



Market Forces

in Primary Care Systems: A Framework
A tool to assess and improve primary care in India

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Acknowledgements

The authors wish to thank the technical reviewers, especially Tricia Morente and Rekha Viswanathan, for their constructive feedback and insights. We appreciate Nishant Chaven for leading the field interviews in Mumbai, and all the providers and patients for giving us time and openly sharing their perspectives.

About ACCESS Health International

ACCESS Health International is a nonprofit think tank, advisory group, and knowledge and implementation partner to governments and the private sector. We are dedicated to improving access to high quality, affordable healthcare in low, middle, and high income countries. We advise national and regional governments and the private sector on the design and management of healthcare finance and delivery systems.

Our vision is that all people, no matter where they live, no matter what their age, have a right to access high quality and affordable healthcare.

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There is a growing recognition that India needs to strengthen primary and preventive healthcare, across both public and private sectors, if it is going to achieve universal health coverage.

1.

Introduction

There is a growing recognition that India needs to strengthen primary and preventive healthcare, across both public and private sectors, if it is going to achieve universal health coverage. What do we mean when we talk about primary care? Primary care is the first point of entry into the health system in a patient's care seeking effort. However, in our definition primary care is not just a service delivery point. With strong ties to the local community, primary care provides an important platform for preventive and promotive efforts such as nutrition counseling, mothers groups, and outreach for school health. Primary care also provides a platform or coordination point to address social determinants of health, including clean water and sanitation. People with chronic and complex illnesses such as mental health issues or diabetes will benefit most from improved coordination between different health services.

However, primary care in India is typically organized around the short term interests of both the consumer (feel better quickly through, for example, antibiotics) and the provider (maintaining patient footfalls), as well as other health systems actors – undermining health outcomes. This framework provides a pathway to taking a more strategic long term view of strengthening primary care, as per the traditional role of policy making.

A barrier to strengthening private sector primary care is that there is no clarity on what it looks like; it is barely visible in policy debate or program planning. The heterogeneity and complexity of the sector pose a challenge to putting a clear definition in place. To this end, this framework has been devised for use at different policy and programmatic levels to guide an understanding of the diversity of the primary care market and the forces that shape the markets where primary care is provided. The framework captures the range of providers, service delivery settings, and business relationships that exist for primary care provision in India – taking into account huge hyperlocal variation across geographies and socioeconomic

contexts. A working definition can help direct interventions toward creating a stronger overall system, including both public and private efforts. The definition posed here provides a way to structure an understanding of the sector, and provides clarity in strengthening a complex and pluralistic sector.

The framework, presented in Chapter 3, describes the primary care system through the WHO Health Systems Building Blocks¹, with the addition of the community as the starting and center point. It highlights the complexity of the sector, providing a list of key variables for assessing the role of the private sector, its actors for primary care provision, and its engagement with government. It serves as a tool to understanding community and market behaviors and needs.

To apply the framework, a four step process is proposed in Chapter 4. This process aims to help policy makers assess and design primary care interventions. **The steps are as follows: define the goal of the intervention; identify the key market; identify the key actors within each building block; and finally, evaluate market forces and risks.** By going through this framework, policy makers and program designers can strategize potential solutions to increase access to, and the quality of, primary care, and create programs that shift incentives toward more robust, sustainable, and locally driven solutions (see Figure 1 for the full range of expected outcomes). For existing programs, the framework can be used to map progress and make adjustments as required.

With the goal of universal health coverage as a priority, we think reforms to primary care in India are overdue. With this in mind, we developed this framework to facilitate such reforms. As we describe the existing situation in the subsequent sections, the situation can seem intractable. However, we have included case studies of successes from similar transition economies in Turkey and Brazil to demonstrate that changes to primary care

Figure 1: Primary care anticipated outcomes



access and quality are possible and reap positive health and efficiency impacts for governments and communities. We suggest that similar changes are not only possible in India, but are urgently required.

Methodology

To begin the analysis, we conducted a desk review of published and grey literature about the involvement of the private sector in providing primary healthcare services in India. This included published journal articles and publicly available reports from programs engaging the private sector in primary care, including the Center for Health Market Innovations, the Harnessing Non State Actors for Better Health of the Poor (HANSHEP) program, and other agencies (see bibliography for more details).

Subsequently, we conducted in depth key informant interviews with a purposive sample of key stakeholders, including consumers and providers. These informants were chosen because of their usual invisibility in policy dialogue; we wanted to understand the health system from their

perspective, in their own words. This reflects the ethos of our framework, which puts the consumer in the middle. Participants were recruited from owner operated clinics in suburban Mumbai. Interviews were conducted in Hindi, Marathi, or English as required.

We then arranged this information according to the WHO Health System Building Blocks, and intersecting with the World Bank's Market Forces. We used this to develop a framework that serves to identify the most important actors in the market, as well as key market forces. The framework includes the private primary care sector, including formal and informal providers, and the public sector. The framework was shared with experts familiar with primary care both in India and globally for feedback and comment, to test it against implementation experience. We also reviewed the framework against a proposed primary healthcare initiative in Uttar Pradesh to assess the expected influence of the intervention on the health system building blocks in the program districts (see Annexure 1).

¹ World Health Organization. (2007). "Everybody's Business – Strengthening Health Systems to Improve Health Outcomes: WHO's Framework for Action."

Primary care has typically been understood as the foundation of the health system. A tenet of health system planning since the Bhole report (1946) is that services should be located as close as possible to people.

2.

The context: Primary care in India

Primary care has typically been understood as the foundation of the health system. A tenet of health system planning since the Bhore report (1946) is that services should be located as close as possible to people.² In the public system in India, primary care is well defined: a primary health center (and the peripheral subcenters within the primary health center's catchment area) is strategized to be the first point of contact with the formal medical system and a point of referral to higher levels of specialist care. Despite the clarity of this definition, care seeking is much messier – even for minor ailments, many patients head straight to higher levels of care at the community health center, or to a hospital where there is a greater array of services available and a doctor is more likely to be present.

Most care in India is not delivered through the public sector, and the public sector alone is unlikely to be able to achieve universal health coverage. The private sector in India is vast and is poorly understood. Much of the private sector is invisible in policy debate – this is especially so for primary care. It is frequently regarded with suspicion by policy makers and public health practitioners. Some concerns are well founded. An unregulated private sector for health can have negative effects on the health system and households. For example, high out of pocket payments for private care is often the cause of catastrophic health expenditures.³ The private sector has also been associated with an increase in multidrug resistance for diseases such as tuberculosis due to low adherence; a lack of standardized drug regimens; and insufficient patient follow up.⁴ However, private sector providers offer an attractive alternative to consumers where public services are inaccessible, of poor quality, or unresponsive to local needs. Furthermore, it is often the only acceptable and available option.⁵

The highest profile private players are big tertiary care hospitals such as Manipal, Fortis, and Apollo; however, such tertiary hospitals account for only two percent of private healthcare institutions.⁶ Of 1.3 million private providers in India, over

Expert perspective

A primary healthcare approach is the most efficient and cost effective way to organize a health system. International evidence overwhelmingly demonstrates that health systems oriented towards primary healthcare produce better outcomes, at lower costs, and with higher user satisfaction.

*Dr. Margaret Chan,
Director General of the WHO*

eighty percent are “owner administered enterprises” (solo practitioners) delivering primary care services. What do these owner administered enterprises look like? There is huge variation across geographies – not only between urban and rural areas, but also within different cities, districts, and economic segments. We can make some generalizations, however. Most will not have an MBBS degree, or other medical degree. Whatever their training, they are likely to practice allopathic medicine (see Appendix 1 on care seeking patterns in rural Uttar Pradesh). They will be well embedded in their community, serving clientele in close proximity to their residences. They will also be commercially embedded within a network of diagnostic clinics and specialists they refer to, drug suppliers, and medical shops.

Who counts as a service provider then? For the purpose of this document, and reflecting the reality of the healthcare landscape in India as described above, we have taken an inclusive approach to defining who is a “service provider.” A provider is “someone who receives payments (either through a salary or via fee for service from the patient or a third party) for providing medical advice beyond a product, such as medicine.”⁷ This includes formal and informal providers (often called quacks), nurses, and community health workers, pharmacists, and AYUSH providers. We also take an inclusive approach to sites of care – seeing as primary care is delivered in pharmacies, out patient departments, primary care chains, and nursing homes (see range of provider types in Table 3).

Meanwhile, in the public system, there are huge shortfalls of formal health workers in all states. The numeric shortfalls are compounded by provider absenteeism, low capacity, low effort, and poor quality care. These problems typically manifest at the primary care level –where facilities have been resistant to quality improvement and accountability efforts.

In depth interview

The government doesn't have much of a contribution in terms of health, because low income groups of people can't afford private practitioners. Neither can they go to government hospitals and wait for three hours in the queue – they might lose their daily wage. So such classes of people become sandwiched in between.

*MBBS Doctor,
Ghatkopar West, Mumbai*

² Bhore, J. (1946). “Report of the Health Survey and Development Committee.” Vol. 2. “Recommendations.”

³ Balarajan, Y., Selvaraj, S. & Subramanian, S. V. (2011). “Health Care and Equity in India.” *The Lancet*, 377(9764), 505–515.

⁴ Sheikh, K., Singh, A., Chokshi, M. & George, S. M. (2011). “Regulating the Availability of TB Medicines in India.” PHFI, Delhi.

⁵ Balabanova, D., Oliveira-Cruz, V. & Hanson, K. (2008). “Health Sector Governance and Implications for the Private Sector.” Rockefeller Foundation.

⁶ Mukhopadhyay, I., Selvaraj, S., Sharma, S. & Datta, P. “Changing Landscape of Private Health Care providers: Implications for National Level Health Policy” (unpublished paper); Raman, V. (2014). “Private Sector and Public-Private Partnership in Health Service Delivery in India.” Chapter 2.6 in *Infrastructure Report 2013–4: The Road to Universal Health Coverage*. IDFC, Oriental Black Swan.

⁷ Das, J. & Hammer, J. (2014). “Quality of Primary Care in Low-income Countries: Facts and Economics.” *Annu. Rev. Econ.*, 6(1), 525–553.

Despite this gap in the public system, and contrary to popular perception, access to care in India is not really a problem, due to the strong presence of these diverse private providers. Ignoring the private sector at the policy level has not made it go away – it has become stronger. Its reach and size now mean it must be factored into and embraced in health systems planning through improved coordination and mutual accountability. There is an acknowledged need to coordinate with different provider types, operating in both public and private sectors, toward a more inclusive and pluralistic health system.⁸ Targeted policy changes and pilot experiments are required to strengthen the private sector and to guide reform.

Finally, we firmly locate private sector primary care as part of a larger health system. It has been argued that the heterogeneity of the private sector in India means it cannot be divided into primary, secondary, and tertiary care (as with the public sector).⁹ However, this document advocates and works toward a clearer definition of primary care for the private sector, **as the foundation of a coordinated health system** (as illustrated in Table 1 below).

Table 1: Locating private sector primary healthcare in the larger health system: Levels of care and features

| Level of care | Features |
|----------------|---|
| Primary Care | <ul style="list-style-type: none"> First contact providers, located as close as possible to people Gatekeeper or coordinator function – to refer patients along appropriate pathways Focus on promotive preventive care, basic curative care, health education Screening and referrals (e.g. non communicable diseases, tuberculosis) Basic diagnostic tests and treatment Emergency triage |
| Secondary Care | <ul style="list-style-type: none"> Hospital chains, nursing homes In patient care Diagnostic tests and treatment Basic surgery |
| Tertiary Care | <ul style="list-style-type: none"> Multispecialty care In patient care High level surgery and emergency medicine |

⁸ Planning Commission. (2011). "High Level Expert Group Report on Universal Health Coverage for India" (No. id: 4646); Rao, M., Rao, K. D., Kumar, A. S., Chatterjee, M. & Sundararaman, T. (2011). "Human Resources for Health in India." *The Lancet*, 377(9765), 587–598.
⁹ World Bank, IFC. (2014). "Landscape of Inclusive Business Models of Healthcare in India."

Strengthening primary care as part of the National Family Health Strategy in Brazil

In Brazil, the National Family Health Strategy was introduced as part of the Unified Health System (Sistema Único de Saúde) in 1998 with a mandate to strengthen primary care as the backbone of the health system. The Family Health Strategy reorganized healthcare delivery from facility centered, passive, curative care toward a comprehensive primary care approach.¹⁰ Primary care, as opposed to hospital visits, became the usual source of care for most Brazilians (from forty two percent in 1998 to fifty seven percent in 2008). The rate of avoidable hospitalizations decreased by fifteen percent after the reform was introduced. There was a corresponding improvement in critical health outcomes, including postneonatal infant mortality rates, and a reduction of deaths from diarrhoeal disease.¹¹

Primary healthcare reforms in Turkey

In Turkey, the Health Transformation Plan launched in 2003 was the flagship program to extend universal health coverage to the population. It placed emphasis on scaling up primary healthcare with a strong gatekeeping function by primary care physicians. A key aspect of the reform was to restructure how family physicians were engaged; they transitioned from working as government employees to contract workers with clearly defined performance terms.¹² Starting in 2005, family physicians were contracted to provide an expanded basket of primary health services, including preventive care, home and mobile based care, and targeted services for mothers and children. The physicians were paid on a capitation and performance basis, which included the potential to make a substantial upside for meeting primary care indicators, or to have a portion of their salary withheld for underperforming. As a result, there was a substantial improvement in the availability of maternal and child health services – particularly related to immunizations and antenatal care, and a threefold increase in the volume of primary care cases attended to by family physicians.¹³

¹⁰ Paim, et al. (2011). "The Brazilian Health System: History, Advances and Challenges." *The Lancet*, 377: 1778–1797.

