

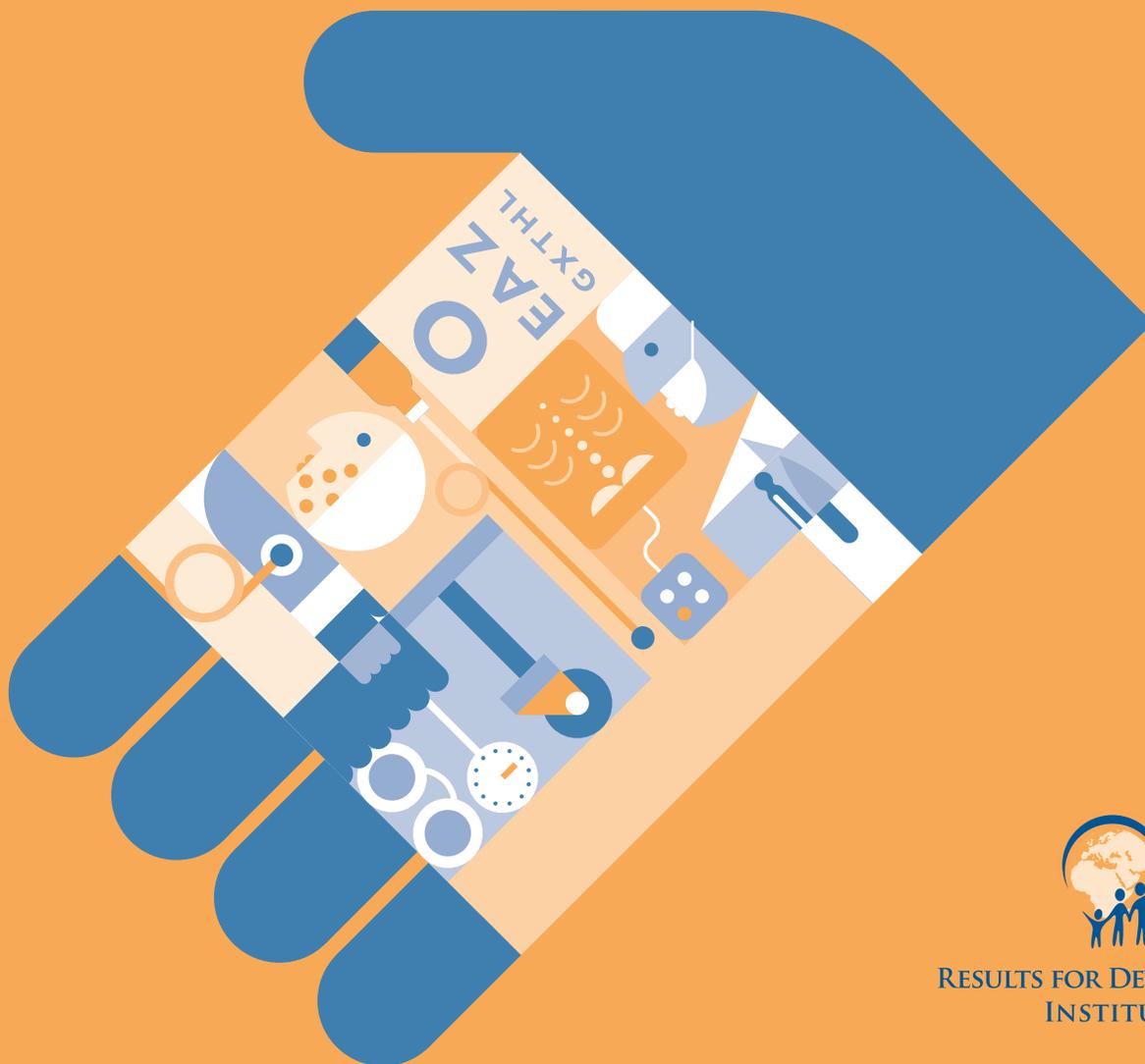
The Rockefeller Foundation–Sponsored Initiative on the Role of the Private Sector in Health Systems in Developing Countries

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Making Health Markets Work for the Poor: Improving Provider Performance

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1. Introduction

During the past two decades, there has been a dramatic spread of market relationships in the health sector of many low- and middle-income countries (Mackintosh and Koivusalo 2005). Typically, out-of-pocket payments account for a substantial proportion of total health expenditure, and a large share of health care transactions include some form of cash payment (National Health Accounts 2007). Many countries have pluralistic health systems in which providers of health-related goods and services vary widely, in terms of their practice settings, their type of knowledge and associated training, and their relationship with the legal system (Bloom and Standing 2001).

