## **BROOKINGS INDIA**

QUALITY. INDEPENDENCE. IMPACT

IMPACT SERIES RESEARCH PAPER NO. 082016



Priorities for India's National Health Policy

BY SHAMIKA RAVI RAHUL AHLUWALIA

## **BROOKINGS INDIA**

QUALITY. INDEPENDENCE. IMPACT

Brookings India IMPACT Series

© 2015 Brookings Institution India Center No. 6, Second Floor, Dr. Jose P Rizal Marg Chanakyapuri, New Delhi - 110021

#### Recommended citation:

Ravi, Shamika; Ahluwalia, Rahul (2015). "Priorities for India's National Health Policy," Brookings India IMPACT Series, Research Paper No. 082016.

The Brookings Institution India Center serves as a platform for cutting-edge, independent, policy-relevant research and analysis on the opportunities and challenges facing India and the world. The Center is based in New Delhi, and registered as a company limited by shares and not for profit, under Section 25 of the Companies Act, 1956. Established in 2013, the Center is the third and newest overseas center of the Washington, D.C.-based Brookings Institution. Our work is centered on the Brookings motto of "Quality, Independence, Impact."

All content reflects the individual views of the author(s). Brookings India does not hold an institutional view on any subject.

## Priorities for India's National Health Policy

BY SHAMIKA RAVI RAHUL AHLUWALIA

## **BROOKINGS INDIA**

QUALITY. INDEPENDENCE. IMPACT.



### Key Insights

- India's public health funding must focus on 'public goods' in health primary and preventive care, vaccination and sanitation among others
- Improved governance and management is absolutely critical for actual delivery of health services the Tamil Nadu Medical Services Corporation *governance model* could be adopted at larger scale for managing all health services delivered by the states
- Human resource shortages should be plugged by paramedics graduates of a three-year course have been shown to be as good as MBBS doctors for common rural primary health problems
- Higher levels of care should be left to the market, while government should focus on providing balanced and transparent regulation to enable the market to function
- Health care financing pitfalls can be avoided by adopting Health Savings Accounts which allow tax exempt savings that can only be used for medical purposes

#### Introduction

One of India's fundamental failings as a modern nation has been our inability to get successive governments to prioritise and deal with public goods. Public goods (as against private goods) have non-rival and non-excludable consumption which makes pricing difficult. This in turn makes their provision through the market mechanism tricky and hence they have to be provided by the government. Classic examples are national security, which we have been reasonably good at providing, and air pollution, which, as anyone living in urban India can tell you, we have not dealt with so well. Sadly, this latter tendency is far more visible in most of our public and quasipublic goods, what with the abysmal condition of our police and justice systems<sup>1</sup>, of sanitation and waste disposal<sup>2</sup>, and of our infrastructure at large. Instead of dealing with, as good governments must, such public and quasi-public goods that involve large externalities, both positive and negative, our governments have traditionally focused their energies on private goods - where consumption and benefits are closely tied and which markets can provide much more efficiently. This is why we have government run premier institutions of higher learning, but our primary education system is devoid of teachers<sup>3</sup> and replete with children that can barely read or do mathematics<sup>4</sup>. It is why we have large capital intensive industries in a country where labour is by far the most abundant resource, while our labour regulations and enforcement mechanisms both hamper more labour-intensive industries<sup>5</sup> and leave the vast majority of our labour force outside the pale of enforcement<sup>6</sup>.

Our healthcare systems too have had to grapple with the same sort of misaligned priorities: an inadequate focus on those elements of health which are public goods—like public health programmes, sanitation, health education, vaccination and primary healthcare, which has meant that large sections of our population live without the fundamental building blocks of a healthy life – while our tertiary healthcare systems have become advanced enough to cater to 'health tourists' from developed countries and public funding, particularly in recent times, has been used to provide secondary and tertiary medical insurance. The government in 2014-15 allocated more money to the Central Government Health Scheme (which treats only the central government's current and pensioned employees) and five hospitals—including one psychiatric

<sup>&</sup>lt;sup>1</sup> Subramanian (2007) presents data that the disposal rate of murder cases, the most reliable crime statistic, is at 15%, down from 35% in 1973. From this and other evidence he concludes "the state level judicial system is overwhelmed, and that the backlog of cases is mounting, resulting in a situation of justice being effectively denied by being indefinitely delayed"

<sup>&</sup>lt;sup>2</sup> India had 597 million people that practice open defecation in 2012 (World Health Organization 2014) <sup>3</sup> Kremer et al(2005) report that 25% of government teachers were absent and only half were actually teaching

<sup>&</sup>lt;sup>4</sup> Only 42% children in Standard 5 in government schools could read a Standard 2 text passage, and only 21% could do division in 2014. Alarmingly, both these figures have been getting worse, falling from 51% and 41% respectively in 2007 (ASER 2015)

<sup>&</sup>lt;sup>5</sup> Besley and Burgess (2004) demonstrate that states having inflexible labour regulations have had poorer manufacturing growth in the organised sector. Using similar methods, other authors, including Aghion et al(2008), and Ural and Mitra (2007) have confirmed these findings.

