumstances’.

Applicants are also strongly advised not to seek employment on their own (without the written permission of the FWMP), but should instead wait for the FWMP to “secure a job offer on your behalf from public sector health institutions” (DoH 2006b, pg. 4). The Department goes on to specify that “the aim, in years to come, is to consider mainly (and in some instances exclusively) those candidates indentified in terms of country-to country-agreements”. Already, the recruitment of individual applicants from developing countries will not be endorsed by the Department” (DoH 2006b, pg. 2).

The policy document also sets a number of general conditions for full-time employment in South Africa for qualifying foreign health professionals. These include:

- Doctors who are permanent residents of South Africa and have obtained medical qualifications in the country must first undergo an internship or community service

before they can register and practise in South Africa. Alternatively, they can elect to work for five years in the public sector.

- Foreign doctors who have qualified outside of South Africa may only register to work in the public service; South African doctors with the same qualifications are, under certain conditions, eligible for community service instead.
- Spouses of South African citizens and residents must apply to the Department of Health ‘for an initial letter of endorsement to facilitate their application for registration’; but unless or until they are permanent residents, they too will be restricted to the public sector.
- The policy on temporary residents deals mostly with refugees and asylum seekers. It makes no mention of the Doctors that might apply for work permits to work temporarily in South Africa. This is because no such permits will be issued for doctors to work outside of the public sector.

In addition to the above general guidelines, foreign doctors applying for jobs in the South African public sector must prove that no qualified South African citizen or permanent resident is available or has applied for the position; must demonstrate fluency in English or at least one of the official languages in South Africa; and are restricted to a three-year, non-renewable contract and may not change employer.

According to the Department of Health (interview), many of the requirements described in the guidelines are redundant or not strictly applied. For example, given the high vacancy rate in the public sector, it is usually unnecessary to provide evidence that no South African candidate has applied; and contracts are readily re-negotiated and extended after the initial three-year period upon receipt of a letter of motivation from the Hospital where the doctor is employed.

This would seem to suggest that the main constraint to the recruitment of foreign doctors into the public sector is finding willing and appropriate people (i.e. doctors from developed countries that want to work in a developing country context). It is perhaps for this reason that the Department has also established four conditions under which it can register and employ doctors from other developing countries:

- If the doctor is a formal refugee. This explains the currently high intake from the war-ravaged DRC.
- If the doctor is married to a South African citizen. This is because the country’s immigration law gives spouses of South African citizens the right to work in the country.
- If the doctor has been practising in a developed country for a reasonable period of time, generally around 5 years.

- If the doctor can provide a formal letter from his/her home country Government confirming that he/she is permitted to work in South Africa.

All of these criteria create perverse incentives for opportunistic or even corrupt activity. For example, there is anecdotal evidence that some doctors marry South Africa citizens in order to gain working rights; while others are able to 'arrange' letters of support from their home countries. At the time of writing this paper, an official from the Department of Health's FWMP was suspended for allegedly receiving bribes to facilitate the employment of foreign doctors in South African hospitals (Department of Health, 2008). It is therefore disturbing that if it were not for these loopholes very few foreign doctors would be recruited to work in South Africa and the public sector would be at serious risk.

3.3.3 Regulations for the registration of foreign doctors

The policies and guidelines described above, which are currently being implemented by the National Department of Health and HPCSA, do not seem to be covered by current legislation. The Forum of Statutory Health Professional Councils, as described in the new National Health Act, has not been created and regulations governing the movement and recruitment of foreign doctors do not exist.

Whereas the country's new Immigration Act strives to make it easier for skilled foreigners to enter the country, the Department of Health has different aims and objectives. For this reason, medical doctors are excluded from the list of scarce skills promulgated by the Department of Home Affairs (responsible for the implementation of Immigration Policy in South Africa). The main avenue for regulating the flow of doctors into the country, lies outside of immigration policy and practise, and is instead dealt with through severe restrictions on the registration of foreign doctors imposed on the health profession by Government.

Until now, limitations on the registration of foreign doctors have been agreed by Government and the health profession, but have not been enforced by law. This is set to change. In February 2008 the Department of Health published draft regulations on the "qualifications for registration of foreign qualified health practitioners". These regulations, if and when approved, will give teeth to existing policies and guidelines by setting out the conditions under which foreign doctors can be registered by the HPCSA.