¹¹ Ibid

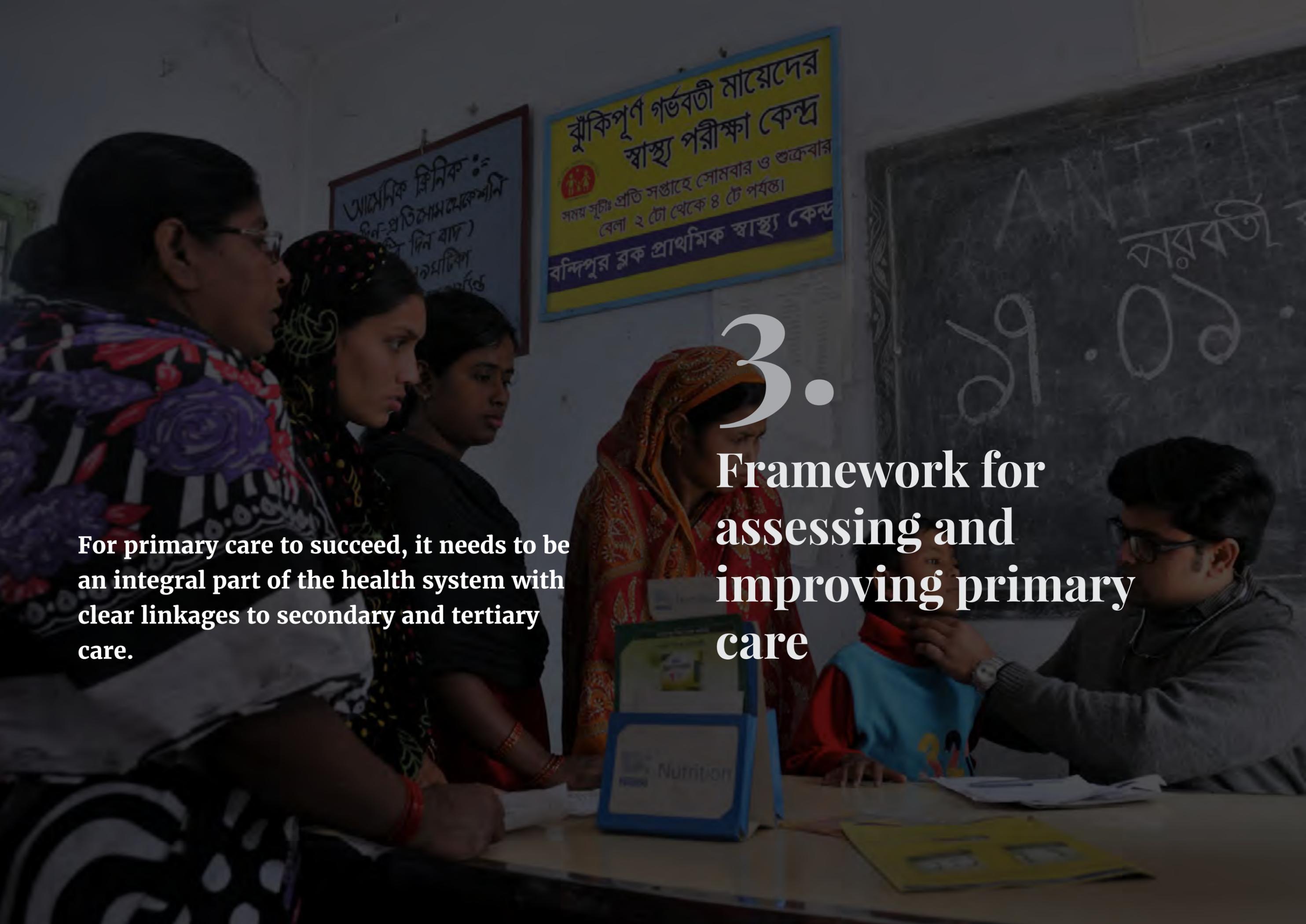
¹² Atun, et al. (2013). "Universal Health Coverage in Turkey: Enhancement of Equity." *The Lancet*.

¹³ Ibid

For primary care to succeed, it needs to be an integral part of the health system with clear linkages to secondary and tertiary care.

3.

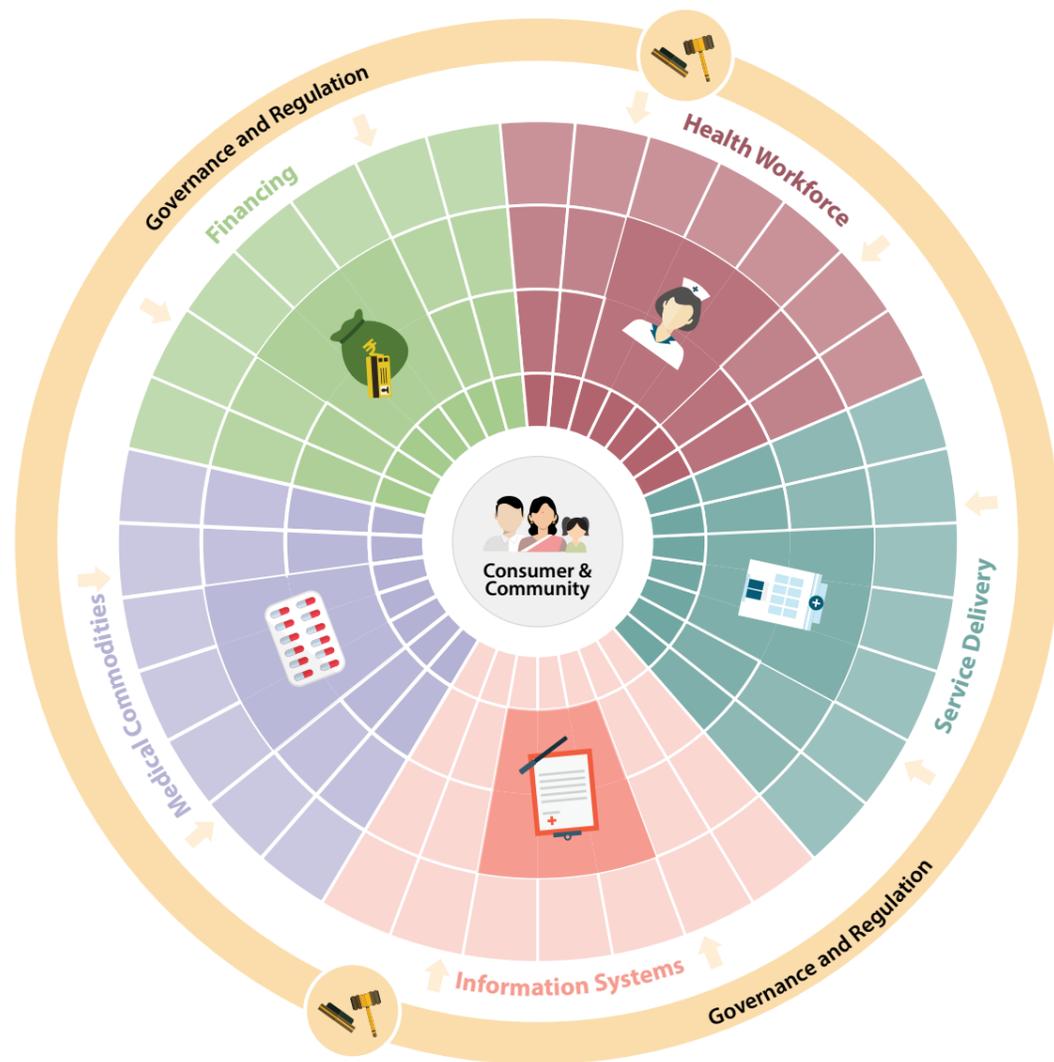
Framework for assessing and improving primary care



For primary care to succeed (see Figure 1 for the outcomes we expect as part of “success”), it needs to be an integral part of the health system with clear linkages to secondary and tertiary care. Strengthening primary care requires that all the components of the health system and value chain building blocks are considered. The objective of this framework is to facilitate a situation analysis in a given context and to inform plans and strategies to strengthen primary care as part of a larger system. To map this, we have referred to the WHO Health Systems Building Blocks,¹⁴ with some key adjustments, including a stronger focus on the consumers and community, which is depicted at the center of our framework (see Figure 2).

As portrayed below, the seven building blocks of any health system include: **the consumers and community** (the people who seek care), the **health workforce** (the providers who deliver care), **service delivery** (the facilities and context in which care is delivered), **information systems** (the platforms that generate and manage data), **medical commodities** (the supply of medicines and equipment), **financing** (the payers of care), and **governance and regulation** (oversight and policy making in the system). These building blocks are present in all health systems, though the strength of each block and its relationship to others will vary by context.

Figure 2: Health system building blocks



¹⁴ World Health Organization. (2007). “Everybody’s Business – Strengthening Health Systems to Improve Health Outcomes: WHO’s Framework for Action.”

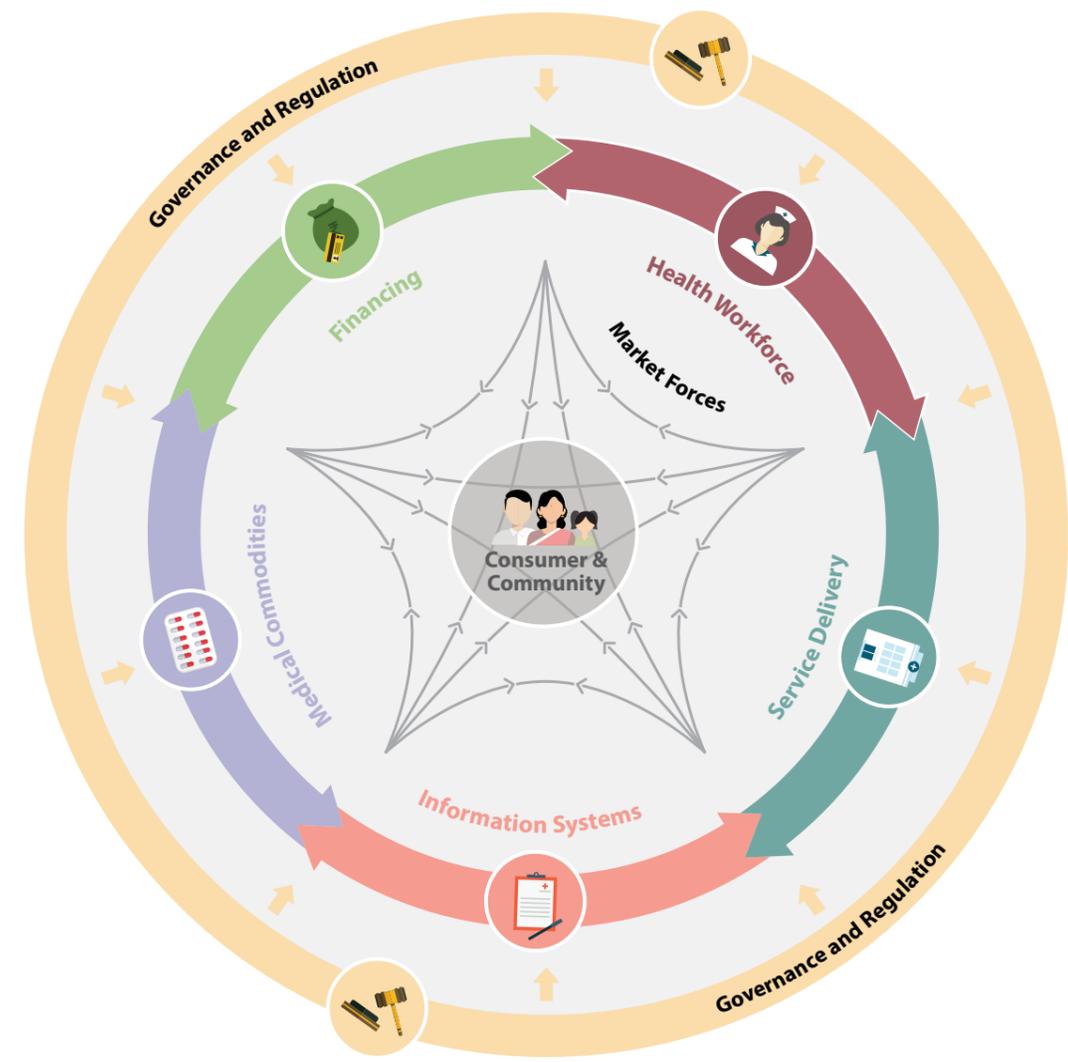
Market Forces

An important lens that we layer onto this framework is the lens of **market forces** (see Figure 3). These are local, context specific influences, such as competition or entry barriers, that directly affect the shape of each building block and collectively have a powerful influence on the functioning of a healthcare system. By adding the market forces lens onto the health system building blocks, we encourage program designers and policy makers to evaluate the underlying influences in the market and to carefully account for them in programming. Market forces continually mediate across and between the health system building blocks (such as between consumers and service providers) and directly influence the character of a given

building block. Market forces are also affected by the building blocks, particularly in the case of governance and regulation. For example, medical commodities in India are typically sold by providers who are not licensed to sell drugs, on account of two parallel influences: strong consumer demand for products and limited enforcement of regulation on providers who sell medical commodities. Understanding local market dynamics and their influence on a given building block is important for effective programming.