<sup>&</sup>lt;sup>6</sup> The organised sector is 7 percent of the total workforce according to NSS 2009-10 statistics and is the only segment 'protected' by our labour regulations

and physical rehabilitation hospital—than it did to the Ministry of Health's entire public health programme<sup>7</sup>.

In this paper we will argue that India's health policy needs to focus more on delivering those aspects of healthcare which are public or quasi-public goods to correct this balance, and to regulate and thus facilitate market provision of those aspects that provide private benefits. Keeping in mind that our governments have largely failed at providing even the healthcare they set out to provide in the past8, we also make a case for focussing on governance and management reform in the delivery systems for healthcare, and suggest a possible mechanism for that reform. For those aspects of healthcare that provide private benefits—secondary and tertiary healthcare—we recommend that the government focus on providing a different public good – balanced and responsive regulation.

As we noted earlier, public and quasi-public goods are characterised by non-rivalry and nonexcludability. The aspect of healthcare that most closely hews to the theoretical definition, and thus can best, and perhaps only, be provided by government, is what is known as public health—monitoring and assessing health in the population as a whole, and promoting healthy practices and behaviours among people. Other elements of public health, such as vaccination, education about, and access to, family planning, early screening for disease, all suggest that a large and robust primary care infrastructure to help deliver these, along with the more conventional general physician and associated medicine, is a critical (quasi) public good that would improve our chances at prevention, rather than just cure, and should receive public funding to reach efficient levels of provision for society.

Closely tied with the health of the population are other public goods, comprising such basic elements of cleanliness and hygiene (dear to our new PM's heart) as sanitation and waste disposal and treatment. Inadequate sanitation is linked to a large and preventable disease burden. A World Bank (2010) study showed that India lost 53.8 billion USD annually in premature mortality, lost productivity, healthcare provision and other losses due to inadequate sanitation.

These elements—a primary health care system geared as much towards screening, monitoring, vaccination, education, outreach and behavioural change as it is towards providing medical care, a functioning, well maintained sanitation system, waste collection and waste disposal are all fundamental building blocks of a healthier society. At the same time, these critical elements, unlike secondary and tertiary healthcare, are public goods with large positive externalities, and hence need public funding to be provided at socially optimal levels. We strongly recommend that the Indian health policy should prioritise funding to reflect this.

Funding however, is only one component and a relatively easy one for the government to address. Just as important, if not more so, and certainly more of a challenge, is the issue of governance and management in the healthcare system.

<sup>&</sup>lt;sup>7</sup> http://indiabudget.nic.in/ub2014-15/eb/sbe47.pdf accessed on 5.02.2015

<sup>&</sup>lt;sup>8</sup> Kremer et al(2006) report that 40% of health workers at Primary Health Centers in India were absent during unannounced visits.

#### Governance

The draft health policy of 2015 speaks about a wide variety of issues that plague our healthcare system: low public health expenditure, inequity in access and poor quality of care. It also suggests a variety of ways to address them, mainly focused around increasing government spending on health and expanding the public delivery system. However, the health policy fails to tackle head-on the core problem of the Indian health system—its management, administration and overall governance structure, without which the measures it suggests are merely symptomatic treatments, akin to applying, as Bannerjee and Duflo put it, a "Band-aid on a corpse". The policy draft itself provides evidence for this malaise. Russia and South Africa both have significantly higher levels of public health expenditure than India. In fact their spending is even higher than the target set by the draft health policy, yet they have life expectancies that are worse (South Africa) or only marginally better (Russia). On the contrary, Sri Lanka and Bangladesh are both countries that actually spend less on their healthcare (as a percentage of GDP) than us, yet both have better outcomes. Within India too, the draft policy notes that states with better capacity have utilized the National Rural Health Mission funds more effectively, while states with poorer initial conditions have been left with worse outcomes. The fundamental difference lies in management and governance structures.

#### Cross country comparisons (2011)

Country	Spend per capita (USD)	Total Health Exp as % of GDP	Govt. Health Exp as % of Total Health Exp	Life expectancy	Infant Mortality Rate	Maternal Mortality Rate
India	62	3.9	30.5	66	45	220
South Africa	670	8.7	47.7	59	34	140
Bangladesh	27	3.8	38.2	70	37	200
Sri Lanka	93	3.3	42.1	74	9	32