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The policies of some international organizations in supporting strict limits to government expenditure and advocating an increased role for markets in health systems have had some influence. But this phenomenon is more generally associated with the rapid spread of market relationships in many sectors. In some cases, its emergence is linked to failures of state provision of services to meet popular expectations. In other cases, it is associated with a rapid spread of markets with economic growth. The spread of markets has often been much faster than the capacity of the state and other key actors to establish regulatory arrangements to influence their performance. A large proportion of market transactions now take place outside any national legal regulatory framework or in settings where regulatory regimes are poorly implemented or lack clarity. A common feature is the blurring of boundaries between public and private sectors, with staff moving across these boundaries, often informally and sometimes in the course of one day, and users making informal payments for services or drugs at public facilities, or consulting government health workers “privately.”

The marketization of health services has created both opportunities and challenges for improving the performance of health systems in relation to poor people. It has produced easier access to drugs and some form of medical advice for those who can pay. There are some examples of excellent market-driven services, but, as Das and colleagues (2008) document, the quality of services that both public and private health workers provide is often flawed. Some of this is due to perverse incentives. It is now widely recognized that governments and other intermediary and non-state organizations can play important roles in altering these incentives and improving the performance of marketized health systems. There is less agreement on what those roles should be in different development contexts and how the institutional arrangements can be constructed for them to play these roles effectively.

Health system analysts have given inadequate attention to strategies for improving the performance of health-related markets in low- and middle-income countries. This partly reflects a normative position that access to health care is a right and that providers of services should not be primarily motivated by financial incentives. In some cases, it reflects a political belief that a stronger acknowledgement of the role of markets in the provision of health-related goods and services could open a floodgate that would enable powerful actors to establish a dominant position, with serious consequences for equity. This has been further complicated by debates about the desirability of allowing the expansion of international health service companies into low- and middle-income countries (Smith 2004; Woodward 2005). However, the spread of market relationships has advanced so far that official policies often have limited relevance to the realities that poor people face when coping with health problems. It is time to find ways to improve the performance of markets for health-related goods and services that acknowledge and start from these realities.

Much analysis of health care markets draws heavily on the experiences of the advanced market economies where there is a much clearer demarcation of the roles of, and boundaries between, the public and private sectors in delivering services. This has led to a tendency to seek models for “working with the private sector” from these countries,

without taking sufficient account of their strong institutional and regulatory arrangements for both market and non-market services (Bloom and Standing 2008). This paper argues for a different approach to policy formulation that bases the assessment of the likely outcome of different reform options on a closer understanding of the realities of the markets that have emerged in developing and transitional economies. It has two main aims: The first is to develop an exploratory framework for understanding how health markets operate in these contexts, using primarily a political economy rather than a public health approach to health systems. The argument here rests on our view that theoretical perspectives grounded in an understanding of the dynamics of markets and their interplay with different contextual conditions offer fresh insights for health systems development. The second is to begin to lay out the implications of these different ways of thinking about health markets for policies and programs. This points us away from standard health policy approaches to planning and regulation and toward questions of knowledge transfer and learning in highly dynamic environments.