We have referred to the work on market forces by the “Managing Markets for Health” teams at the University of Edinburgh and the World Bank, and incorporated their conceptual model into our health systems building blocks framework. We

Figure 3: Framework for assessing market forces in the health system



show how their analysis of market forces can be combined with an analysis of the building blocks to assess interventions to strengthen or improve private sector primary care. It is important to look at the system as a market, recognizing how market forces influence the behavior of all actors

on the supply and demand side, including actors in public and private sectors. Summarized in Table 2 is an overview of the six types of market forces and a discussion of how each applies to private providers in the Indian primary care context.

Table 2: Types of market forces

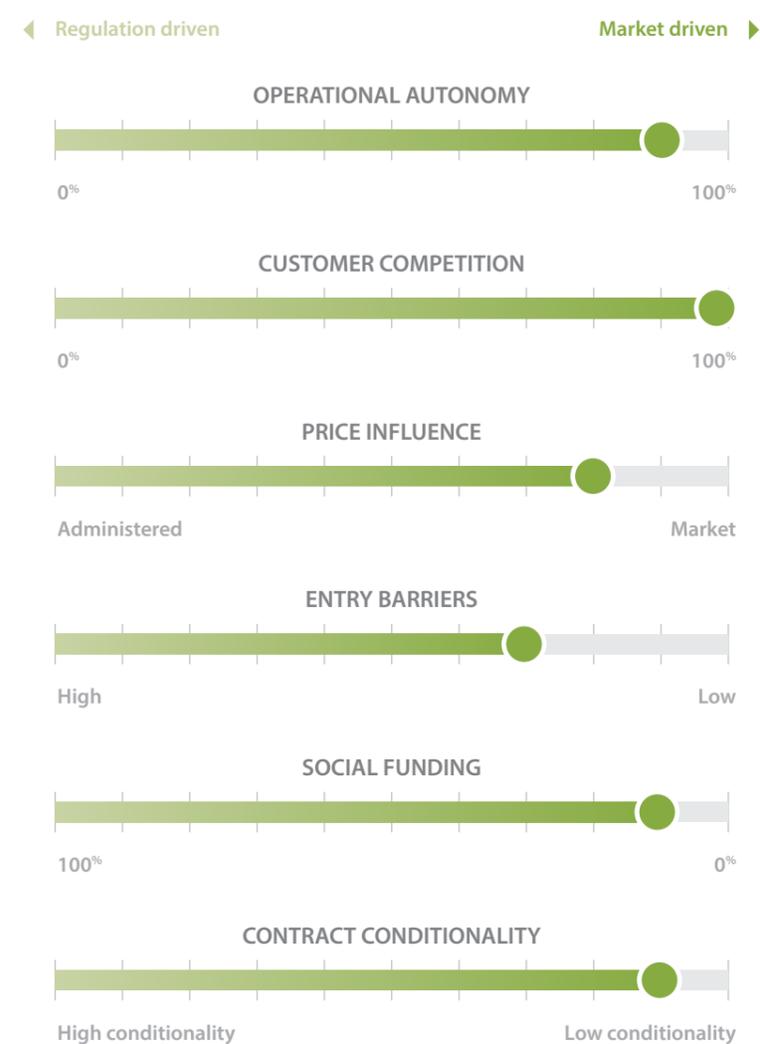
| Market force | Definition | Examples from our analysis in India |
|---|---|--|
| Operational autonomy | The degree of autonomy or regulatory constraint on the day to day activities of a healthcare provider. It combines both the <i>magnitude</i> of constraint and the <i>proportion</i> of providers who operate under the constraint. For example: Are providers able to collect user fees, allocate funds according to need, and set their own prices? | Over seventy percent of primary care in India is delivered by private providers with close to full operational autonomy. Providers in the public sector, on the other hand, have very little autonomy in how they manage their practices. |
| Customer competition | The degree to which providers' income depends on customers' choices and their demand for services. It combines the <i>degree</i> of dependence on customers with the <i>proportion</i> of providers in the market who express such dependence. | High out of pocket spending in India indicates most provider income is derived from customer payments. Other sources of income may include kickbacks from suppliers. Most places in India have high degrees of customer competition. |
| Price influence | Providers' ability to set the price of the services and products they sell. For example, are there regulations or price limits that are established and enforced by the government? | In private sector primary care in India, prices are almost always set freely and in consideration of the market that is being served. While there is a maximum retail price for drugs sold, price adherence is not always enforced. |
| Entry barriers | The barriers a new provider faces when entering a market. For example, a barrier can be high costs associated with the initiation of services. It can also be regulatory or social barriers to entering the market. | Our review of the evidence has found that preexisting networks and patronage relationships can block new entrants to the market. However, a low level of education is not a barrier, nor are regulatory requirements. |
| Social funding | Includes funds pooled through insurance arrangements, such as government sponsored programs. It can also include public or private funds or grants that cross subsidize a provider's practice. | Social funding for primary care, including pooled mechanisms for financing, currently do not exist in India on a large scale. |
| Performance tension under contract | A mandate or pressure on service providers to operate under formal contracts, or to meet certain performance standards under a contract. | There is limited contracting of private providers for primary care services in India, and thus little performance pressure on providers. However, this is starting to change as some states are contracting specialized private organizations to manage their public primary health centers. |

The private sector primary healthcare market in India is characterized by little regulation and strong market forces, as depicted in the scales below (see Figure 4). Typically, providers enjoy a high degree of operational autonomy, are competitive in attracting customers, have the ability to set prices according to demand, and receive little or no social funding. Though formal entry barriers are not high, a provider's ability to establish a practice can be influenced by factors such as ethnicity and social networks. Providers typically do not hold formal contracts that impose conditions on their

practice, but this is starting to shift as some state governments engage the private sector under performance contracts.

The following sections broadly characterize the building blocks in India's private sector primary care system, and discuss how each building block is mediated by specific market forces. The characterization is supported by excerpts from the literature and qualitative interviews with providers and consumers in low income neighborhoods of Mumbai and rural Uttar Pradesh.

Figure 4: Market forces in private sector primary care in India





The consumer and their community are at the center of the health system. The health seeking behavior of an individual is determined by the community and family in which they live as well as other factors such as income levels, education levels, cultural norms, and values. In the private sector, the perceived needs and choices of the consumer are central to service delivery. Here we attempt to identify how the consumer and the community shape private sector primary care.

A.

The consumer and the community

-  **Key Factors and market forces that shape consumer behavior and choices**
1. Customer competition is high, with providers largely relying on out of pocket payments from the community
 2. Low health literacy among consumers, who are influenced by providers who “oversell”
 3. Frequent and suboptimal care seeking: preference for “more” and quick treatment
 4. Consumers use price as a proxy to determine the quality of services rather than provider qualifications or licensing
 5. Consumers prefer allopathic providers and medicines
 6. Health literacy and care seeking patterns can be positively influenced by social networks and behavior change initiatives

A focus on primary care requires putting people at the center of healthcare. Despite the availability of datasets such as the National Sample Survey Office, under the Government of India, little attention has been paid to consumer preferences, priorities, and care seeking patterns in India. A goal of this framework is to **sharpen the focus on the consumer** to address this gap. The consumer is central to, and the starting point of, the framework (see Figure 5). Understanding the perspective of the consumer is key to appropriate provisioning, commercial success, improved health outcomes, fostering accountability, and keeping health spending in check.

The health system in India can be an intimidating and hostile environment for consumers. However, this does not deter them from care seeking. People seek care frequently from a range of providers in both public and private sectors – often for the same ailment.¹⁵ Contrary to popular perception, access to care in India is not really a problem. People in rural Rajasthan, a low income and low density state, visit a doctor about six times a year.¹⁶ This is nearly on par with the average for member countries under the Organization for Economic Cooperation and Development, which is seven visits a year.¹⁷ In Delhi, individuals visit doctors about five times a year.¹⁸ This high level of care seeking means there is a high level of competition among providers for customers. However, to no avail – health outcomes are still poor.

In which case, the question we must ask is: Why is care seeking not improving health status? The heterogeneity of the market can be difficult to navigate, especially complex facility environments such as multispeciality hospitals. Low health literacy is also a problem. Subsequently, consumers exercise choices in surprising ways when it comes to choice of provider. Care seeking patterns are suboptimal – with many delays; failures to seek care when required; seeking the wrong kind of care; and using price as a proxy to determine quality, rather than provider credentials. From a provider point of view, irrational prescribing and unnecessary procedures result in poor quality care in both sectors.¹⁹

Research suggests that consumers prefer providers who deliver more, where more includes both rational and beneficial “things” and completely unnecessary “things.”²⁰ The high level of competition for customers means that providers will cater to these

¹⁵ Das, J. & Hammer, J. (2014). “Quality of Primary Care in Low-Income Countries: Facts and Economics.” *Annu. Rev. Econ.*, 6(1), 525–553.

¹⁶ Banerjee, A., Deaton, A. & Duflo, E. (2004). “Health Care Delivery in Rural Rajasthan.” *Economic and Political Weekly*, 944–949.

¹⁷ OECD. (2017). Doctors’ consultations (indicator). doi: 10.1787/173dcd26-en (Accessed on 20 March 2017).

¹⁸ Das, J. & Sánchez-Páramo, C. (2002). “Short but Not Sweet: New Evidence on Short Duration Morbidities from India.” World Bank Policy Research Working Paper (2971).

¹⁹ Das, J., Holla, A., Das, V., Mohanan, M., Tabak, D. & Chan, B. (2012). “In Urban and Rural India, a Standardized Patient Study Showed Low Levels of Provider Training and Huge Quality Gaps.” *Health Affairs*, 31(12), 2774–2784.

²⁰ Das, J. & Sánchez-Páramo, C. (2002). “Short but Not Sweet: New Evidence on Short Duration Morbidities from India.” World Bank Policy Research Working Paper (2971)

In depth interview

Money minting with purpose is good, but my experience with the medical fraternity is very scary. They keep saying, ‘Please pay the bill,’ but when I ask if he will survive they are blank. They keep asking for money, money, money.

Consumer,
Andheri, Mumbai

In depth interview

I never had a bad experience with respect to local doctors or to my family doctor. But my neighbor had a bad experience with another doctor in the Santosh Nagar area. His injection touched her bone, and since then she walks by limping continuously. Because of the disability she is not getting married. Since that incident, patients very rarely go to this doctor.

Consumer,
Santosh Nagar, Mumbai

Figure 5: The pivotal role of the consumer in primary care



preferences. This means that consumers frequently receive treatment that they do not need, and they pay for it, increasing out of pocket healthcare spending. Unnecessary treatments are not just expensive; they can often be injurious to health. This undermines the whole point of primary care, which is to moderate rather than accelerate medical intervention.²¹ This means seeking care can actually adversely affect health outcomes – for example, irrational prescribing of antibiotics is leading to drug resistant strains of “superbugs” (see the Service Delivery section for further details around risks to patients’ health).

However, there are a range of outreach interventions that can improve healthcare seeking and health literacy, such as women’s self help groups. For instance, in rural Uttar Pradesh, women who participate in community groups where discussions on healthcare are routine are aware of their benefits through the National Health Mission. Group members reported specifically accessing maternal and child health services through their ASHA worker at public health facilities, rather than the private providers that they frequent for most other illnesses.²²

In depth interview

Last week a lady patient came to see me, she had a urine infection for the last three years. She used to go a homeopathic practitioner who would give six to seven intramuscular injections and saline water and a few tablets. She just asked for a regular urine checkup. During these years, she felt only temporary relief. I asked the patient whether she was asked to do a ‘urine culture’ test, to which she said no. . . . That patient may be at high risk of kidney damage due to the influx of so many irrelevant injections, the saline, and the tablets. So I advised the patient to do a ‘urine culture’ test and then she will start her treatment.

MBBS Doctor,
Ghatkopar West, Mumbai

²¹ Van Lerberghe, W. (2008). “The World Health Report 2008: Primary Health Care: Now More than Ever.” World Health Organization.

²² Based on focus group discussions led by ACCESS Health International with Self Help Group members in Lakhimpur Kheri, Uttar Pradesh in December 2014.



The health workforce includes all people who are involved in working toward a healthy population – including service delivery, public health, and administrative functions. In this section we attempt to identify the factors that shape the composition and distribution of the workforce.



B.