The draft regulations allow for the registration of foreign doctors as interns or to practise in the public service, as long as the council considers their qualifications satisfactory and/or they pass an exam or appropriate assessment. Registration for private practise is effectively prohibited. All foreign doctors must complete a minimum of five years in the public service before they can be considered for registration in the category 'independent practice'. Furthermore, all applications for registration as independent practitioners require the support of the National Department of Health.

3.3.4 South Africa and the General Agreement on Trade in Services (GATS)

The implementation of these guidelines and regulations makes clear the South African Government's intention to severely limit the ability of foreign doctors to practise in the private sector in South Africa. Not only do these regulations go well beyond the country's normal immigration laws and requirements in determining the conditions for practising in (and not just entering) South Africa, they are also blatantly discriminatory. Foreign doctors are required to work for five years in the public sector before they can practise independently, South African doctors are not.

South Africa is the only 'developed country'³⁴ to have made full commitments in modes 1 to 3 in medical and dental services. As a result South Africa cannot impose restrictions on market access, as defined in Article XVI of the GATS. This would include any form of discrimination based on nationality as well as numerical restrictions on the number of doctors or on the type of services they provide. Not only is South Africa's schedule particularly liberal, but it would seem to be incompatible with both the new National Health Act (certificate of need) and the draft regulations for the registration of foreign medical professionals.

Table 3.2: South Africa's GATS schedule: professional services

Sub-sectors	Market access	National treatment	Mode
Medical and dental services	None	None	1
	None	None	2
	None	None	3
	Unbound except as indicated in horizontal section	Unbound except as indicated in horizontal section	4
Services provided by midwives and nurses	Unbound (technical reasons)	Unbound (technical reasons)	1
	None	None	2
	None	None	3
	Unbound except as indicated in horizontal section	Unbound except as indicated in horizontal section	4
Services provided by physiotherapists and paramedical personnel	Unbound (technical reasons)	Unbound (technical reasons)	1
	Unbound (technical reasons)	Unbound (technical reasons)	2
	None	None	3
	Unbound except as indicated in horizontal section	Unbound except as indicated in horizontal section	4

It is extremely unlikely that any other WTO member country would challenge South Africa if and when it does implement the certificate of need or introduces formal regulations to restrict the activities of foreign doctors, but South Africa's backtracking in this sector does raise questions about its overall approach to services liberalisation and its commitment to international agreements in this area. Sinclair (2006, pg. 26) takes this

³⁴ South Africa is classified as a developed country within the WTO

further to suggest that “due to the stark inconsistency between the Health Act and the GATS, disputes can be expected eventually”. Certainly, the more South Africa discriminates against foreign medical providers, the sooner and more likely it will face such a dispute. This needs to be taken into account in the drafting and revision of new regulations.

3.4 Policy implications

This case study raises three main policy questions and concerns for South Africa. Firstly, current and proposed restrictions on the movement of health professionals into and within South Africa are clearly in conflict with the country’s existing GATS commitments. This deserves further attention but is beyond the scope of this particular study. Secondly, the Government’s decision not to recruit foreign doctors from other developing countries severely limits its ability to fill domestic vacancies and deliver services to its own citizens. Finally, while an increasing number of doctors leave South Africa every year, from both the public and private sectors, the Government prevents foreign doctors from entering the country to work in private practice. We deal with the last of these issues first.

3.4.1 Foreign doctors and private practice

The Government is right to prioritise recruitment for the public sector - it has a moral and constitutional duty to provide basic health services to all South Africans. This is best achieved through effective management and human resource planning; good training, facilities and support, and competitive remuneration and conditions of service. “The Strategic Framework for Human Resources for Health”, launched by the Department of Health in 2006, rightly recognises the need for improved support and compensation in the public sector to counter the drain of doctors and nurses to the private sector and abroad. However, “since its launch, the details of the framework have not been finalised” (Rispel and Setswe 2007, pg. 13)

In the absence of clear plans and programmes to retain doctors in Government hospitals and clinics, the Department of Health has adopted policies that seek to restrict the growth of the private sector and force doctors and patients back into the public sector. This includes severe restriction on foreign doctors that prohibit them from private sector work, regardless of their speciality, experience or their reason for entering the country, until they have paid their dues in the public sector and mostly in rural South Africa.