Source: World Bank

The evidence from the draft policy does not stand alone, and is in fact, supported by a rich literature. Globally, research findings have highlighted the criticality of administration in improving health outcomes. Rajkumar and Swaroop (2008) find that the effectiveness of public health spending in reducing child mortality depends on the level of perceived corruption. It is found that higher integrity is associated with reduced child mortality. Gupta et al (2000) show that corruption indicators (using Kaufman, Kraay and Zoido-Lobatón, 1999) are negatively correlated with child and infant survival, attended births, immunization coverage and birth weight. These results are robust even after accounting for spending on public health, education, and urbanization. In a study looking at the UN's Millennium Development Goals, Wagstaff and Claeson (2004) conducted an analysis which showed that across-the-board additions to government health spending have no significant effect on underweight children, maternal mortality, or tuberculosis mortality in poorly governed countries. They defined poorly governed countries as being one standard deviation below the mean score on the World Bank Country Policy and Institutional Assessment (CPIA) index. They estimated that for across-the-board spending to have a significant effect on outcomes such as malnutrition and tuberculosis

mortality, the CPIA score for a country has to get above the population-weighted average of 3.5. India's score in 2011 and 2012 was slightly below that threshold. Bannerjee and others (2008) provide evidence from an experiment within India. They find that an incentive program designed to increase nurse attendance in Rajasthan was initially successful but was eventually undermined by the local health administration and workers. They concluded that piecemeal attempts to improve health delivery would be ineffective until health system reform becomes a top priority for the stakeholders.

The weight of evidence clearly suggests that if we want our health outcomes to improve, the Indian health policy needs to focus on how its health system is governed and managed. While our people are among the best and brightest, long years of neglect and misgovernment have vitiated our public management systems with perverse incentives. It is easier and more sensible for people within the system to subvert their jobs - through chronic absenteeism, endemic corruption and private practice - than to actually do them. The draft policy mentions band-aids for a few of these problems, but it needs to prioritize and lay far greater focus on the critical issue of governance and management of the Indian health system.

Governance structures need to balance responsibility, flexibility and accountability (Feldman and Khademian, 2001) in order to carry out their functions. It is clear that our systems today, at best, fix responsibility, but do not provide the flexibility and accountability that our managers / bureaucrats need to do their jobs. A useful, and not entirely radical, model to consider would be the one pioneered in India by the Tamil Nadu Medical Services Corporation. It is a registered corporation set up by the Tamil Nadu government to procure drugs for the public health system. It is accountable to an independent board of directors which includes the health secretary. The corporation has an IAS officer as its managing director, and professionals and academics are hired or taken on deputation as deemed necessary. The model has proved so successful in improving drug supply in Tamil Nadu that several other states, including Kerala, have adopted it as the basis of their own governance structure.

#### Cross state comparisons within India (2011)

State	NRHM expenditure to allocation ratio (2009-10) <sup>1</sup>	Life expectancy <sup>2</sup> (2002-2006)	Infant Mortality Rate <sup>3</sup> (2010)
Kerala	107%	74	13
Tamil Nadu	104%	66	24
Bihar	88%	62	48
Bengal	80%	65	31
Assam	82%	59	58
Chhattisgarh	61%	58	51
Jharkhand	42%	58	42

<sup>&</sup>lt;sup>1</sup>- Source: Improving Effectiveness and Utilisation of Funds, NIPFP

A similar governance structure at the state level, albeit at a much larger scale, could be a suitable vehicle for the coming expansion of public delivery in primary and preventive healthcare in

<sup>&</sup>lt;sup>2</sup>- Source: Human Development Index for India's states, UN

<sup>&</sup>lt;sup>3</sup>- Source: Data.gov.in accessed on 15.01.2015

India. Present health workers and doctors who are employees of the government can be absorbed on deputation, while new hiring and capacity building can be carried out by the corporation. Thus, they will not be hampered by either restrictive government rules for employees, or the negative image that is associated with short term contracts which became the favoured capacity building instrument for the National Rural Health Mission. Internationally, this model is in fact already quite well established in the healthcare delivery space. The National Health Service (NHS) of the United Kingdon, one of the largest organisations in the world, already operates on a very similar model, with an executive board that is accountable to the secretary of health. Its mandate and targets are set by the government, but it operates as a largely independent entity. Finances are devolved to local health boards, which 'purchase' or contract NHS primary care providers and hospitals on a services rendered basis, ensuring accountability at the local as well as the highest levels.

Whether or not this specific type of model is adopted for healthcare delivery in India, the more fundamental point is that governance and management of any health system is a core determinant of its effectiveness. The National Health Policy of the Modi government should make it a prominent focus of reforms, thereby announcing a tectonic shift in India's healthcare system.

#### The Healthcare market

We come now to the provision of secondary and tertiary care. Unlike the elements of public health discussed above, secondary care and tertiary care have most of the characteristics of private goods. The benefit from secondary care and tertiary care derives largely to the person that is undergoing care, with few, if any, externalities involved. The role for public action from the aspect of dealing with externalities is thus limited. At the same time, healthcare is widely recognised as not being a typical private good. The main problem in the proper functioning of healthcare markets is poor information available to consumers, which manifests itself in a number of ways, and these must be dealt with if we are to have a healthcare market that works. In spite of these issues, we argue that it is better for India's government, with its long track record of massive inefficiency and waste, to try and make the market work, rather than step in and provide all healthcare on its own, as some governments in more advanced economies do.