Health Workforce

Key Factors and market forces that shape the health workforce

1. High levels of geographic variability in quality of care, density of providers, and types of providers
2. Entry barriers for private health providers are generally low, given little enforcement of licensing and certification.
3. Shortages of formal providers even where entry barriers are low – especially in areas where the need is greatest
4. Very few private providers have formal contracts that influence performance; without formal contracts, labor costs and the price of services are not standardized
5. Evidence shows that informal and formal providers often deliver care of similar quality
6. Consumers often prefer informal providers because they speak the same dialect, have established relationships, offer flexible payment options, come to people's homes, and even accompany them to the hospital.

Given that more than seventy percent of primary care is delivered by private providers, we ask who is delivering this care? Primary care is delivered by a wide range of formal and informal provider types, across a range of different care giving disciplines: ayurvedic, homeopathic, and allopathic (see Table 3, below). There are many factors and market forces that shape the nature of the health workforce – shortages of formal providers,²³ low entry barriers related to clinical credentials and

licensing, regulations that limit the role of nurses and paramedics, uneven quality of medical education, limited contract conditionality and staff absenteeism, and compromised professional councils. Formal providers' aversion to primary care and public health priorities creates a huge gap largely filled by private informal providers – especially in rural areas.

In the absence of formal providers, informal providers flourish. In one study of rural Madhya

Pradesh, sixty seven percent of healthcare providers reported no medical qualifications at all;²⁴ in another study it was twenty five percent.²⁵ However, this varies by geography. A provider mapping exercise from Tamil Nadu found the presence of informal and traditional providers is low, and declining.²⁶

Lack of suitable qualifications is not just a challenge specific to the private sector.²⁷ Despite government hiring restrictions, many informal providers operate in public clinics. In a study by Das et al, when “standardized patients” visited public clinics, they were seen by whoever was providing care at that time.²⁸ In sixty three percent of interactions in public clinics in rural Madhya Pradesh, this was a provider without medical training.²⁹ As mentioned earlier, qualitative data from Mumbai suggests that many consumers do not typically know or recognize the educational background of their provider – they use price as a proxy indicator for quality.

While informal providers flourish, National Sample Survey Office data indicates that consumers, both men and women, prefer allopathic providers across all states of India, in rural and urban contexts. For example, over ninety percent of urban men seek care from an allopathic provider (see Table 4). It is unlikely however that these “allopathic” providers are actually licensed or trained to practice medicine.

In depth interview
Most of the patients in this area go to doctors nearby, because the time is the important factor here in Mumbai . . . and also patients don't even know what degrees the doctors have. I have asked the tenth grade pass patients to tell me what degree I have, and they were not able to answer.
MBBS Doctor, Ghatkopar West, Mumbai

Table 3: Different provider types currently delivering primary care

| | Education/ Training in Medical Care | Eligibility to Practice Modern Medicine | Geographic Presence |
|--|--|--|---|
| Specialist Doctors | Doctor of Medicine (MD); typically a two year course | Licensed to provide specialist care; often also providing primary care – especially pediatricians and OBGYNs | Urban centers, district, block headquarters and large towns |
| MBBS Doctors | Bachelor of Medicine, Bachelor of Surgery (MBBS); typically a four year course | Licensed to provide care | Urban centers, district, block headquarters and large towns |
| AYUSH Practitioners (Ayurveda/Unani/Siddha) | Formally trained in alternative medicines; many have training in modern medicine | In some states, AYUSH providers are licensed | Ubiquitous |
| Pharmacists | Bachelor of Pharmacy degree | Not licensed to recommend treatment | Large towns |
| Nurses and Paramedics | Formally trained under various degrees, including a Bachelor of Science or Diploma | Depending on qualification, typically as an aide to medical doctors | Large towns |
| Informal Providers | No formal training; many have assisted a formally trained practitioner in the past | Unlicensed | Ubiquitous |

Table 4: Type of care sought in India – national level, NSSO 2014

| | Male (percentage) | | | Female (percentage) | | |
|--------------|-------------------|-----------|-------|---------------------|-----------|-------|
| | None | Allopathy | Other | None | Allopathy | Other |
| Urban | 2.8 | 90.4 | 6.8 | 2.5 | 91 | 6.5 |
| Rural | 4.1 | 90.6 | 5.3 | 4 | 88.7 | 7.3 |

²⁴ Das, J., Holla, A., Das, V., Mohanan, M., Tabak, D. & Chan, B. (2012). “In Urban and Rural India, a Standardized Patient Study Showed Low Levels of Provider Training and Huge Quality Gaps.” *Health Affairs*, 31(12), 2774–2784.

²⁵ Rao, K., Bhatnagar, A. & Berman, P. (2009). “India’s Health Workforce: Size, Composition and Distribution.” In La Forgia, J. & Rao, K., eds., *India Health Beat*. New Delhi: World Bank, New Delhi and Public Health Foundation of India.

²⁶ Ramachandar, L. & Pelto, P. J. (2004). “Abortion Providers and Safety of Abortion: A Community-based Study in a Rural District of Tamil Nadu, India.” *Reproductive Health Matters*, 12(24), 138–146.

²⁷ Banerjee, A., Deaton, A. & Duflo, E. (2004). “Health Care Delivery in Rural Rajasthan.” *Economic and Political Weekly*, 944–949; Banerjee, A. V., Duflo, E. & Glennerster, R. (2008). “Putting a Band-Aid on a Corpse: Incentives for Nurses in the Indian Public Health Care System.” *Journal of the European Economic Association*, 6(2-3), 487–500; Chaudhury, N., Hammer, J., Kremer, M., Muralidharan, K. & Rogers, F. H. (2006). “Missing in Action: Teacher and Health Worker Absence in Developing Countries.” *The Journal of Economic Perspectives*, 20(1), 91–116.

²⁸ “Standardized patients” are a way to assess quality of care. Actors are trained to present to different providers with an array of symptoms (acting as “standardized patients”), and the providers’ compliance with standard care protocols in treating the actor is assessed.

²⁹ Das, J., Holla, A., Das, V., Mohanan, M., Tabak, D. & Chan, B. (2012). “In Urban and Rural India, a Standardized Patient Study Showed Low Levels of Provider Training and Huge Quality Gaps.” *Health Affairs*, 31(12), 2774–2784

²³ See for example: Planning Commission. (2011). “High Level Expert Group Report on Universal Health Coverage for India” (No. id: 4646); and Rao, M., Rao, K. D., Kumar, A. S., Chatterjee, M. & Sundararaman, T. (2011). “Human Resources for Health in India.” *The Lancet*, 377(9765), 587–598.

Why do people seek care from informal providers? Informal providers frequently have flexible arrangements for payments, speak the local dialect, are considered local opinion leaders, are better trusted with confidential information (such as unwanted pregnancies or sexually transmitted infections), are cheaper, are conveniently located and accompany patients to the hospital.³⁰ Qualitative research also finds that informal providers are more responsive to patient needs and expectations – they provide treatments that give quick relief with little concern to long term effects, such as steroid injections or high level antibiotics.

Unfortunately, a medical degree is no guarantee of quality care. Evidence from both Delhi and rural Madhya Pradesh has found that for a range of conditions, the quality of care was similar, whether delivered by MBBS doctors or informal providers.³¹ Other studies have found similar levels of knowledge about HIV and other sexually transmitted infections among allopath and registered medical providers in southern India.^{32,33}

This highlights a larger concern. Across all provider types, public and private sectors, and sites of care there is a consistent risk to the wellbeing of the consumer: a low level of competence. A study from 2005 in Delhi found that a provider had to have above average competence to have a fifty percent chance of not harming their patients. Even among the top twenty percent of providers, the likelihood of harming the patient was more than fifty percent for viral diarrhea, twenty five percent for preeclampsia (a potentially life threatening condition of hypertension in pregnancy), and seven percent for tuberculosis.³⁴

However, it is impossible to describe a typical Indian scenario, as there is huge geographic variation among states – and even within cities. Poorer neighborhoods typically include a higher proportion of providers with low competence.³⁵

E Swasthya Case Study

Rural patients generally preferred ‘quacks’ or ‘doctors with bags’ to public providers and traditional healers. A quack’s typical treatment was to give steroid injections, which had an immediate palliative effect and made patients feel energetic. After receiving these shots, patients were more likely to return to work and tell family and friends about their experience. Although steroid shots were banned in India and had questionable treatment value, villagers had learned to associate ‘good’ care with these shots since they seemed to produce instant results.

*Jhunjhunu District,
Rajasthan (Kanter 2011)*

³⁰ Ganatra, B. & Hirve, S. (2002). "Induced Abortions Among Adolescent Women in Rural Maharashtra, India." *Reproductive Health Matters*, 10(19), 76–85; Kanter, R. M. & Bird, M. (2011). "Piramel e-Swasthya: Attempting Big Changes for Small Places – In India and Beyond." Harvard Business School Case Study 9-310-134.

³¹ Das, J., Holla, A., Das, V., Mohanan, M., Tabak, D. & Chan, B. (2012). "In Urban and Rural India, a Standardized Patient Study Showed Low Levels of Provider Training and Huge Quality Gaps." *Health Affairs*, 31(12), 2774–2784.

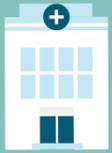
³² Mignone, J., Washington, R. G., Ramesh, B. M., Blanchard, J. F. & Moses, S. (2007). "Formal and Informal Sector Health Providers in Southern India: Role in the Prevention and Care of Sexually Transmitted Infections, Including HIV/AIDS." *AIDS Care*, 19(2), 152–158.

³³ This evidence must be applied with caution. Maternal health is a field that has long grappled with the question of what to do with traditional and informal providers, and how to moderate overmedicalization. Despite many years of attempted integration, there is still no evidence that traditional birth attendants can contribute to improving maternal and newborn health outcomes. Estimates suggest that attendance of a skilled provider at deliveries prevents twenty to thirty percent of maternal and newborn mortality globally.

³⁴ Das, J. & Hammer, J. S. (2004). "Which Doctor? Combining Vignettes and Item Response to Measure Doctor Quality." World Bank Policy Research Working Paper, (3301).

³⁵ Ibid





The domain of service delivery describes the clinical encounter between health provider and consumer, in a facility or community based setting. In the previous section we looked at who is providing care – in this section we look at the location and context of the encounter. We review data about quality of care to understand factors that shape service delivery quality and access.

C.

Service Delivery

Key Factors and market forces that shape service delivery

1. Private health facilities enjoy a high degree of operational autonomy, and determine their service offering and pricing based on demand; the reverse is true in the public sector, where facilities receive earmarked funds for predetermined inputs and services.
2. Where providers work in both public and private clinics, the quality of care is worse in the public sector, possibly due to the influence of customer competition.
3. Location of care seeking is driven by providers seeking a proximate residential catchment area, among “like” businesses, and a by consumer preference for a local provider.
4. Though the Clinical Establishment Act (2010) is aimed to regulate new facilities, it is rarely enforced in the private sector, keeping entry barriers low.
5. Providers in both the public and private sectors exert low effort due to lack of contract conditionality.

National Sample Survey Office data tells us that care is sought in the private sector for over seventy four percent of all out patient episodes in the country. This may be in a private doctor's clinic, a nursing home, or a hospital (see Table 5). Unfortunately, this care is typically of poor quality. This is not just due to low levels of provider competence (as described earlier). Another challenge is poor infrastructure, poor cleanliness, and low levels of provider engagement and effort.

In most contexts time is short, but this is especially true for primary care in India. In studies from Delhi and rural Madhya Pradesh, the average consultation time is three minutes. In that time (on average) the provider asks three questions, completes one examination, and gives three different types of medicine. At the lower end of the spectrum, one third of interactions lasted less than a minute, with only one question ("What's wrong with you?") and no examinations.³⁶ It is likely that this is too little time to deliver "person centered" care.

While quality is very low across the board, evidence from Das indicates that it is lower in the public sector. Private sector providers spend more time with the patient and are more likely to adhere to care protocols. This does not just have to do with the competence or qualifications of the provider. Government doctors who also have their own private clinics (eighty three percent in one study) deliver better quality care in the private clinic – spending more time, asking more questions, conducting more examinations – with a higher likelihood of delivering correct treatments.^{37 38} This is not so surprising, there is no contract conditionality, and it is likely that providers are actively complicit in this arrangement – otherwise, why would people pay to see them in a private clinic when they could see them for free in a public primary health center or community health center?

In-depth Interview

I have been practicing in Mumbra for four years. Before choosing to practice in this area I surveyed Mumbai, I went to Kalyan, Dombivli, Govandi, Wadala, and Dharavi and consulted with my seniors. They advised me it is better to set up clinic in the area where you stay because it will save travelling time and my availability for patients will increase manifold. This was a newly developing area so there were no more than three providers – one MBBS and two AYUSH providers – with an average experience of ten to fifteen years, so it was a little bit easier to set up clinic in Mumbra.

*Ayurvedic Doctor,
Mumbra, Mumbai*

Geography is another factor that determines quality. Clinic location also has many implications for economic viability. Qualitative data from providers has found that it is important to locate your clinic near a residential area (where there is a big catchment area) and around your competition (near a cluster of like businesses) in a way that is very visible (for example, on the ground floor). Qualitative data from consumers also indicates that they prefer a provider who is nearby, to reduce the travel time and inconvenience of care seeking. It is also better if the location of your clinic is near your own residence, so you can know and respond to your community better.