The sections that follow present the ideas of the authors and an informal network of health system analysts and innovators. Sections 2, 3, and 4 introduce current thinking about the roles of markets and institutions in health systems, outline a framework for analysis of health systems, present some new developments that have emerged in recent years, and explore sources of institutional innovation in these markets. They draw on previous work by the authors on analytical approaches for understanding the pluralistic health systems that have emerged in many countries,¹ scoping studies carried out by partners of the Future Health Systems Consortium in Nigeria, Uganda, Bangladesh, India, and China,² a review of current knowledge on innovations to improve the performance of health-related markets (appendix 1), a review of current knowledge on the applications of information and communications technology to health (appendix 2), and discussions between innovators and researchers at a recent workshop hosted by ICDDR,B in Dhaka. Section 5 presents some key elements of a strategy for making health-related markets work better for the poor, and section 6 concludes with a presentation of learning approaches for improving the performance of health market systems. This is one of a series of background papers commissioned by the Rockefeller Foundation that address different aspects of markets for health-related goods and services in low- and middle-income countries. This paper focuses particularly on innovations for improving provider performance other than through government regulation or the strategic use of the purchasing power of an insurance scheme, which other papers discuss. It explores mechanisms for addressing problems of information asymmetry between provider and client, while noting that the pattern of services provided and the degree to which they meet the needs of the poor are strongly influenced by the specific arrangements for financing and organizing public health services.

¹ See Bloom and Standing (2001 and 2008); Bloom et al. (2008); Lucas (2008); Peters and Muraleedharan (2008); and Peters et al. (2008).

² www.futurehealthsystems.org.

2. Markets, Institutions, and Health Systems

Before introducing the main analysis, this section provides a brief background to past and current debates about how health markets function. In particular, we note—and raise some problems with—the dominance of thinking drawn from the experience of the advanced market economies with long histories of regulation.

The limits of markets

The advanced market economies have created complex institutional arrangements within which state, market, and civil society actors cooperate to translate scientific medical knowledge into widely accessible goods and expert services (Bloom, Standing, and Lloyd 2008). Debates about health system organization, based on a combination of economic theory and historical evidence, have led to a widely held consensus on why markets, in themselves, do not produce efficient or equitable health systems.

The health sector is characterized by a number of well understood “market failures” (Bennett et al. 1997). This paper focuses on those that directly affect the performance of health service providers. Government functions and other formal arrangements have arisen to compensate for these failures. For example, a variety of non-market institutions have developed to prevent possessors of expert knowledge from abusing their power, including professional self-regulation and internalized codes of ethics, public provision of services, government regulation, and tort law. These institutions and mechanisms are also present, to some degree, in many low- and middle-income countries. In addition, markets have capacity for self-regulation on the basis that market share is often protected by demonstrated adherence to rules and standards. Again, institutions to create greater market order are present in low- and middle-income countries, but in many contexts they are largely informal and predominantly local. Health system analysts have paid much less attention to the operation of informal health markets, but there is potentially important learning in terms of mechanisms for enhancing quality.

“Market failures” in the health sector

- Health-related services include public goods such as public sewerage and water supply systems, which would be undersupplied if left to the market.
- Services, such as immunization, have positive externalities in that an individual’s consumption confers benefits on others so that decisions based only on individual needs are likely to result in suboptimal funding.
- Markets tend to under-insure against major health expenditure because they cannot control costs effectively and there is little incentive for a healthy person to join an insurance scheme.
- Markets may not adequately reflect the greater willingness of the population to finance basic health care than other non-health goods and services.
- Markets can worsen distributive outcomes and hence health inequities.
- Markets for goods and services that embody expert knowledge produce information asymmetry between providers and clients that can make clients vulnerable to abuse of provider power.

“Path dependency” and institutional change

The experience of the advanced market economies provides useful insights into the problems of health systems in low- and middle-income countries, but it is dangerous to assume that the latter countries will follow a similar path in developing their health systems. The concept of path dependency of technology (David 1985) and institutions (Pierson and Skocpol 2002; Thelen 2003) describes the process by which a small early decision profoundly influences future development because of the increasing returns to institutionalization and the high cost of changing to a different path. The dominant model of health system organization is an example of path dependency: highly regulated professions and pharmaceutical markets reflect the social and economic context and associated institutional decisions within which the first modern health systems were embedded. It is important to keep this in mind when attempting to adapt institutional arrangements from one context to another and when assessing the likely future consequences of reforms.