#### Making the market work: Regulation

Perhaps the most important issue to be addressed in healthcare markets is information asymmetry—consumers typically know very little about healthcare, and doctors (are supposed to) know a lot. This makes service quality hard to judge both when attempting to choose a service provider, and after having received healthcare. Poor medical records, when they exist, exacerbate this problem, making it difficult even for other doctors to judge the quality of care. Both of these aspects are very important to address via regulation and public funding, as is the related matter of how extremely poor quality care, or malpractice, is to be handled.

Supporting the consumer's search for good healthcare can be accomplished in a number of ways, and indeed there are already market solutions trying to fill this need. Websites have started up in India that allow people to look for doctors near them and rate and review those doctors, providing a source of information that did not previously exist, and introducing a form of market pressure for doctors to perform better. The government should supplement such efforts

with its own regulatory initiatives. Currently, a morass of health 'regulators' exists. The National Accreditation Board for Hospitals & Healthcare comes under the Department of Industrial Policy and Promotion. The clinical (registrations and regulation) act comes under the Ministry of Health and Family Welfare. The National Pharmaceutical Pricing Authority comes under the Ministry of Chemicals and Fertilizers. There is clearly scope, and need, for rationalisation of regulatory authority so that regulatory actions can be better coordinated.

One contribution that the regulatory authority can make is to establish rules for maintaining medical records, preferably based on a single standard for Electronic Medical Records. The Ministry of Health & Family Welfare has already drafted such a standard with the help of an expert committee. Doctors and Hospitals should be encouraged to phase in these standards, and over a period of five to six years, they should be made mandatory. Standard Electronic Medical Records can have large benefits not only from a regulatory point of view, helping to establish quality of care and resolve potential disputes between doctor and patient, but going forward they also open up several possibilities to help improve healthcare, just one of which is that they be linked to Aadhar and made available on a network that can be accessed by physicians in case of emergency.

Regulators should also act to improve and ensure patient safety. Here, we draw from the suggestions made by Madhok et al in an editorial of the National Medical Journal of India (2012). Regulators should create and support the creation of systems for "recording, learning and reporting on the quality of services and adverse events in a 'balanced' manner (neither too heavy-handed, nor too light)". Such an approach is necessary in dealing with these events too. India's courts and laws already tend to err on the side of the physician, which is good news for a system that focuses on the 'patient safety' methodology, but managing the tension between encouraging systematic reporting of adverse events to improve patient safety while building incentives to reduce such events will be a critical function for regulators. One tool that could help manage this tension is a list of India specific 'Never Events'9, and regulation around such a list, which should help reduce common yet preventable medical mistakes. A regulatory body can also encourage implementation of evidence based global best practices such as hand hygiene and surgical checklists.

The internet is already hard at work ameliorating the negative effects of information asymmetry by supporting and empowering patients with both more information and more resources to question professionals. Regulators should work to further support the work being done by providing trusted sources for people to use, for example, the Mayo Clinic, the Patient Safety Alliance (www.patientsafetyalliance.in), and others. Another intervention that regulators should make is by increasing the importance of patient safety at the level of education and training by mandating, for instance, the World Health Organization (WHO) curriculum on patient safety at the undergraduate level and for established professionals through some manner of continuing medical education. The task of regulation in the context of medical education in India is particularly important, and currently particularly badly done and we return to this in the section

<sup>&</sup>lt;sup>9</sup> Serious incidents that compromise patient safety and that would not have occurred if commonly available preventive measures had been followed

on human resources.

#### Financing of healthcare in India

Another way lack of information causes problems in healthcare markets is uncertainty—people do not know when they will fall sick or how, so it is difficult to plan for healthcare costs, which can be substantial. Large uncertain expenditures are typically covered by insurance, but insurance has also proved to be a poor model for healthcare, famously leading to the extremely expensive and distortionary US healthcare system<sup>10</sup>. Health insurance has adverse selection and moral hazard problems, wherein people who are more likely to require care are more likely to want insurance, and people who are insured are likely to both demand more care, and to receive more care through supplier induced demand, leading to the 'death spiral' of insurance companies needing to raise rates, which increases the incentives for adverse selection and leads to a dysfunctional system and public intervention, as 'Obamacare' and its universal mandate have shown. That too is far from an ideal situation in the context of increasing life expectancies and improving tertiary care, where instead of the typical insurance markets—where a large pool insuring against risks that will only be realised for a few-almost the entire pool is certain to have healthcare expenses, only the timing is uncertain. As the population ages, the younger and healthier part of the pool diminishes, there are fewer people to pay into the healthcare system, while more people are consuming healthcare<sup>11</sup>.