While the Clinical Establishment Act (2010) is supposed to regulate all medical establishments, it is rarely enforced. The formal entry barriers to setting up a new clinic are minimal. Private providers typically enjoy a high level of autonomy and face little regulatory oversight or contract conditionality.

E-Swasthya Case Study

Many public health practitioners were known to run parallel private practices. By making the public service inefficient, they funneled patients to their offices where clients paid a small premium to receive faster, more attentive care.³⁹

*Jhunjhunu District, Rajasthan
(Kanter 2011)*

Table 5: Location of care for out patient services, NSSO 2014 data

| | Public (percentage) | | | Private (percentage) | |
|----------------------|---------------------------------------|--|-----------------|----------------------|------------------|
| | Health sub center / front line worker | Primary health center or community health center | Public hospital | Private doctor | Private hospital |
| Gujarat | 2.5 | 6.4 | 10.5 | 52.9 | 27.5 |
| Kerala | 0.6 | 10.2 | 23 | 35.4 | 30.6 |
| Maharashtra | 2.1 | 5.4 | 10.3 | 62 | 20 |
| Uttar Pradesh | 2.2 | 2.7 | 11.8 | 72.4 | 10.8 |
| Bihar | 0.6 | 5 | 8 | 76.3 | 9.8 |
| Rajasthan | 1.5 | 11.4 | 22.5 | 48.4 | 16 |
| All India | 1.9 | 6.5 | 17 | 50.3 | 24.1 |

³⁶ Das, J. & Hammer, J. (2014). "Quality of Primary Care in Low-income Countries: Facts and Economics." *Annu. Rev. Econ.*, 6(1), 525–553.

³⁷ Das, J., Holla, A., Mohpal, A. & Muralidharan, K. (2015). "Quality and Accountability in Healthcare Delivery: Audit Evidence from Primary Care Providers in India." World Bank Policy Research Working Paper, (7334).

³⁸ Ibid

³⁹ Kanter, R. M. & Bird, M. (2011). "Piramel e-Swasthya: Attempting Big Changes for Small Places – In India and Beyond." Harvard Business School Case Study 9-310-134.



Information systems are important for primary care in a number of ways. They facilitate referrals to other levels of care and they help ensure continuity of care across time and different locations. They are especially important in a context where there is increasing prevalence of chronic conditions – where patients may have long and complex care seeking pathways. This section looks at the factors and market forces that shape the availability of health information systems.



D.

Information Systems

Key Factors and market forces that shape health information systems

1. Private sector is not contributing to routine disease reporting under a unified governing framework, partly due to poor enforcement of policies.
2. Private providers do not sufficiently value information systems in their standalone practices, rendering high entry barriers for suppliers of information systems.
3. While providers working under certain government led vertical disease programs are contractually obligated to report data, there is no system wide integration of information.
4. In the absence of integrated information systems, chronic conditions requiring multiple types of specialist care make continuity of care difficult, with high loss to follow up.
5. Lack of protection around confidentiality of patient data.
6. Few success stories of electronic health records in low and middle income countries, including India.
7. Uneven literacy, computer literacy, electricity, and connectivity makes implementing any kind of common platform difficult.

The WHO defines a well functioning health information system as one that “ensures the production, analysis, dissemination, and use of reliable and timely information on health determinants, health systems performance, and health status.” Well functioning health information systems are key to the success of effective primary care. Primary care can only effectively function as an “entry point” if there is an effective mechanism for referrals and patient tracking in place. A health information system can ensure the patient is tracked from primary care to specialist treatment and (depending on the condition) back into the community for home based care. At an aggregate level, a health information system can help a health system identify and respond to changing community needs.

Unfortunately, routine health information systems in India typically produce poor quality data of limited utility. Traditionally, health information systems have been vertical in nature, and often led by different donor-driven disease programs. In India, there are different information systems for tuberculosis (Nikshay), maternal and child health (Health Management Information System and Mother Child Tracking System), and disease surveillance (Integrated Disease Surveillance Program). Providers working within these programs are obliged to report this data. Many states have different systems for human resources for health, health finance, and drugs and supplies. These systems typically do not include the private sector, with the exception that some programs collect data on consumer care seeking patterns in the private sector. On the other hand, private players’ health information systems (such as Apollo or Fortis) do not contribute to public health planning.

The need for health information system coordination is becoming more urgent. With the increase in noncommunicable and chronic conditions, patients are likely to need to visit a variety of different provider types for the same condition. For example, someone with diabetes may need to visit an endocrinologist, a nutritionist, a podiatrist, and an optometrist. This requires a more coordinated response with patient information and care delivery shared between different providers. The introduction of data standards means that it is now possible to share patient data between different providers and different information systems.⁴⁰ Digitization means that this can occur at scale relatively easily. The introduction of Aadhar, the national unique personal identifier in India, presents an opportunity to create a national health information database that is linked to individuals. The state of Kerala is pioneering efforts to create an information platform linked to Aadhar that will enable the collection and management of population health data, and will improve the coordination of care for its people. However, in any such effort, privacy protections and an opt out feature must be included to ensure that health system strengthening does not mean undermining civil liberties.

Clinical record keeping is an important part of primary care and referral. Yet available evidence suggests that informal providers – the majority of primary care providers – typically do not keep records.⁴¹ Furthermore, so far the participation of the private sector in the production and use of health information is almost nil, with most providers barely reporting notifiable diseases. The heterogeneity of the private sector – in terms of computer literacy, literacy, connectivity, or even access to electricity – makes any kind of systematic data collection

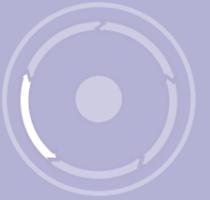
difficult. The lack of clear contract conditionality with the private sector (and a generally low sense of accountability to public health goals and the larger health system) is a barrier to private sector reporting. The low demand for health information systems among private providers results in high entry barriers for the developers of such platforms.

Alongside patient data there are other types of information that support a strong primary care infrastructure. For instance, a human resource

information system is a critical tool for planning and coordination of the health workforce. A coordinated human resource information system would enable policy makers to rapidly view the registration status and distribution of public and private providers, thus helping to ensure an ideal provider mix according to different contexts and needs. Public and private professional councils can serve as the stewards of such information systems and work hand in hand with regulatory authorities.

⁴⁰ Ministry of Health and Family Welfare, Government of India. (2013). “Meta Data and Data Standards for Health Domain. Part 1: Overview Report of the National Committee.” New Delhi.

⁴¹ Mignone, J., Washington, R. G., Ramesh, B. M., Blanchard, J. F. & Moses, S. (2007). “Formal and Informal Sector Health Providers in Southern India: Role in the Prevention and Care of Sexually Transmitted Infections, Including HIV/AIDS.” *AIDS Care*, 19(2), 152–158.



Medical commodities is comprised of drugs, supplies, and equipment – including new technologies for health, such as mHealth and eHealth solutions. It can also include the supply chain and logistics required to ensure that these commodities are in place. In this section, we examine the factors and market forces that shape the current supply of pharmaceuticals and new medical technologies – both factors that have the potential to create catalytic change across the health system.

E.

Medical Commodities

Key Factors and market forces that shape the provisioning of medical commodities

1. Medicines and diagnostic tests are key drivers of out of pocket spending, which makes providers actively compete for customers.
2. Irrational prescribing is the norm due to lack of training, profit motive, and patient demand.
3. Providers have price influence in the market; though regulatory entry barriers and price adherence rules exist, these are not consistently enforced.
4. Lack of quality assurance means people rely on brands – keeping costs high.
5. New technologies have the ability to create efficiencies, increase scale, and improve access; innovations are emerging with new social funding, but entry barriers for developers remain, and there are no scaled models yet.

Pharmaceuticals

“Rational use of drugs requires that patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest cost to them and their community” – Conference of Experts on the Rational Use of Drugs, 1985

Due to low public spending and high out of pocket expenditure on health, many Indian families are impoverished every year. The number of people impoverished due to spending on medicines increased from twenty six million in 2004 – 2005 to thirty four million in 2011–2012. According to the 71st National Sample Survey Office round, nearly seventy percent of out of pocket costs are accounted for by medicines.⁴² Most of the demand for medicines is met by the private sector, due to the availability of drugs and the perception that drug quality is higher in the private sector. Based on the National Drug Survey for 2014–2016, the quality of drugs is marginally better in the private sector than the public sector, though drug quality is not particularly poor in either sector.⁴³ The main concern in India relates to the irrational use of drugs.

Rational drug use is not common in India due to pressure from a number of stakeholders, as illustrated in the table (see Table 6). Many different actors have a stake in irrational prescribing. Drug companies, pharmacists, and doctors all profit from consumption. Patients have a short term interest in a quick and tangible positive benefit, convenience, and minimal immediate outlay. In the absence of appropriate regulation and any quality safeguards, branded pharmaceuticals maintain a large market share – keeping costs high.

Equipment and New Medical Technologies

Due to low public spending, most health expenses in India are out of pocket, leading to a high level of price consciousness among providers. This has meant limited financial incentives for new medical technologies and innovations. However, after the global financial crises in 2008, there has been a new emphasis

In depth interview

Primary health centers only have low level antibiotics, and so it is difficult to treat patients. Already patients are immune to such antibiotics, so the medicines at primary health centers and government hospitals should be upgraded to cefixime and cefuroxime – these are fourth generation antibiotics; the US now has fifth generation antibiotic usage. . . If I treat people according to the government protocol, then the patient goes to another doctor in the area, and that doctor will give them a higher end antibiotic and make the patient feel better in two days.

Homeopath provider,
Thakurli, Mumbai

Table 6: Irrational prescribing – causes and consequences

| | Causes | Consequences |
|-----------------------|--|--|
| Consumer | <ul style="list-style-type: none"> Prioritize medication and injections as part of health seeking. Prefer brands in absence of other quality indicators to support decision making on drug choice. Do not shop around – prefer pharmacist that is convenient or close by. Low levels of health literacy around drug use. | <ul style="list-style-type: none"> Antibiotic resistance, high costs, poor health outcomes. |
| Doctors | <ul style="list-style-type: none"> Demand from patients for more drugs and injections. Incentives from drug companies to sell more. No training in rational prescription, or enforcement of minimum standards. | <ul style="list-style-type: none"> Feel pressure to maintain over-prescribing. Incentivized to make money. |
| Drug companies | <ul style="list-style-type: none"> Incentivize doctors to overprescribe – especially for higher cost products. | <ul style="list-style-type: none"> Drug companies increase profits. Pressure on doctors to prescribe. |
| Pharmacies | <ul style="list-style-type: none"> Have a commercial interest in selling drugs with highest margins. Pharmacists not present and are only required in name for getting a license – shops attended by untrained people. High level antibiotics sold over the counter. | <ul style="list-style-type: none"> Pharmacies make money. |

Patients are often unhappy if they aren't prescribed multiple drugs or given an injection. They perceive that to be low quality care.

Zeena Johar,
SughaVazhvu

A doctor can get a 2 lakh car if he gets sales of 10 lakh for the company.

Medical Rep,
Begusarai, Bihar.

Retailers come to me and ask for the products with the best margins for them so that they can sell those over the counter.

Stockist, Saharanpur, UP

on “frugal” innovation – creating new technologies for low resource environments. With this shift in perspective, new attention and social funding have been given to innovation and design for emerging, or resource constrained, markets.⁴⁴

While this has given impetus to the med tech industry within India, the regulatory infrastructure and capacity for new medical technologies is still limited, posing entry barriers for developers and curbing the catalytic effect of innovations. New technologies could be game changers, even if the

change they introduce is incremental. For example, point of care diagnostic devices, which are increasingly being tested in India, have potential to improve access to appropriate screening and testing at the community level. The development of new drugs or procedures can assist task shifting to allow different types of providers to deliver treatment. For example, medical abortion – or abortion delivered through drugs as opposed to surgery or vacuum aspiration – means that different provider types can deliver the procedure with less risk.⁴⁵

⁴² This data point should be interpreted with caution, as providers commonly do not adhere to maximum retail pricing on products, and tend to bundle a consultation fee in with their sale. This implies that the actual pay out on medicines may be lower than suggested by the survey. If drugs were to be provided for free, there may be reason to believe that healthcare providers would make up the lost income through consultation fees.

⁴³ Specifically, the study finds the percentage of nonstandard quality drugs in the public sector to be ten percent, compared with three percent in the private sector; the fraction of spurious drugs is five tenths of a percent in the public sector and only two tenths of a percent in the private sector. Ministry of Health and Family Welfare, Government of India; National Institute of Biologicals. (2016). “National Drug Survey 2014–2016.”

⁴⁴ PWC, FICCI. (2012). “Enhancing Access to Healthcare through Innovation.”

⁴⁵ Jejeebhoy, S., Kalyanwala, S., Mundle, S., Tank, J., Zavier, A. F., Kumar, R., . . . & Jha, N. (2012). “Feasibility of Expanding the Medication Abortion Provider Base in India to Include Ayurvedic Physicians and Nurses.” *Medicine*, 14, 16.



Health financing describes the financial resources that support the health system, and the mechanisms to spend the resources. In this section, we identify the key sources and factors of financing on the demand side (who finances healthcare for consumers, and how) and on the supply side (who finances healthcare providers and organizations, and how).