Institutional arrangements in the health sector are notoriously “sticky” mainly because they reflect the intrinsically political nature of health system reforms. Substantial resistance to change by stakeholder groups must be expected where reforms might threaten their interests and where ideological stances have evolved to justify this resistance (Altenstetter and Buse 2005; Gordon 2005; Rochaix and Wilsford 2005). Pierson (2000) argues that political processes are more path dependent than those

mediated by markets, because the latter are more able to correct a false first step through competition between companies and learning by individual ones. During the second half of the 20th century, the right to health care became a highly charged political issue and governments became heavily involved in health financing and service delivery. The high political profile of health may therefore have slowed the rate of institutional change. This could explain why health systems in advanced market economies preserve many aspects of their early 20th-century structure, while other economic and social sectors have altered greatly.

The tendency of health systems to be path dependent has important implications for policy analysts in low- and middle-income countries: First, *frameworks for understanding health systems are highly influenced by the history of institutions in the advanced market economies*. This means their transferability is questionable. Second, *the regulation of health systems in advanced market economies has precluded the development of certain other types of organization that may be equally or more effective*.³ This means that low- and middle-income countries may be in a better position to innovate institutionally. Third, *the regulatory arrangements in the advanced market economies strongly influence international standards and the development of health systems in other countries*. However, this does not mean that the direction of development of global health systems is already determined. The rapid growth of demand for health-related goods and services and the emergence of a variety of organizations to meet this demand have created opportunities for major changes in the organization of both national and global markets. This means that policies and interventions over the next few years are likely to influence the path of development of these market systems for many years to come (Bloom and Standing 2008).

Health systems in low- and middle-income countries

National health systems in developing countries reflect different historical legacies. Most countries have long-established health-related markets based on different medical knowledge systems and embedded in “traditional” institutional arrangements. During the second half of the 20th century anti-colonial and/or post-revolutionary governments in much of Africa and Asia attempted to provide equitable access to “modern” health services for all. Strategies for achieving this were influenced by a shared understanding of development as a state-led process for creating the building blocks of a modern economy. Many governments constructed a network of basic health facilities, trained and deployed health workers, established drug distribution systems, and created vertically organized public health programs. There was little interest in the previously established health markets, and their importance diminished in many countries.

³ For example, well-established rules govern access to prescription and non-prescription drugs, the role of advertising, and the relationships between medical professionals, retail pharmacies, and pharmaceutical companies. Countries with a less well-established health regulatory system face a choice of passing similar laws or fostering the emergence of new types of organization, such as more demand-led approaches to information for users.

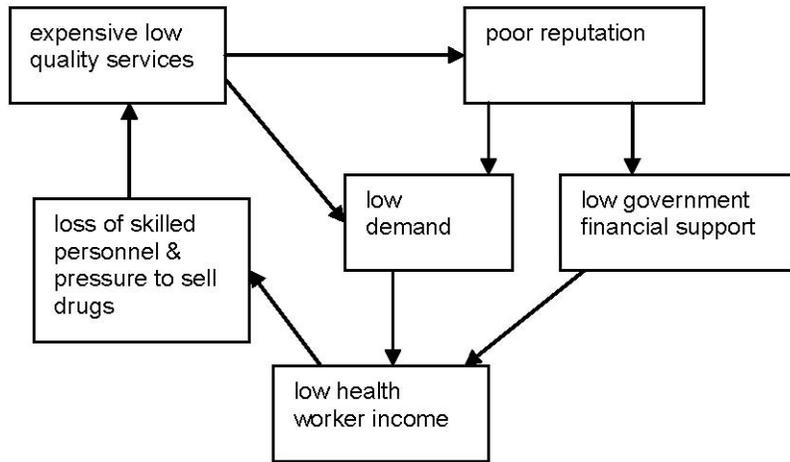
The subsequent history of national health systems has varied greatly (Bloom and Standing 2001). Some countries have established and sustained well-organized government health services, but many others have evolved into pluralistic health systems with a large informal market. Some have experienced shocks such as war and civil disturbance, natural disasters, prolonged economic crisis, and the pandemic of HIV and AIDS, which have eroded the financial basis of the public health system and led to changes in the attitudes and behavior of government employees. Much economic activity in these countries occurs outside the organized economy. The health sector has mirrored these changes with a rapid spread of markets into services previously organized through “traditional” relationships or by the state. Other countries, including many transition economies and other countries that are encouraging the growth of markets, have substantially altered the balance between the state and markets. Some are well on the way to becoming advanced market economies. Others have experienced substantial economic decline and resemble those described above. Still others have experienced rapid economic growth and concomitant increase in market-oriented activities in health.