So we need a different way to account for uncertainty in the timing of medical expenses that will help people pay for them, but does not suffer from all of these problems. One solution to these theoretical problems is medical savings accounts (MSAs). These would function similarly to normal savings accounts, with savings incentivised by tax deductions that apply as long as the money is used only for healthcare expenditures arising for the individual or their immediate family. This method dovetails neatly with existing practice, since medical insurance is already tax exempt to a certain degree, and will also help mobilise savings. It also removes the distortionary effect the tax deduction has on medical spending.

The evidence on cost containment in the healthcare system through MSAs in countries where they have been tried is mixed, but this is because they have either been introduced in parallel with other reforms or tried in mixed systems at a small scale where they cannot be expected to have an impact. In India, we have the opportunity to introduce a non distorting financing system for healthcare at a stage where financing for healthcare is still at a nascent stage and medical insurance is not as entrenched as in the United States. We should take it. If we wish to address the concerns of inequity with MSAs—that the poor cannot pay into such accounts and will not be protected from financial shocks, we should do that in the least distortionary waygovernment payments into these accounts for those that are most at risk, particularly children.

<sup>&</sup>lt;sup>10</sup> Alarmingly, the US model is the one we seem to be currently emulating, with medical insurance provided tax breaks by the government and typically tied to employers

OECD(2013) projections estimate that healthcare costs will rise to significantly higher(as much as 7.7 percentage points of GDP levels for the developed countries and 7.3 percentage points for the BRIICS countries

#### Mainstreaming AYUSH

A large component of India's healthcare sector comprising Ayurveda, Yoga, Unani, Siddha and Homeopathy also needs to be brought under the ambit of regulation. The longer term goal must be to incorporate elements from such traditional approaches under the broader umbrella of evidence based medicine. Our ancestors did sterling work in devising some of these approaches to improve our health. We must try and build on this work and back it up with empirical evidence that can stand the gold standard test of clinical trials. We must also keep in mind the shorter term goals of allowing consumers to benefit from the advantages these approaches have to offer while attempting to minimise the harm that they cause. A possible approach to achieve this is thrown up by a similar effort made in Hong Kong to harmonise Chinese traditional medicine with modern 'bio-medicine', wherein experts on both were consulted in successive rounds to try and arrive at a common minimum consensus which could be agreed on to allow both groups to work together in improving healthcare. Such an exercise can easily be repeated in India to permit us to arrive at a policy for mainstreaming the AYUSH sector.

#### **Human Resources**

The paucity of qualified health workers in India is well documented. We only had 0.7 physicians per 1000 people in 2012<sup>12</sup>. The corresponding numbers for the Organisation for Economic Cooperation and Development and China are 3.213 and 1.9. Closer home though, Sri Lanka and Bangladesh both have similar or even lower ratios, 0.7 and 0.4 respectively. So the physician shortage is not the critical limiting constraint in achieving better health outcomes. More critical is the distribution - the public health system, particularly in rural areas, is very short of qualified personnel. 18% primary health care centers are without doctors, and 52 percent of specialist posts at community health care centers are vacant (Rao et al 2011). The deficit of human resources in support staff is also quite severe. One estimate (WHO 2010) put this deficit at 2.4 million to reach a nurse ratio of 1 nurse to 500 patients. The nurse to population ratio in India is 1:2500, approximately 10 times less than richer countries. The nurse to doctor ratio is also quite low, with 0.5 nurses (1.6 nurses and midwives) per doctor, compared with 3 in the US and 5 in the UK. It's not just the quantity that is a problem, the quality of education in nursing schools is also suspect. Changes to state government notifications in Uttar Pradesh for instance, made seniority the only criteria to hold teaching jobs, and the Indian Nursing Council withheld recognition from nursing schools under the state government (Raha et al 2009).

The disincentives to working in rural areas in the public health system are many and complex. They relate to financial and non-financial factors, including lower salaries, poor working conditions, unreliable service rules and fewer opportunities for the workers and their families.

<sup>&</sup>lt;sup>12</sup> Source: World Bank http://data.worldbank.org/indicator/SH.MED.PHYS.ZS accessed 20.02.2015

<sup>&</sup>lt;sup>13</sup> Source: OECD http://www.oecd.org/els/health-systems/Briefing-Note-CANADA-2014.pdf accessed 20.02.2015

These disincentives and conditions also vary from place to place, and as such specific solutions for attracting human resources are best left to empowered local management.

The central government should focus on ensuring adequate supply. This can be achieved both by expanding training of physicians and health workers under the current system, and expanding the system itself to provide certification and training to new categories of paramedical staff focused on public health—preventive and primary care. Under the expansion of primary and preventive public health care that we recommend, more work will exist for nurses and other paramedical workers with training in public health. Accordingly, an expansion of training programs for such health workers, along with a revised training curriculum that focuses on various aspects of public health management is advisable. These new categories could include both para-physicians-cum-public-health-managers that are trained (and licensed) to practice at the primary health centre level, and community health workers with more rigorous training and a more stable role than the current Accredited Social Health Activists (ASHAs).