F.

Financing

Key Factors and market forces that shape health financing

1. Most health spending is private and out of pocket, and is directed toward out patient care and medicines.
2. Providers have strong price influence and set prices freely according to market demand, often leading to cost escalation.
3. Without prepayment, effective risk pooling, and strategic purchasing of services through contracts, financing for primary care is not effective or efficient.
4. Without carefully designed contracts, providers have an incentive to oversell services rather than to manage care and improve health outcomes.
5. There is an aversion among consumers to paying in advance in subscription or insurance models; while states are offering subsidized social health insurance, this coverage is largely restricted to secondary and tertiary level treatments.
6. Social funding for healthcare enterprises is limited, particularly for primary care.

Health financing is the collection of resources – public and private – that support a health system. Financial resources are channeled to the supply side (to support a system’s infrastructure) or the demand side (to target resources to people, commonly through risk pooling). The exact way in which financing is administered has a direct impact on the use and quality of services.

Many primary care providers in the public sector are unable to efficiently respond to local needs due to delays in payments and limited supplies. The vast majority of health spending in India – over seventy percent – is private, out of pocket expenditure made at the point of care. This lack of financial protection commonly results in poverty or in people delaying medical care. Where financial protection in the form of insurance or risk pooling exists, it is largely restricted to secondary and tertiary care. For example, the central and state governments’ sponsored insurance programs only provide coverage for hospitalization at the secondary or tertiary level (with the exception of the Employee State Insurance Scheme and the Central Government Health Scheme). Similarly, health insurance offered by private insurance companies or voluntary community health insurance programs typically exclude out patient care and medicines. This design choice limits the financial protection impact given that most out of pocket expenditure (seventy four percent) is made toward out patient care and medicines – not hospitalization.⁴⁶

When consumers pay out of pocket, there is a preference for paying at the point of care rather than prepaying for services through a subscription or risk pooling mechanism. Knowledge and awareness seem to make a difference. In Tamil Nadu, the SughaVazhu model found that patients who were

diagnosed with chronic conditions prior to the start of a subscription service have a higher buy in rate than those who are newly diagnosed. Those who have already been living with a chronic condition have a high level of awareness about the costs involved – and can appreciate the financial benefit of a subscription (which saves approximately forty percent of care seeking costs).⁴⁷

The way in which providers are paid also impacts the use and quality of care. For example, strategic contracting of health services under insurance programs can establish standards for quality and performance; but, as discussed above, these programs do not extend to primary care. Fee for service payments are the most widely used form of payment in India within the private sector. As mentioned earlier, research by Das has found that working on a fee for service basis seems to improve quality of care compared to subsidized care provided in the public sector. However, the effect is not wholly positive; fee for service can also lead to unnecessary treatments, diagnostics, and irrational prescribing.⁴⁸ In publicly financed programs, including government contracting of primary health centers to private agencies, payments are typically tied to inputs rather than to outputs or outcomes.

One of the drivers of a formalized and growing private health sector is the ability to access social and commercial financing to start or expand a business. Today, most owner administered enterprises in primary care are small in scale and were started with individual savings or family investment, rather than commercial financing. The financial entry barriers are thus low, and there is a tendency among providers to self finance growth—whether it is to purchase new medical equipment or refurbish clinics.⁴⁹

A recent study done by ACCESS Health International in partnership with the University of California in San Francisco on impact investments in healthcare explored the nature of funding available for social enterprises in healthcare. The study, based on interviews with several impact investment firms in the country, shows that while investments in health have been steadily rising, they currently form only four percent of all impact investments (Intelicap, 2015). Of the funds invested in healthcare, most

are directed into product innovations like point of care diagnostic devices, information technology applications, and single specialty in patient facilities that are able to scale rapidly and generate expected returns on investment. Funding into primary healthcare delivery chains is limited, given the lack of a track record in generating sustainable revenues.

⁴⁶ Kumar, A. S., Chen, L. C., Choudhury, M., Ganju, S., Mahajan, V., Sinha, A. & Sen, A. (2011). “Financing Health Care for All: Challenges and Opportunities.” *The Lancet*, 377(9766), 668–679.

⁴⁷ Thoui, A., Udayakumar, K., Drobnick, E., Taylor, A. & McClellan, M. (2015). “Innovations In Diabetes Care Around the World: Case Studies Of Care Transformation Through Accountable Care Reforms.” *Health Affairs*, 34(9), 1489–1497.

⁴⁸ Le Roy, P. & Holtz, J. “Third Party Payment Mechanisms in Health Microinsurance.” (2012). In Matul, M. & Churchill, C., eds. *Protecting the Poor: A Microinsurance Compendium*, Volume II. Geneva: ILO.

⁴⁹ Based on a study conducted in 2010 under the USAID funded Market Based Project for Health in Uttar Pradesh.



This section describes the regulatory infrastructure that shapes the delivery of private sector primary care. We describe the key factors that shape the regulatory environment – or lack thereof – and the implications it has on the health system.

G.

Governance & Regulation

Key Factors and market forces that shape governance and regulation

1. Governance and regulation can impact the nature and strength of all market forces, including entry barriers, price influence, and contract conditionality; market forces also influence the effectiveness of governance and regulation.
2. Limited regulatory enforcement of the private sector – despite policies and laws on the books, which enable market forces to flourish ad hoc.
3. Government has limited capacity for regulation, and faces questions of legitimacy around policies that are not enacted.⁵⁰
4. Heterogeneity of the private sector makes regulation difficult.⁵¹
5. Informal systems for rent seeking, such as for medical college seats, are prevalent.
6. Informal providers have no professional regulatory infrastructure, such as professional councils.
7. Professional councils exist for other cadres of private health workers, but tend to remain localized.

⁵⁰ Kilaru, A., Saligram, P., Nagavarapu, S. & Giske, A. (2013). "Some Health Care for Some of the People, Some of the Time." Working paper. Jana Andolana Karnataka.

⁵¹ Mukhopadhyay, I., Selvaraj, S., Sharma, S. & Datta, P. "Changing Landscape of Private Health Care Providers: Implications for National Level Health Policy" (unpublished paper).

Unfortunately, left to their own devices, health systems do not gravitate toward stronger primary care, improved health outcomes, and equity.⁵² Good governance is key to ensuring health systems are getting the best results. The absence of effective health governance in India has led to a lack of an overarching regulatory framework, a failure to effectively address corruption, limited administration of strategic contracting and financing, and no assurance of quality service delivery or pharmaceuticals.

The relationship between governance and market forces is closely interrelated. In the absence of governance frameworks, market forces dominate in an ad hoc manner. When effectively designed, governance frameworks can have a critical and positive influence on market forces and provider behavior. For example, policy makers can develop and institute rules for engaging the private sector that require clear practice standards and performance linked payments. These norms may start with a limited set of services relevant to primary care – such as for screening of non communicable diseases – and be expanded as capacities develop. Reciprocally, market forces can improve the effectiveness of governance and regulation. For example, as contract conditionality is strengthened or social funding increased with the private sector, the government has greater leverage to enforce regulations and conditions, including basic clinical qualifications and facility standards.

In India, health service delivery is regulated by a series of laws, which are mostly not enacted (see Table 7).⁵³ Primary care service delivery is regulated by the Ministry of Health and Family Welfare at the national level, and the Departments of Health

at the state level, through different state level iterations of the 2010 Clinical Establishments Act⁵⁴ – although only some states have enacted this. A legal regulatory framework has only been put into force in some states, such as Tamil Nadu, Karnataka, Maharashtra, and Delhi. Consumers are supposedly protected under the Consumer Protection Act; however, doctors will not typically testify against each other, making it difficult to ever prosecute a medical negligence case. Medical doctors, nurses, and dentists need to be registered with their respective councils.

There is no mechanism for the regulation of informal providers, and heterogeneity makes regulation and compliance difficult. Heterogeneity is not the only challenge. There is currently limited *capacity* for regulation of private providers. Successful engagement with private sector providers and other actors requires decentralized capacities and skills in the regulation, management, and implementation of flexible financing mechanisms.⁵⁵ Furthermore, the government lacks the competencies to engage with autonomous actors through flexible and consensual approaches (as opposed to the reflexive “command and control” approach). The government’s inability to regulate the private sector and proactively influence market forces ultimately disadvantages consumers and undermines health outcomes – increasing costs and undermining quality and safety. Though several strong pan Indian professional councils exist, such as the Indian Medical Association or the Association of Healthcare Providers India, these do not focus on all cadres of providers, or equitably represent the needs of providers in the private sector. Self governance through professional associations has not been effective in India so far.

Table 7: Laws and policies governing primary care

| Domain | Applicable Laws & Policies |
|-----------------------------------|---|
| Governance | National Health Policy, 2002 |
| Finance | Employee State Insurance Act, 1948 Insurance Regulatory and Development Act, 1999 |
| Medical Commodities | Pharmacy Act, 1948 The Drugs and Cosmetics Amendment Bill, 2013 Patents Act, 1970 |
| Information Systems | Information Technology Act, 2000 Electronic Health Records Standards, 2016 |
| Health Workforce | The Indian Medical Degree Act, 1916 |
| Service Delivery | The Clinical Establishments Act, 2010 |
| Market Forces | Competition Act, 2002 Trade Markets Act, 1999 |
| Consumer and the Community | Food Safety and Standards (Prohibition & Restriction on Sales) Regulation, 2011 Food Safety and Standards (Containments, Toxins, and Residues) Regulations, 2011 The Medical Termination of Pregnancy Act, 1971 Prenatal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994 HIV/AIDS Bill, 2006 Cigarettes and Other Tobacco Products Act, 2003 |

Informal parallel systems also make change difficult – as there are strong vested interests in maintaining the status quo. Parallel systems function by charging for seats in medical colleges, charging for licenses to run a private practice, and charging for transfers and postings within the public system.⁵⁶

⁵² Van Lerberghe, W. (2008). “The World Health Report 2008: Primary Health Care: Now More than Ever.” World Health Organization.

⁵³ Kilaru, A., Saligram, P., Nagavarapu, S. & Giske, A. (2013). “Some Health Care for Some of the People, Some of the Time.” Working paper. Jana Andolana Karnataka.

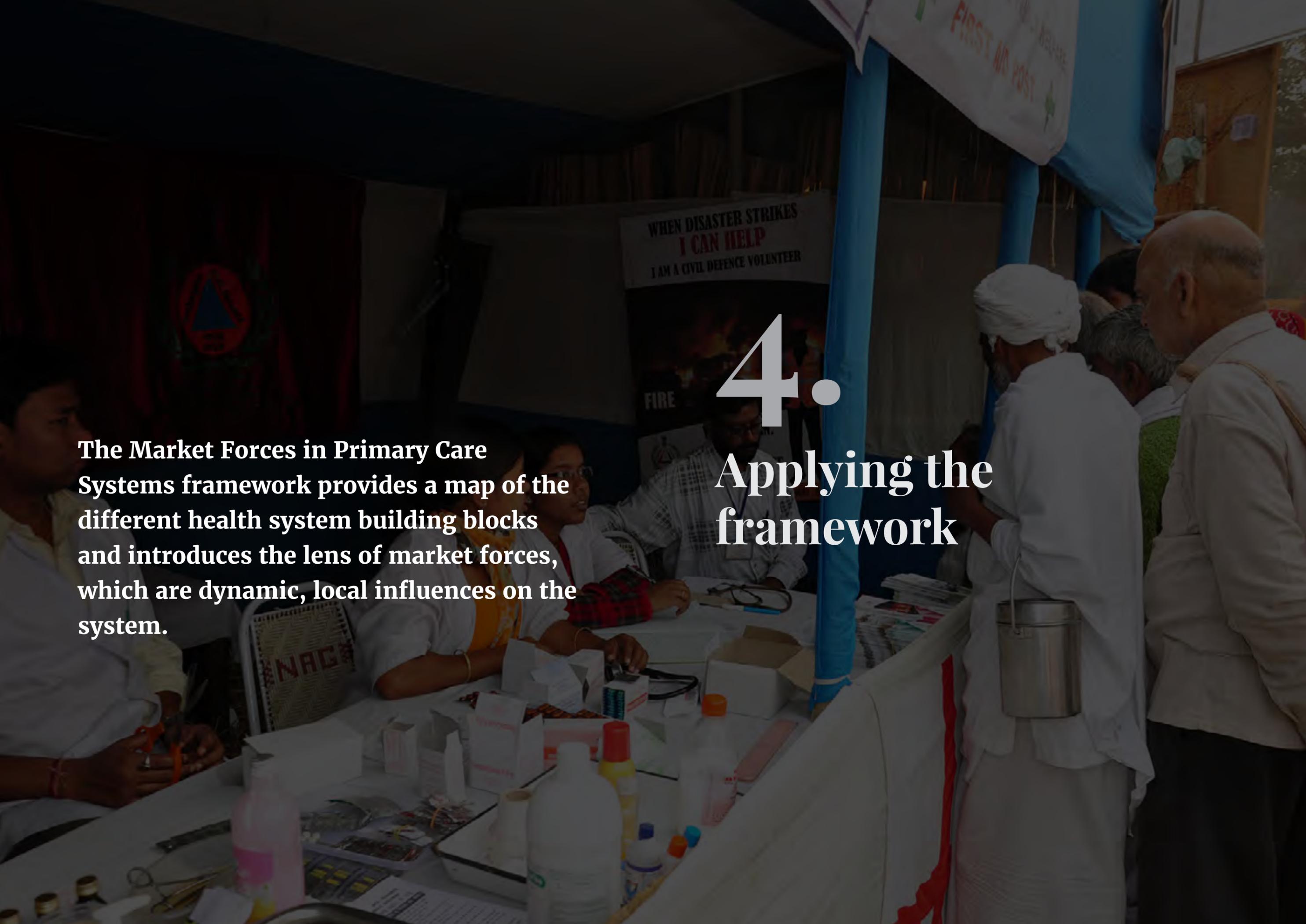
⁵⁴ For details on the Clinical Establishments Act, see: <http://clinicalestablishments.nic.in/cms/Home.aspx>.