Such policies might help to plug short-term gaps in the public sector, but they mask rather than address the underlying problem. Requiring all foreign doctors to work in the public sector creates the false impression that conditions are better than they otherwise might be and leaves the Department extremely vulnerable to the changing whims of migrant doctors. At the moment, for example, the South African public health system is ‘benefiting’ from the civil war in the DRC. But it is extremely unlikely that the current boom in migrant doctors from this country will continue indefinitely or that these doctors

will, necessarily, remain in South Africa once registered with the HPCSA. The Department of Health itself acknowledges that many doctors use registration in South Africa as stepping-stone to more distant and lucrative shores.

There can also be little doubt that many experienced foreign doctors would not contemplate restarting their careers in the South African public service. By insisting that all foreign doctors spend five years in rural and public hospitals the Government is shutting the door on a desirable cohort of highly skilled, probably wealthy and potentially very productive immigrants³⁵. Given the large net outflow of doctors from the South African private sector, the Government should be looking at ways to grow and increase competition amongst private practitioners. Not only will this help to moderate private medical costs, but it may encourage private doctors to venture into under-served areas and discourage public sector doctors from entering private practise.

Finally, the Government could look to the private sector to assist with public sector delivery: historically, the public sector contracted-in individual private doctors on a fee-for-service basis to provide care to the poor in under-served areas (McIntire et al 2006); and there is strong evidence of private sector activity in even the poorest parts of the country (Soderland 1998). The new National Health Act enables the Minister to prescribe mechanisms to improve coordination between the public and private health care services. Four years on and the regulations on these sections of the Act have not been published.

3.4.2 Foreign doctors from developing countries

South Africa has got itself caught-out on the wrong side of the classic prisoner's dilemma. If the Government assumed a less altruistic approach it could possibly capture as many doctors from other developing countries as it loses to the developed world and the domestic medical profession would be more or less in balance. But by assuming the moral high-ground South Africa gives up a large proportion of its own potential gains for the benefit of other countries. This begs the question - what happens to those doctors refused entry from South Africa? Do they stay at home, and if not, where are they most likely to go?

SAMP (2008, Table 1) presents data on the number of physicians from Southern African countries residing abroad. The results are reorganised and summarised below. The data confirms that a high number of physicians from most Southern Africa countries practise abroad. It also confirms that South Africa is an important source of employment, accounting for 9% of all Southern African physicians residing outside of their home country. But with the exception of Lesotho, Namibia and Swaziland (which are in a customs union with South Africa) and Zimbabwe, the UK is a much more popular destination for Southern African doctors than South Africa. Portugal absorbs an even larger number, though largely from Mozambique and Angola.

³⁵ The Department of Health disputes this; claiming that they have had very few applicants for private practise. But this is hardly surprising. It is patently obvious from official communication by the Department that such applicants would be rejected.

Table 3.3: Southern African physicians residing abroad (excludes South Africa)

Sending country	Home	Abroad	% abroad	% abroad in SA	% abroad in UK
Angola	881	2,102	70	1	1
Botswana	530	68	11	38	41
DRC	5,647	552	9	18	7
Lesotho	114	57	33	86	14
Malawi	200	293	59	16	65
Mauritius	960	822	46	2	36
Mozambique	435	1,334	75	5	1
Namibia	466	382	45	76	10
Seychelles	120	50	29	8	58
Swaziland	133	53	28	83	8
Tanzania	1,264	1,356	52	3	55
Zambia	670	883	57	23	53
Zimbabwe	1,530	1,602	51	40	35
Total	40,501	16,917	29	9	14

Source: SAMP (2008)

These results do nothing to diminish the importance of South Africa as a lure for doctors from nearby countries. But they do reveal, rather strongly, that South Africa is far from the only option available to medical emigrants from the sub-continent. If South Africa slams the door on doctors from Zimbabwe, for example, there is no reason to believe that they will not find their way to the UK, where more than 500 Zimbabwean doctors already reside. In fact a recent survey of Zimbabwean doctors (Chikanda 2005) reveals that the UK, and not South Africa, is their favoured emigration destination.