One promising way forward is offered by Chhattisgarh's experience with 3 year long medical training provided to students from the state. While the course was shut down in a few years after opposition from doctors, its graduates were hired as Rural Medical Assistants (RMAs) in government run Primary Health Centers (PHCs). A Public Health Foundation of India (PHFI) study in 2010 evaluated PHCs across the state, focusing on diseases and conditions that PHCs most need to treat. They found that PHCs run by RMAs were just as good as those run by regular MBBS doctors in terms of provider competence, prescription practices and patient and community satisfaction. China's famous 'barefoot doctors'—high school graduates who were trained in local hospitals to treat common ailments and in preventive healthcare also played a large role in improving health in rural China. This evidence suggests that three year degrees focusing on conditions that most commonly crop up at the PHC level (obviously, these may differ from state to state), on preventive healthcare and on public health management, would provide a group of qualified personnel willing and able to serve the cause of healthcare in rural areas in India.

The Bachelor of Science in Community Health degree, which is intended to fill exactly this role but has been hanging fire in government files for over four years now, and also finds a place in the draft national health policy, should thus be approved. However, the government should learn from the Chattisgarh experience and create conditions that will allow the initiative to succeed. It should clearly stipulate the status of graduates of the degree - what they will be able to call themselves, what conditions they will be considered qualified to treat, what they are expected to refer to more qualified doctors (emergencies aside) and what medicines they are free to prescribe. Importantly, the government must also lay down a system for progression for any graduates of this course. If they are to be hired at PHCs after graduating, there must be a system where after a certain number of years of service they can expect to continue their education and further their careers.

Another set of professionals that can be mainstreamed in this way are practitioners of traditional medicine systems or AYUSH doctors. Though the same PHFI study found that AYUSH doctors did not score as highly as RMAs or MBBS doctors in provider competence or prescription practices, they did better than paramedical staff, and patients had the same degree of trust in AYUSH doctors. Since they already share some aspects of training with MBBS

doctors, additional modules of training in modern medicine can be provided to them, again focused on the issues that crop up most commonly at a rural PHC and aspects of public and preventive health management. This would enable them to perform the role of primary health care providers.

#### Indian medical education and the MCI's role

The number of medical colleges in India has increased from 152 colleges with an MBBS intake of 12249 in 1995 (Dasgupta 2014) to 398 colleges with an intake of 52105 in 201514. While an expansion in capacity is a positive, the lack of regulatory probity surrounding this expansion is less welcome. The Medical Council of India, the body responsible for regulating medical education, has faced criticism from several quarters on the charges of corrupt functioning. This is best exemplified by the constant taint surrounding its long time (though not current) president Ketan Desai, who was asked by the Delhi High Court to step down in 2001 after it established that he had misused his office for monetary gain, kept the council well below full strength and appointed about half the members himself (Sharma 2001). However, he maintained control of the council through proxies, until he won an appeal at the Supreme Court and was reinstated by the council as president in 2009 (Pandya 2009). In 2010, Mr. Desai was arrested again, on charges of accepting a bribe to 'recognise' a medical college in Punjab, after which the government dissolved the entire council. When the council was reconstituted however, one third of the members that found a place in it had been associated with the MCI earlier, and Mr. Desai himself was nominated by Gujarat University as the member from Gujarat, though he still has CBI cases pending against him<sup>15</sup>. The following excerpt from a November 2014 Times of India News article<sup>16</sup> indicates that there are still significant issues with the MCI's functioning (ellipses ours). "Inspection of medical colleges is ... done through a random selection of inspectors and colleges to be inspected... However, a look at the inspections this year, since the current Medical Council of India (MCI) took charge, indicates a pattern that hardly seems random.

"Of 261 inspections, inspectors from medical colleges in Gujarat were involved in about 100 and another 40 involved faculty from Bihar. Yet inspectors from Tamil Nadu, the state with the highest number of government medical colleges, were involved in just seven inspections. There were 24 inspectors involved in 40 inspections from just two medical colleges in Haryana, a state with just three government colleges, while only six faculty members were involved in seven inspections from Kerala, a state with nine medical colleges. Out of 33 inspections done by inspectors from Delhi, 21 were from just one medical college, Maulana Azad Medical College (MAMC), though Delhi has six medical colleges. Of those from MAMC, just two doctors were involved in 11 inspections."

Transparent and honest regulatory bodies are the most critical public good of them all, and

<sup>&</sup>lt;sup>14</sup> http://www.mciindia.org/InformationDesk/CollegesCoursesSearch.aspx Accessed 05.02.2015

<sup>15</sup> http://indiatoday.intoday.in/story/ketan-desai-medical-council-of-india-returns-to-hauntregulatorybody/1/328211.html, accessed 05.02.2015

<sup>&</sup>lt;sup>16</sup> http://timesofindia.indiatimes.com/india/The-murky-world-of-medicalcollegeinspections/articleshow/45172843.cms, accessed 05.02.2015

a basic requirement of a smoothly functioning healthcare system. The MCI's corruption stems partly from the widespread corruption in our institutions, but also from its monopoly position in regulating medical education and recognising the qualifications of doctors. Alongside efforts to clean up corruption through investigation and prosecution, we should also take steps to reduce the monopoly power held by the MCI by devolving some of its powers, such as inspection and recognition of medical colleges, to state level bodies while leaving it with the ability to set standards.