⁵⁵ Balabanova, D., Oliveira-Cruz, V. & Hanson, K. (2008). “Health Sector Governance and Implications for the Private Sector.” Rockefeller Foundation.

⁵⁶ La Forgia, G. M., Raha, S., Shaik, S., Maheshwari, S. K. & Ali, R. (2014). “Parallel Systems and Human Resource Management in India’s Public Health Services: A View from the Front Lines.” World Bank Policy Research Working Paper, (6953).

The Market Forces in Primary Care Systems framework provides a map of the different health system building blocks and introduces the lens of market forces, which are dynamic, local influences on the system.

4. Applying the framework



The Market Forces in Primary Care Systems framework provides a map of the different health system building blocks and introduces the lens of market forces, which are dynamic, local influences on the system. The purpose of the framework is to identify the relevant actors within each building block and to understand the market forces that influence the behavior of those actors. This understanding will improve the ability of policy makers or program managers to design and evaluate appropriate interventions.

The framework serves as a guide to designing policies and interventions by reflecting on the characteristics of the relevant actors within each building block, the nature of market forces that influence each actor, and the levers of influence that can be used to change the behavior of the relevant actors.

Following are four key steps to optimize use of the framework. These steps are also illustrated in Figure 6, and can be supported with the matrix template provided in Annexure 2:

Step 1: Define the **goal** that you are setting out to achieve in the health system in as much specificity as possible.

Step 2: Based on the goal, reflect on the exact **market** or **sub market** that would be the focal point of attention to achieve it. For instance, this may be the private informal provider market, or the public primary healthcare market. The goal may also require intervention in more than one market. In this case, the framework can be used for each particular market and can present a holistic understanding of the interlinkages.

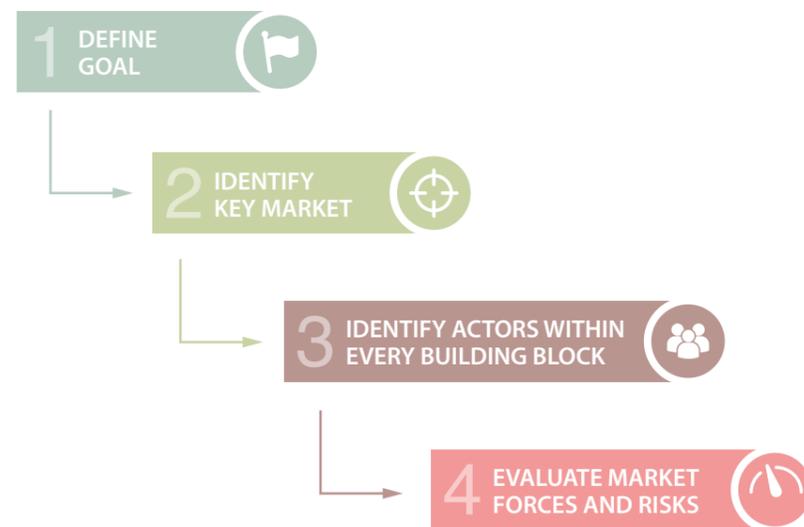
Step 3: Identify all the **actors** in each of the **health system building blocks** that can influence the market or sub market under review. These actors would comprise specific entities or groups, such as nursing staff under the “Health Workforce,” or primary health centers under “Service Delivery.” The building blocks, as presented in Chapter 3, include: Consumers and Community, Health Workforce, Service Delivery, Information Systems, Medical Commodities, Financing, and Governance. In studying the health system building blocks, keep in mind that there may not be relevant actors in *each* building block.

Step 4: **Evaluate** the influence of market forces on each actor within a given building block using a suitable scale. “Low, medium, high” can be commonly used. The user can customize the rating according to the level of information available and to the extent the influence can be made objective. As part of this evaluation, also identify the potential risks that may limit the success of the intervention.

Based on the assessment of the current market and how the system building blocks are influenced by market forces, policy makers and program designers can create interventions to shift behavior among the different actors, and potentially among regulators. The framework can also be used once a program is underway to review progress against the original goals, and to make necessary course corrections. Applying the framework is made easier with the matrix template, which is provided in Annexure 2, with actors and building blocks along the y axis, and market forces along the x axis.

The case study presented in Annexure 1 demonstrates an application of the framework in Uttar Pradesh. The framework was used to design an intervention to improve the performance of public primary healthcare provisioning in two districts of the state.

Figure 6: Applying the framework, stepwise



Key questions to ask for each actor in relation to market forces

| | | |
|--|---|---|
| <p>Q1 Operational autonomy <i>How much autonomy does the actor have in day to day operational decisions? A useful factor to consider is “ownership,” which determines the level of operational autonomy.</i></p> | <p>Q2 Customer Competition <i>To what extent does the customer’s choice impact the providers’ income or footfall? This measure indicates the need to appeal to customers for growth and sustenance.</i></p> | <p>Q3 Price Influence <i>To what extent does the provider have the ability to set their own prices?</i></p> |
| <p>Q4 Entry Barriers <i>Are there certain regulatory, social, cost, or other barriers for entry into a certain market?</i></p> | <p>Q5 Social Funding <i>To what extent is the provider dependent on or able to access social funding (government or non government sources)?</i></p> | <p>Q6 Contract Conditionality <i>To what extent are providers required by contracts to meet certain performance, regulatory, quality, or other standards?</i></p> |

Annexure 1: Case study

Uttar Pradesh Transformative Primary Care Project

The case study demonstrates the use of the primary care framework to design a pilot program in two districts of Uttar Pradesh to improve primary healthcare service delivery. The framework was used to assess the primary healthcare situation in the district, and to guide policy makers in designing an appropriate intervention to meet the desired outcomes.

Background

The Government of Uttar Pradesh is planning to launch a transformative Primary Healthcare Pilot Project in select blocks of Uttar Pradesh.⁵⁷ The project is expected to begin in 2018, in three blocks of Lakhimpur Kheri and Sitapur districts. The situational assessment and evaluation of market forces discussed in this case study helped to define the contours and scope of the Project.

Lakhimpur Kheri and Sitapur districts are both designated as High Priority Districts by the Government of Uttar Pradesh, given their poor health and socioeconomic indicators. For instance, the maternal mortality rate in both districts exceeds 300 per 100,000 live births, and the infant mortality rate is higher than 75 per 1,000 births. The districts also perform below the state average on other communicable and noncommunicable disease parameters.

Step 1 – Define the Goal

The overarching goal of the Primary Healthcare Pilot Project is to **improve access to high quality primary care services** and **reduce out of pocket expenditure for the community**. The Project will do so by proactively managing population health, offering a coordinated and comprehensive primary care package, and strengthening systems for accountability. Key innovations include engaging a lead organization to manage care

delivery, introducing outcome based payments, and strengthening systems for governance and monitoring.

Step 2 – Identify the Market

The focal point for the intervention is the **public primary healthcare market** in rural Uttar Pradesh, which is underused by the community and has scope to improve staffing and service quality. A secondary market that will be influenced by the program is the **private sector** (both formal and informal), which is currently the dominant provider of most primary care services in the catchment area.

Step 3 – Identify the Actors in Each Building Block

The key actors that will directly or indirectly influence the Project are discussed below. The content for this analysis is drawn from a field assessment conducted by ACCESS Health International in 2014.⁵⁸

Community

The population of Phardhan, which is primarily rural, tends to participate actively in community and village level organizations. For instance, Self Help Groups located in Phardhan are a popular voluntary platform for women to mobilize savings and credit, build leadership capacity, and discuss health issues. By regularly convening and generating social capital among community members, such groups are an important platform to build awareness and influence healthcare seeking patterns. The community groups also improve the use of government health benefits, such as those provided through the National Health Mission.

Women participating in community groups are more likely to know about government sponsored maternal and child health services, which they access with support from ASHA workers. Outside the ambit of these services, patterns of care seeking

are not organized and overall health literacy is poor. Usually, care seeking is delayed until it leads to an emergency. Proximity seems to be the leading factor in choosing healthcare providers. Care seeking is also affected by the type of illness, and who in the family is sick. For example, care is sought faster, with greater willingness to travel and pay, when it involves a sick child. As is the case across India, the use of public sector providers is low, owing to routine staff absenteeism, long waits, and poor staff attitude toward patients. With the exception of specific services offered by the government (for example, support for institutional deliveries), patients predominantly seek care in the private sector. In the block of Phardhan, the private sector is dominated by informal providers who have little or no formal medical training. A patient's ability to distinguish the credentials or quality of private sector providers is poor, and price is the dominant determinant of selection.

Health workforce

The health workforce in the district is fragmented, with the private informal providers (commonly called "jholaachaps") dominating the rural markets and the more formally trained MBBS or AYUSH doctors operating in urban markets. The informal providers are usually the first point of contact for the community. Estimates show that close to five hundred informal providers and about sixty formal providers operate in Phardhan block, which has a population of around 500,000 people. Meanwhile, the community health centers and primary healthcare centers are staffed at approximately thirty percent of clinical capacity, with the greatest understaffing in specialists and nurses. This results in limited services and high patient loads for the medical staff who are present in the public system.

ASHA and Anganwadi workers (AWW) are a key resource to delivering health and nutrition to mothers and children at the village level. However,

ASHAs and AWWs are also usually assigned to more population than is standard.

Service delivery

Public Health Facilities: Health infrastructure in public facilities fails to meet the recommended levels required for the given population. Most of the patient load in the district is handled at the community health centers rather than at the primary health centers. The presence of better equipment at the community health centers is a key factor in attracting more patients. Emergency services are primarily handled by the district hospitals or formal private providers due to limited resources, including drugs and diagnostics, at the primary health centers and community health centers. Funding for the public facilities comes from the government regardless of service levels or performance, and the staff has little autonomy or incentive to make operational decisions to improve service delivery.

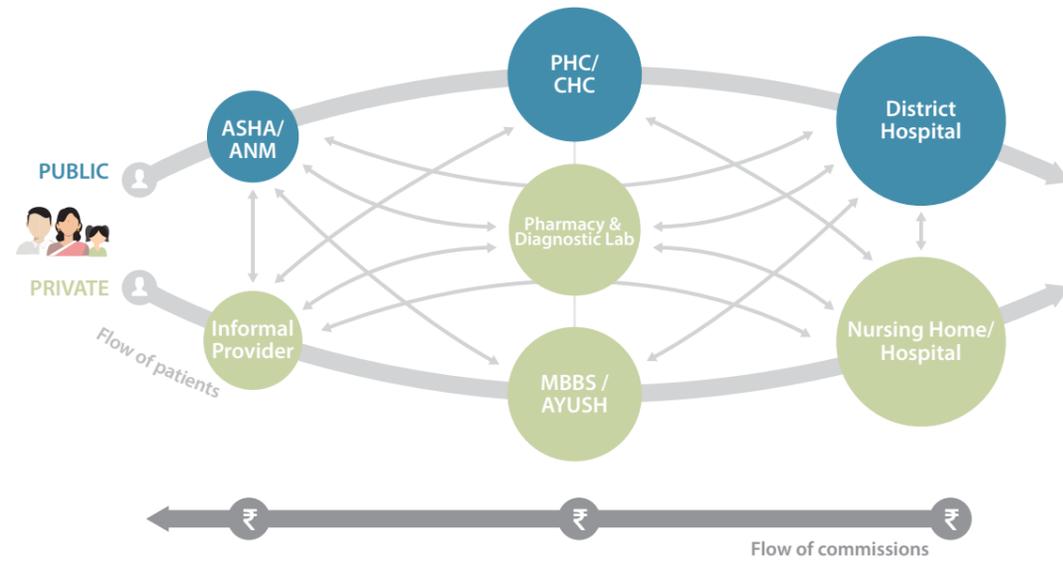
Private Health Facilities: Informal providers typically have very small clinic spaces, some equipped with a bed, and often attached to their homes. Most informal providers also stock and sell basic drugs. The conditions are often unhygienic. They are the first point of contact for basic out patient care. They refer severe or emergency care to private hospitals. The formal providers in the block have clinics with basic life support equipment; those that are part of a larger chain of clinics may also use advanced equipment. These clinics are usually staffed by an MBBS doctor and supported by managerial staff. Many MBBS doctors also work in the public sector, though it is difficult to ascertain clear numbers. Private health facilities flourish because they cater closely to the needs of the population and display high operational autonomy.