To base policies on the assumption that Zimbabwean doctors should or will stay there, regardless of economic and political circumstance, is both inhumane and unwise. “There is a decided and growing shortage of health professionals. Morality may suggest that a no-immigration policy is the best one to pursue but no country uses morality as a basis for making immigration decisions and South Africa is certainly not applying such criteria to other sectors. A twin-pronged strategy is needed: address the conditions at home that are prompting people to leave and adopt a more open immigration policy to those who would like to come.” (SAMP 2008, pg. 7) Moreover there is growing empirical evidence (including from the Indian case study in this report) that the emigration rate of health professionals does not necessarily cause scarcity of health professionals in source countries (Calì, 2008).

3.5 Conclusion

The world health care industry faces severe challenges. In developed countries ageing populations and advances in medical treatment have contributed to a significant rise in health care expenditure, placing strain on household and national budgets. In most developing countries poverty and disease are much more prevalent and the public sector struggles to extend basic primary health care to the majority of the population. South

Africa faces both of these challenges. It is blessed with a modern and high quality private sector, which operates alongside an inefficient and under-resourced public sector. This deserves a careful policy response – one that contributes to the sustainability of a well-functioning private sector, but also leverages private sector knowledge and resources for the benefit of the public sector and the poor.

South Africa has chosen to regulate change, forcing all new and foreign doctors into the public sector and rural areas. This might get more professionals into needy areas, temporarily, but it is also likely to contribute to increased emigration and some erosion in private sector capacity. Already, about half of all doctors working in South Africa plan to leave the country. South Africa needs to address the root causes of public sector understaffing, which have not to do with migration of health professionals. The analysis suggests at least three ways for doing so:

- *Investing substantially to address the push factors* of the public health sector. This should help redress the staff balance between public and private sectors.
- *Promoting the development of a more competitive private sector* including by encouraging qualified foreign doctors that prefer to work in private practise to enter the country and do so.
- Looking at ways to *increase competition amongst private practitioners*. Not only will this help to moderate private medical costs, but it may encourage private doctors to venture into under-serviced areas and discourage public sector doctors from entering private practise.

South Africa has also chosen to prohibit immigration from developing countries; this despite the fact that the public sector is already highly dependent on doctors from other African countries and most migrant doctors still come from the continent. There are no simple solutions to this quandary but South Africa's response does little to address the underlying causes of the medical brain drain from other African countries. Moreover it flies in the face of its own citizens and its regional commitments. Perhaps the only way out of this dilemma is to recognise that South Africa does have a disproportional economic and political influence in Africa – figures presented in table 3 above suggest that current vacancies in the South African public sector exceed the total number of doctors in all of SADC. The analysis above yields a few **policy implications** to maximise the development benefits of health professionals' migration into South Africa:

- 5) Rather than finding loopholes through which the Government can freely recruit African doctors, it would be better for South Africa to negotiate a framework agreement within the region and *compensate or assist* those countries from which it receives medical migrants.
- 6) At the same time the country should *open itself up to doctors from the rest of the world*, regardless of development status. If surplus Indian, Pakistani or Pilipino doctors choose to leave home, it is hard to hold South Africa accountable.

- 7) The South African Government should implement a pro-active and recurrent recruitment drive to *attract foreign doctors from developed countries*. This would include participation at job fairs, the placement of advertisements and improved communication, support and administration at home.
- 8) *Direct recruitment from developing countries* could also be considered but should ideally be guided by a framework agreement which specifies the conditions under which recruitment can and will take place, and the type and level of compensation that will be provided to the country of origin (Wonca, 2002).

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4. Conclusions

Our study aimed to answer two inter-related questions on the relation between regulation, trade in health services and health systems:

- Does more liberal trade-related regulation increase trade in health services (and vice-versa)?
- What is the evidence on the benefits and costs of increased (or decreased) trade in health services on developing countries' health systems?

This report indicates that restrictions to trade can indeed decrease trade in health services (as in the case of South African restrictions to import health professionals from developing countries). On the other hand a liberal environment does not necessarily lead to increased trade if the underlying conditions for effective trade are not in place. This is evident in the case of the Indian health sector which has managed to attract little FDI despite a very liberal regulatory environment, and where other factors are more binding constraints.

The case studies suggest that increased trade in health services leads to small negative and positive effects on domestic health systems, with probably small net positive effects. For instance, the recent surge in emigration of nurses from India has not been associated with a reduction in the density of nurses in the country; in fact migration has probably stimulated the supply of new nurses via raising the attractiveness of the nursing profession. The involvement of the private sector in health services provision in India is likely to have released some public resources by serving a segment of the population that was using public sector services before. Obviously there may be instances in which increased trade in health services may have adverse effects; so for instance, the increased private sector participation in the health sector may have a negative impact on general public budgets in India due to the amount of public subsidies that the private health sector receives on the grounds of its contribution to the treatment of public sector patients. But these contributions are often not effective, thus generating an avoidable burden on public resources.