Vicious circles and low-efficiency traps—the example of rural China

Markets for health-related goods and services in a number of countries have expanded more rapidly than the creation of trust-based institutional arrangements to ensure their efficient operation. This has sometimes led to a “race to the bottom,” in which service providers or sellers of drugs compete on the basis of price, since they have no way to indicate the value of their skills to potential clients.

Figure 1 illustrates the vicious circle that emerged in rural China as the health system adapted to changes associated with the transition to a market economy. Government health budgets grew less rapidly than both the overall economy and average earnings. This meant that rural health facilities had to generate revenue to provide reasonable levels of pay. Meanwhile the most highly skilled personnel transferred to urban facilities. Health workers gained a reputation for over-prescribing drugs. This led people to seek care from village clinics, where health workers were part of local social networks, or from large hospitals, whose competence they trusted more. This decreased utilization of local health centers and increased their need to generate revenue. The perception grew that health workers acted opportunistically, and local governments became less and less willing to fund them. Attempts to reestablish local health insurance schemes foundered because of the unwillingness of households and local governments to contribute to them. The government has now made rural health reform a priority and is taking a number of measures to build the institutional arrangements for transforming the vicious circle into a virtuous one. This could make possible a win-win situation for providers and users of good quality services. Many other countries face similar issues with health systems caught in a low-efficiency trap.

Figure 1: The vicious circle in rural health services in poor localities of China



Implications for markets and states

Private providers in advanced market economies operate within a highly regulated context. The situation is quite different in countries where a legal or regulatory framework does not take into account the emergence of markets for health-related services. The legal framework established to support a state-led health system may remain intact and government health workers generally have contracts that imply they are in full-time employment, yet in practice they rely on market-like activities to maintain their income.⁴ Informal providers and public sector employees, who receive informal payments, may operate outside any legal framework, and there is limited capacity to enforce regulations because of a lack of resources or inadequate understanding by regulators of their role or because they have little incentive to act (Ensor and Weinzierl 2006). Indeed, regulators may have strong incentives not to enforce regulations. There are often large discontinuities between the legal framework and the real social and economic relationships. In many cases, the health system is highly segmented with the better-off benefiting from institutions, such as health insurance and a relatively effective regulatory framework, while the poor rely largely on informal markets.

The recognition that much market activity takes place outside a formal regulatory framework and that public systems are increasingly involved in formal and informal markets suggests that the clear demarcation between private and public sectors in advanced market economies does not necessarily apply elsewhere (Bloom 2005a). The definition of the private sector by Smith and colleagues (2001) as “those who work outside the direct control of the state” raises big questions. For example, how does one

⁴ Some public health services could more accurately be described as publicly subsidized markets, with a number of regulatory rigidities, and the gap between formal employment contracts and long-established reality can provide anomalous incentives for health workers.

define government-owned health facilities in China, which generate as much as 95 percent of their revenue from payments by patients (Fang and Bloom 2008)? How should one regard government employees in many countries who rely on informal payments to earn a living, or work part of their day in “private” facilities?

Categorization of organizations in terms of ownership and legal status is similarly problematic. For example, a recent report on private health systems in Africa differentiated between for-profit providers, not-for profit organizations, including faith-based organizations, and social enterprises (IFC 2007, p. 7). However, although many advanced market economies have highly developed regulatory frameworks that provide quite different patterns of incentive to each type of organization, that is not the case in many African countries. It may be difficult to differentiate between the incentives facing employees of “for-profit” and some “not-for-profit” organizations, for example. Similarly, performance may differ greatly between health facilities that notionally share the same mission (Tibandebage and Mackintosh 2005). We need to move beyond a simple public-private dichotomy to develop a more nuanced understanding of markets and the influence of the state and other agencies on their performance. As Das and colleagues (2008) note, the performance of both public and private providers of health services is strongly influenced by the incentives they face.