Care seeking patterns by consumers are chaotic, shifting between public and private provision

⁵⁷ The State Innovations in Family Planning Services Project Agency (SIFPSA), the nodal agency for the Primary Healthcare Pilot Project, published a Request for Proposal to identify a lead implementing partner in December 2016: <http://www.sifpsa.org/tenders.php>.

⁵⁸ The field work included interviews and focus group discussions with providers, community members, and organized groups in the block of Phardhan in Lakhimpur Kheri district.

Figure A1: Care seeking and referral behavior



depending on the condition and its severity, and on who in the family is sick. The formal referral chain is usually restricted to the public facilities referring to higher public facilities and private to private. However, shortages of supplies and equipment breakdowns in public facilities have led to a surge for private pharmacies and diagnostic labs. There is a complex web of commissions and kickbacks on referral to higher levels of care in the private sector. Referral cuts from diagnostic labs and pharmacies to both public and private sector providers have been observed. Figure A1 gives a glimpse of the healthcare referral chain in the district.

Information systems

Active use of information systems to drive decisions in the block of Phardhan is absent. Public healthcare facilities use the Government of Uttar Pradesh Health Management Information Systems (HMIS) to capture service outputs. However, the data is not verified and its quality is inconsistent. There is no electronic information collection in the private sector. Thus, the private sector does not contribute either to disease reporting or to health performance measurement.⁵⁹ Neither public nor private providers maintain patient electronic health records, and information does not follow the patient between facilities.

Medical commodities

Medicine and diagnostics are the key source of out of pocket spending in the district. Drugs and supplies in public facilities are procured centrally by the Central Medical Stores Department based on indenting. Indenting is often unscientific, leading to frequent shortages. These shortages drive patients to buy their medicines in private pharmacies or from unlicensed providers.

In the private sector, both informal and formal providers stock medicines that are consistently available. For private providers, cuts on medicines and injectables are the major source of revenue, which induces them to prescribe what may not be clinically necessary.

Finance

Primary care is predominantly financed by out of pocket expenses, with the bulk of expenditure going toward drugs and diagnostics. Fees charged by private providers vary based on credentials, training, location, and neighboring competition. For example, informal providers typically charge Rs. 50 for a consultation and drugs; an AYUSH provider typically charges Rs. 100; and an MBBS doctor may charge Rs. 300 for the same service. There is limited prepayment or risk pooling for healthcare

services in the area; the public insurance programs that operate, such as the Rashtriya Swasthya Bima Yojana, are all reserved for secondary care. In terms of supply side financing, the public sector receives financing from state budgets and the National Health Mission to support the functioning of public healthcare facilities and administrative units. Allotments for managing the public health facilities are based on inputs and historical spending; they are not linked to performance, outputs, or outcomes. Historically, based on 2014–2015 data, approximately eighty five percent of the budgeted funds for health are used in the state.

Governance

The government plays the role of both steward and provider of healthcare through the public healthcare facilities. Performance measurement is poor, with limited data and information systems to drive effective monitoring. Despite playing the stewardship role for the health sector at large, the government has minimal regulation and oversight over the private healthcare system. Private clinics are to be registered under the Chief Medical Officer for the district, but the registrations are rarely renewed or supervised by field visit validation. Informal providers fall outside any regulatory purview.

Step 4 – Evaluate the Market Forces and Risks

Below is a summary of the interplay between the relevant actors under each building block and the market forces. Given the limited role of pooled financing in Uttar Pradesh, and the fact that most expenditure is out of pocket, there were no particular “actors” to consider in the Financing building block. Community and Governance are also not showcased in the matrix below. As depicted in Figure 2, Community and Governance

influence the character of the different building blocks and market forces, but are themselves not evaluated in relation to the market forces.

Preintervention Analysis

As seen in Table A1, public sector workers, facilities, and departments have low **operational autonomy**. They are unable to customize resources or manage facilities according to changing community requirements. The private sector, on the other hand, has substantial autonomy in determining what resources to acquire and services to provide. The private sector faces substantial **customer competition** and strong **price influence** from the market. They set prices competitively and are sensitive to customer preferences and demands. The exception is private pharmaceutical retailers, who are obligated to adhere to maximum retail pricing, though the practice is not always enforced. In general, public sector workers have higher **entry barriers** to join the health department, given the limited positions and kickbacks required. Once recruited, however, there is low **contract conditionality**; many health workers operate a dual private practice and receive government salaries, regardless of their attendance or performance. The exception is contractual staff, such as ASHA workers, who are paid a defined incentive for services rendered. Though the conditions for public facilities are outlined in the public health standards, such as minimum operating hours, these are not contractually enforced. In the private sector, providers rarely have service contracts that influence their service scope or quality, with the exception of diagnostic laboratories or hospitals empaneled by the government. All public sector actors have access to **social funding**, while those operating in the private sector rarely do.

⁵⁹ The only exception is in the case of private hospitals empaneled under insurance programs, such as the Rashtriya Swasthya Bima Yojana, which are obligated to submit patient claims and financial data.

Table A1 Preintervention analysis

| Building Blocks | | Market Forces | | | | | |
|--|---|--|---|--|---|--|--|
| | Actors within each building block | Operational autonomy | Customer competition | Price influence | Entry barriers | Social funding | Contract conditionality |
| | | How much autonomy does the provider have in operational decisions? | To what extent does customer choice impact providers' income? | Can the provider set their own prices? | Are there regulatory, social, cost, or other barriers to entry? | Is the provider dependent on or able to access social funding? | Are providers contractually obligated to meet certain performance, regulatory, quality, and other standards? |
|  Health Workforce | Public MBBS / AYUSH Doctor | Low | Low | Low | High | High | Low |
| | ASHA or Anganwadi worker | Low | Low | Low | Medium | High | Medium |
| | Private MBBS or AYUSH doctor | High | High | High | Low | Low | Low |
|  Service Delivery | Primary health center / Community health center | Low | Low | Low | High | High | Medium |
| | Owner administered enterprise | High | High | High | Low | Low | Low |
|  Information systems | Government operated systems | Low | Low | Low | High | High | n/a |
|  Medical Commodities | Private Retailer | High | High | Medium | Medium | Low | Low |
| | Central Medical Stores Department | Low | Low | Low | High | High | Medium |

Low Medium High
 Less market, more regulation More market, less regulation


Table A2 Post intervention analysis

| Building Blocks | | Market Forces | | | | | |
|--|--|--|---|--|---|--|--|
| | Actors within each building block | Operational autonomy | Customer competition | Price influence | Entry barriers | Social funding | Contract conditionality |
| | | How much autonomy does the provider have in operational decisions? | To what extent does customer choice impact providers' income? | Can the provider set their own prices? | Are there regulatory, social, cost, or other barriers to entry? | Is the provider dependent on or able to access social funding? | Are providers contractually obligated to meet certain performance, regulatory, quality, and other standards? |
|  Health Workforce | Public MBBS Doctor (reports to new System Manager) | Medium | Low | Low | High | High | High |
| | Public ASHA or Anganwadi worker (reports to new System Manager) | Medium | Low | Low | Medium | High | High |
| | Private MBBS, AYUSH doctor or Informal Provider (on contract to System Manager) | Medium | Low | Low | High | High | High |
|  Service Delivery | Primary health center or Community health center | High - Medium | Medium | Low | High | High | High |
| | Owner administered enterprise (not a part of the intervention and no changes expected) | High | High | High | Low | Low | Low |
|  Information systems | Government operated systems | Medium | Low | Low | High | High | High |
|  Medical Commodities | Private Retailer (not a part of the intervention and no changes expected) | High | High | Medium | Medium | Low | Low |
| | Central Medical Stores Department | Low | Low | Low | High | High | Medium |
| | System Manager | Medium | Medium | Low | High | High | High |

The post intervention situation is a hypothesis of how the market forces across the several building blocks will change, as the program is not yet implemented. An impact analysis of the program a few years from the implementation will reflect a more realistic picture of the changes in the framework.

Post Intervention Analysis

The Primary Healthcare Pilot Project is focused on improving the quality and accountability of healthcare services delivered through government facilities, including sub centers, primary health centers, and community health centers.

A central lever of the Project is to engage a *System Manager* to oversee the entire ecosystem of care delivery. The System Manager should: operate and maintain the designated health facilities, build capacity of health workers and ensure clinical excellence, proactively enroll, screen, and treat the community free of charge, and introduce digital solutions for program effectiveness and reporting.

The System Manager will be accountable to a new governing body located within a semiautonomous society known as the State Innovations in Family Planning Services Project Agency (SIFPSA). An independent Performance Monitoring Agency will review and validate all aspects of the program and closely support the governance function. The rationale for introducing a System Manager, a semiautonomous governing body, and an independent Performance Monitoring Agency is to separate the functions of governance and service delivery to ensure specialization and improved accountability.

The System Manager will oversee the existing government staff and contract additional health

workers as required. Staff will be managed in teams, with supportive supervision and continuous training, and will be paid performance based incentives that are aligned with the Project's key performance indicators. The System Manager will ensure that care is coordinated for patients and aided with electronic health records. The System Manager will be responsible for procuring drugs from government approved vendors or from the private market, depending on availability. The System Manager will integrate a robust information management system to deliver high quality care and ensure continuous improvement.

There are also risks associated with the intervention. For one, the Project assumes that the community will shift their care seeking from private informal providers to the public system. This will require substantial efforts by the System Manager to build awareness and trust in the new initiative. A second risk relates to the management of human resources; public health staff will work jointly with new recruits from the private sector. While there are significant payoffs in seeing such a collaborative model succeed, there are risks that public and private sector workers may not be motivated to the same extent.

In conclusion, the primary care situation in Uttar Pradesh, akin to primary care across India, is characterized by diverse providers, a large unregulated private sector, little provider

Expected shifts in market forces through the intervention

The intervention is expected to effect change through the following mechanisms (see Table A2):

Increase operational autonomy by handing over control of public facilities to a System Manager. The System Manager will be accountable for meeting broad contractual outcomes but will have flexibility to respond to reality on the ground (for example, in assigning health workers to specific facilities). The System Manager will introduce the necessary systems and protocols to improve the performance of existing public health staff and newly recruited private health workers. Existing public health staff will have greater input in decision making under the Project, but will be held to stronger performance measures. Newly recruited private health workers who were previously self employed will have relatively less autonomy in the Project.

Enhance customer competition by providing services that people need (including free medicines) and improving the effectiveness of services (including availability of health workers at facilities and during outreach). The System Manager will have an incentive to enroll and screen more customers, and to ensure that customers are aware of the Project and satisfied with services received. Thus, the System Manager will introduce appropriate strategies to improve the competitiveness of public facilities.

Remove the price influence from the market by ensuring that all services in the Project are free of cost. The System Manager will not charge user fees. The Project will leverage social funding (public health sources and donor funding) to provide comprehensive primary care services and motivate health workers to improve access to and quality of services available in the Program blocks.

Strengthen contract conditionality for the System Manager and all players within the Project (health workers, information technology partners, drug suppliers, and others) by introducing clear roles and responsibilities, measures for accountability, and payments linked to performance.

Increase entry barriers at an institutional level by competitively selecting a professional System Manager and its partners. Entry barriers for private health workers will be strengthened by ensuring that they are competitively selected and that all workers practice according to their qualifications. Over time, with increased competition and quality standards, the intervention is expected to raise entry barriers in the market as a whole.

accountability in the public sector, and overall poor quality of care. The public and private health sectors operate independently from one another, on either end of a continuum of free market and tight control. The challenge of the government is to improve service delivery in its own channels, while regulating the private sector to provide reasonable quality at affordable prices. This will require a balance between improved structure and

controls on the one hand, and increased flexibility, competition, rewards, and performance on the other.

By providing a structure to evaluate provider behaviors, funding patterns, consumer behaviors, and other factors, this framework allows policy makers to design appropriate interventions and evaluate markets as they transition over time.

Annexure 2: Market forces matrix template

A blank template of the market forces matrix is provided for adaptation and use in different programs and contexts, as required.

Evaluation Scale

Low Medium High
 Less market, more regulation More market, less regulation



| Building Blocks | | Market Forces | | | Market Forces | | | |
|--|--|--|---|--|---|--|--|--------------|
| | | Operational autonomy | Customer competition | Price influence | Entry barriers | Social funding | Contract conditionality | |
| Actors within the building block | | How much autonomy does the provider have in operational decisions? | To what extent does customer choice impact providers' income? | Can the provider set their own prices? | Are there regulatory, social, cost, or other barriers to entry? | Is the provider dependent on or able to access social funding? | Are providers contractually obligated to meet certain performance, regulatory, quality, and other standards? | |
|  Health Workforce | | | | | | | | Notes if any |
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| | | | | | | | | |
|  Service Delivery | | | | | | | | Notes if any |
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|  Information systems | | | | | | | | Notes if any |
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|  Medical Commodities | | | | | | | | Notes if any |
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|  Financing | | | | | | | | Notes if any |
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A health care team provides primary health care services and first aid to thousands of pilgrims who have arrived at Outram Ghat in Kolkata, India, en route to Sagar Island in West Bengal for a holy dip during the auspicious moment of "Makar Sankranti."
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