#### Conclusion

India's public healthcare sector is poised at a crossroads, and the direction we take will be critical in determining the trajectory of our healthcare sector in the years to come. We argue that our new health policy should focus on expanding and effectively delivering those aspects of health that fall under the definition of public goods, for example, public health, vaccination, health education, sanitation, primary care and screening, family planning through empowering women, and reproductive and child health. These are all aspects of health with significant externalities and thus cannot be efficiently provided by markets. Large gains in our nation's health, and particularly the health of the poorest and most marginalised, can be made with this limited focus. Importantly, these gains can come very cost effectively, as demonstrated by our neighbours Bangladesh and Sri Lanka. It is not an expansion in spending that is critical for improving health outcomes. Instead, we need to set appropriate goals and reform our governance and management systems so that they are able to deliver against those goals.

Where secondary and tertiary care are concerned, we believe that the government's role should be to provide a different public good – sensible and responsive regulation that allows a healthcare market to develop. The government's regulatory mechanism will need to address issues of information asymmetry between doctors and patients, for which we recommend government action to supplement market solutions for doctor discovery and quality appraisal that are already springing up. Hospital accreditation, increased importance for patient safety standards and guidelines, standardised, and, in time, mandated Electronic Medical Records are all measures that will go towards ameliorating market failures that arise from information asymmetry in healthcare. Increased focus on patient safety in medical curriculums will help, but providing regulation that balances the twin objectives of improving monitoring, reporting and prevention of adverse events while disincentivising the events themselves will be a key challenge for regulators.

Healthcare financing is another area where government can play a large role. Medical insurance has proved to be a poor model for financing healthcare. It faces several theoretical pitfalls and has been one of the major factors behind the extremely expensive and unsustainable healthcare system in the USA. One approach that circumvents the adverse selection and moral hazard issues of medical insurance is that of introducing Medical Savings Accounts (MSAs). These can be incentivised by tax deductions that would apply if the accounts were used to pay for medical expenses, and equity concerns can be alleviated by direct payments for those that cannot pay for themselves.

Human resource expansion in healthcare is an area where transparent and responsive government regulation on the supply side is a public good of fundamental importance.

The expansion in quantity of doctors trained needs to be balanced by quality. There is also a need for formal recognition for and training of paramedical roles—a primary care and public health oriented physician along with community health workers that can help us beat the human resource crunch that we face, particularly at the rural primary healthcare level. Practitioners with training in traditional medicine can also be potentially mainstreamed into such roles. These methods can help us accomplish the task of building a health care system that places its principle public spending focus on making and keeping large swathes of our population healthy, and its principle regulatory focus on creating an efficient market for healthcare.

#### References

Aghion, Philippe, Robin Burgess, Stephen Redding, and Fabrizio Zilibotti. 2008. "The Unequal Effects of Liberalization: Evidence from Dismantling the License Raj in India" American Economic Review, 98(4): 1397-1412

Annual Status of Education Report (2015) "Trends Over Time 2006-2014", ASER Centre

Bannerjee, A., E. Duflo, and R. Glennerster. 2008. "Putting a band-aid on a corpse: Incentives for nurses In the Indian public health care system". J Eur Econ Assoc.; 6(2-3): 487–500

Besley, Timothy, and Robin Burgess (2004) "Can Labor Regulation Hinder Economic Performance? Evidence from India." Quarterly Journal of Economics, 119(1): 91–134

Dasgupta S. (2014) "Reforms in medical education: Optimizing quantity and quality", Indian J Public Health; 58:1-4

Feldman, M. and A. Khademian. 2001. "Principles of public management practice". Governance: An International Journal of Policy and Administration; 14-3:339-361

Gupta, S., H. Davoodi, and E. Tiongson. 2000. "Corruption and the Provision of Health Care and Education Services". IMF Working Paper. Washington D.C.: International Monetary Fund.

Kaufman, D, A. Kraay and P. Zoido-Lobatón. 1999. "Governance Matters." World Bank Policy Research Working Paper 2196. Washington, D.C.: World Bank.