Analyses of “government failure” in many low- and middle-income countries note that government employees do not behave like “Weberian bureaucrats.”⁵ Performance is strongly influenced by financial incentives and by political and patronage relationships. In many instances, there is a fine line between market-like behavior that has accrued a degree of legitimacy and behavior that is socially understood to be corrupt (Lewis 2006; Vian 2008). For example, some informal payments may be regarded as “fair” in a context of very low public sector pay, while other payments may be viewed as exploitative. There is an equally difficult-to-define line between the use of regulatory powers for the public good and in the interest of specific stakeholders or the regulators, themselves. Interventions that do not take this reality into account can have unintended consequences (Pritchett and Woolcock 2004).

The same factors that contribute to the failure of government systems also influence the performance of markets. North (1990) stresses the importance of agreed and enforced rules and associated expectations and behavioral norms in facilitating the effective performance of markets. In the absence of these institutions, one finds major failures of both states and markets (Chang 2007). Some current manifestations of these failures in the health sector are the growing problem of counterfeit drugs, inappropriate use of anti-microbial and anti-viral agents, and problems with the quality and cost of care.

Effective regulatory structures usually involve partnerships between the state and other stakeholders. For example, the drug regulatory systems of the advanced market economies were established in close consultation with the pharmaceutical industry, and they reflect a balance between public and stakeholder interests (Abraham 1995). Some

⁵ This refers to government employees who are paid a salary and provided with good career prospects in exchange for being public servants who act in the interest of the population.

argue that the balance has favored powerful stakeholders, but most agree that some form of regulatory partnership is needed. In contrast, the governments of many low-income countries have tried to create these structures without direct involvement of industry actors. And large international companies have taken little responsibility for the use of their products in export markets. The result has often been weakly regulated health markets, both nationally and internationally. One encouraging response has been the emergence of regulatory partnerships (“co-production”) between government and other actors (Joshi and Moore 2004). Although these regulatory arrangements are subject to the influence of narrow interests, they also reflect recognition that these actors have a shared interest in the creation of a trusted and effective health system.

3. Markets and the Health Knowledge Economy

A number of propositions about health systems and markets lie at the core of this paper:

- The reality of health care systems in many developing economies is of high levels of marketization, pluralistic provision, and a large gap between the goal of a functioning publicly provided and regulated health system and the messy reality that confronts both users and providers. This paper argues for better analytical and practical understanding of this reality. It is not an argument for privatization but for creative thinking on how to start from this reality in constructing health systems that work much better for the poor.
- Health systems are frequently highly segmented. This is no longer just a financial segmentation, in which the better-off can either afford to pay for good quality care or are protected by privileged financing arrangements such as private insurance, leaving the poor to underfunded public health systems. Health markets increasingly dominate transactions for all socioeconomic groups, as demonstrated in major changes in health seeking behavior.⁶ Markets themselves are segmented in complex ways that reflect their users’ purchasing power (or lack of it), their cultural and social needs, understandings of health and disease, and assessments of provider reputation.
- The development of trust-based institutional arrangements that provide a reasonable guarantee of competence and effectiveness has lagged behind this growth in market-type relationships. However, the path dependency of health systems means that institutional pathways to more equitable health systems are likely to take different forms outside the countries of the Organisation for

⁶ For instance, a recent study in Chakaria District, a poor rural area of Bangladesh found that 28 percent of people reporting an illness during the previous two weeks used a home remedy, 65 percent sought treatment from an informal village doctor or drug seller, and only 14 percent consulted a qualified doctor (Future Health Systems 2008).