Both case studies show that restricting trade in health services will not address structural problems of domestic public health sectors; and in fact it could prevent the possibility of using trade in health services to tackle some of these structural problems. This is the case for imports of health professionals in South Africa, where public sector personnel shortages have been offset by immigration of health workers. Increased commercialisation of health services may improve the performance and equity of health systems if adequate complementary policies are in place, as shown by the positive experience of some Indian states through public-private partnerships.

We suggest five types of complementary policies in India, most of which would fit the South African and other developing countries' health sector as well:

- 1) Facilitating an orderly expansion of the health professionals skill base

- 2) Increasing the role of the State as financier rather than direct provider of health services
- 3) Strengthening public-private partnerships
- 4) Strengthening the health insurance market
- 5) Scaling up the overall public oversight system.

The South Africa case study shows that even (certain) developing countries may benefit from import of health professionals from other developing countries, subject to the adoption of specific policies:

- a) Compensating and/or assisting those countries from which it receives medical migrants
- b) Opening up to doctors from the rest of the world, regardless of development status
- c) Developing a pro-active and recurrent recruitment drive to attract foreign doctors from developed countries
- d) Direct recruitment from developing countries could also be considered as long as it is guided by conditions under which recruitment can and will take place, and the type and level of compensation that will be provided to the country of origin.

Obviously, the impact of trade in health services on health system is likely to be country-specific; moreover, not all developing countries may be equally equipped to take advantage of the potential benefits of trade in health services liberalization and to face the possible challenges. However, the principle that a more open regime of trade in health services may be an opportunity rather than a threat for domestic health systems is likely to apply more generally and is reinforced by the evidence presented here.

Appendix

List of people interviewed in India, 25 February-4 March 2008

Person	Institution	Role
Dr Rajiv Kumar	Rao Tula Ram Memorial Hospital	Medical Superintendent
Rupa Chanda	Indian Institute of Management Bangalore	Professor
Suneeta Reddy	Apollo Hospitals	Executive Director – Finance
Dr Lalitha Sekhar	Indraprastha Apollo Hospital	Clinical Coordinator – Wellness Centre
Dr Ashok Kumar	Central Bureau of Health Intelligence, Ministry of Health & Family Welfare	Director
Dr Bir Singh	Department of Community Medicine, All India Institute of Medical Sciences	Professor
Dr S Batra	Lok Nayak Jai Prakash Hospital	Medical Superintendent
Sheila Seda	The Trained Nurses' Association of India	Secretary General
Major HPS Ahluwalia	Indian Spinal Injuries Centre (ISIC)	Chairman
Dr A K Mukherjee	Indian Spinal Injuries Centre (ISIC)	Director General
Dr Naresh Trehan	Global Health Private Limited	Chairman
Rajiv Misra	Global Health Private Limited	Executive Director
Dr. Manju Vatsa	College of Nursing All India Institute of Medical Sciences, and Indian Nursing Council	Principal Member of the board (INC)
Dr. Chandrakant S. Pandav	Centre for Community Medicine, All India Institute of Medical Sciences	Professor & Head
Pranav Kumar	Consumer Unity and Trust Society	Researcher
Siddhartha Mitra	Consumer Unity and Trust Society	Director (Research)
Barun Kanjilal	Institute of Health Management Research	Professor
Lakhwinder P Singh	Institute of Health Management Research	Professor and Dean (Research)
P K Abdul Kareem	Department of Health & Family Welfare Ministry of Health & Family Welfare	Deputy Economic Adviser
Peter Berman	World Bank	
J.P. Steinmann	GTZ	Principal Advisor - Health
Vivek Rae	Dept. of Health & Family Welfare Government of Delhi	Principal Secretary
Dr. Narottam Puri	Fortis Healthcare Limited	President - Medical Education
Krishnan Ramachandran	Apollo DKV Health Insurance	Chief Operating Officer
Chandra Shekhar	Apollo DKV Health Insurance	Chief Marketing Officer
Ali Mehdi	Indian Council for Research on International Economic Relations (ICRIER)	Research Associate