Kremer, Michael; Muralidharan, Karthik; Chaudhury, Nazmul; Rogers, F. Halsey and Hammer, Jeffrey. (2005) "Teacher Absence in India: A Snapshot." Journal of the European Economic Association, 3(2-3), pp. 658-67

Kremer, Michael; Muralidharan, Karthik; Chaudhury, Nazmul; Rogers, F. Halsey and Hammer, Jeffrey. (2006) "Missing in Action: Teacher and Health Worker Absence in Developing Countries", Journal of Economic Perspectives, Volume 20, Number 1, 91-116

Madhok, R, Roy, N and Panesar S (2012), "Patient Safety in India: Time to speed up our efforts to reduce avoidable harm", The National Medical Journal of India Vol. 25, No. 3

Pandya, S. (2009) "Medical Council of India: the rot within" Indian Journal of Medical Ethics, [S.l.], v. 6, n. 3, p. 125-131

Public Health Foundation of India (2010) "Which Doctor For Primary Health Care? An Assessment Of Primary Health Care Providers In Chhattisgarh, India"

Rajkumar, A. S. and V. Swaroop 2008. "Public Spending and Outcomes: Does Governance Matter?" Journal of Development Economics 86, 96–111

Raha S, Berman P, Bhatnagar A (2009) "Some priority challenges of the nursing sector in India."

#### India Health Beat

Rao, Mohan, et al. (2011) "Human resources for health in India." The Lancet 377.9765: 587-598

Sharma, D. (2001), "President of Indian medical council found guilty of corruption", The Lancet, Volume 358, No. 9296, p1882

Subramanian, A. (2007), "The evolution of institutions in India and its relationship with economic growth" Oxford Review of Economic Policy 23 (2): 196-220

Ural, Beyza P., and Devashish Mitra. 2007. "Indian Manufacturing: A Slow Sector in a Rapidly Growing Economy." World Bank Policy Research Working Paper 4233

Wagstaff, A. and M. Claeson. 2004. Rising to the Challenge: The Millennium Development Goals for Health. Washington, D.C.: World Bank.

World Bank Water and Sanitation Program (2010), "The Economic impacts of inadequate sanitation in India", World Bank

World Health Organization (2010) "Wanted: 2.4 million nurses, and that's just in India" http://www.who.int/bulletin/volumes/88/5/10-020510.pdf, accessed 05.02.2015

World Health Organization (2014), "Progress on Drinking Water and Sanitation", World Health Organization 2014

#### THE BROOKINGS INDIA IMPACT SERIES

Brookings India's fundamental objective is to contribute meaningfully to the process of designing solutions for India's policy problems. We aspire to do this in a way which fully reflects the core values of analytical quality and independence of views. We believe that policy recommendations based on these two attributes are most likely to have a positive impact on outcomes.

Since we began our activities in 2013, we have been active in three broad domains: Economic Development, Foreign Policy, and Energy & Environment. We have initiated research on several issues within these domains and, simultaneously, organised a regular series of conversations between various stakeholders, who bring their particular perspective to the discussions in a constructive way. These activities have helped us understand the nature of specific problems in each domain, gauge the priority of the problem in terms of India's broad development and security agenda and develop a network of people who think deeply about these issues.

As the Indian government concretises its policy priorities and the methods and institutions with which it intends to address these critical issues, we at Brookings India see this as an opportunity to contribute to the policy thinking across a range of issues. The Brookings India IMPACT Series represents our efforts to do this. In this series of policy papers, authors will offer concrete recommendations for action on a variety of policy issues, emerging from succinct problem statements and diagnoses. We believe that these papers will both add value to the process of policy formulation and to the broader public debate amongst stakeholders, as opinion converges on practical and effective solutions.

Given Brookings India's current research focus, we are classifying the papers into three categories: Development and Governance; Foreign Policy; and Energy and Environment. Many of the papers are written by Brookings India researchers, but, in keeping with our objective of developing and sustaining a collaborative network, we have invited a few experts from outside the institution to contribute to the series as well.

We look forward to active engagement with readers on the diagnoses and recommendations that these papers offer. Feedback can be sent directly to the authors.

### The Authors



### Shamika Ravi

Dr. Ravi's research is in the area of Development Economics with a focus on Political Economy of Gender Inequality, Financial Inclusion and Health. She is also a Visiting Professor of Economics at the Indian School of Business, where she teaches courses on Game Theory and Microfinance. She is an Affiliate at the Financial Access Initiative of New York University, member of the Enforcement Directorate of Microfinance Institutions Network in India and served on boards of several microfinance institutions. Dr Ravi publishes extensively in peer reviewed academic journals and writes regularly in leading newspapers.

Her research work has been featured and cited by BBC, The Guardian, The Financial Times and several leading Indian newspapers and magazines.



Rahul Ahluwalia

At the time of writing this paper, Rahul Ahluwalia worked as a Research Associate with Brookings India, working on issues of development like health, education and financial inclusion. He has a Post Graduate Diploma in Management from the Indian Institute of Management Calcutta and a Masters in Economics from the University of British Columbia. Mr Ahluwalia now works with NITI Ayog.

# BROOKINGS INDIA

QUALITY. INDEPENDENCE. IMPACT

# BROOKINGS INDIA

QUALITY. INDEPENDENCE. IMPACT



Brookings Institution India Center No. 6, Second Floor Dr. Jose P Rizal Marg Chanakyapuri New Delhi – 110021 www.brookings.in