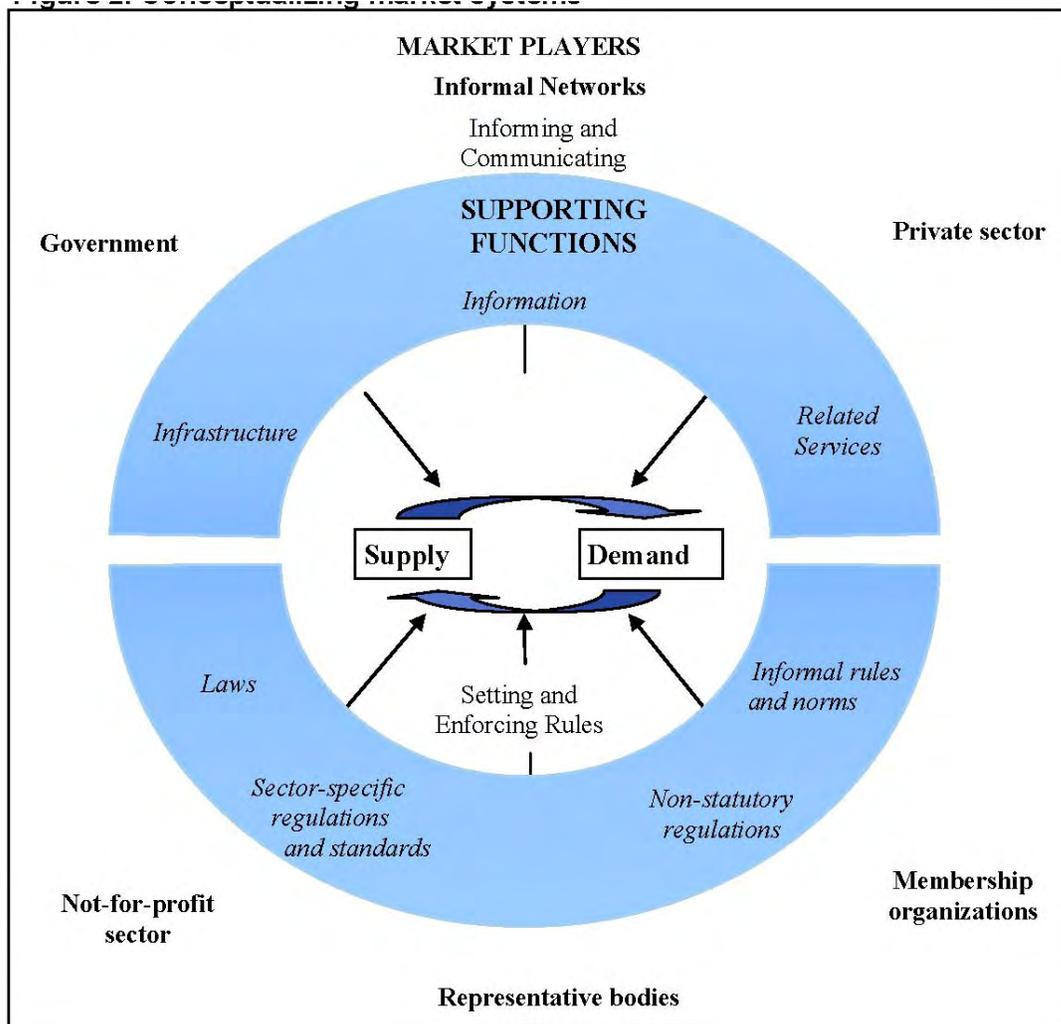
Economic Co-operation and Development (OECD). These forms will reflect the different development pathways, sets of actors, and existing and emerging institutional arrangements, including “informal” ones, in a particular country.

- The form these institutional arrangements take, including the role of government, reflects a country’s political economy. And a regime’s legitimacy can be affected by the perceived safety, effectiveness, and fairness of the health sector.
- Information asymmetry pervades health markets and is considered to be a key market failure in health. This can particularly disadvantage the poor, who lack both financial and *knowledge-based* access to competent, affordable health care. We argue that it pervades all knowledge-based market transactions, not only health. There is thus much to be learned from different market sectors on other kinds of approaches to reducing information asymmetries in ways that benefit the poor.

Understanding market systems

This section builds on these core propositions to examine in more detail how health-related markets operate. Their role is to make widely available the benefits of expert medical knowledge, in terms of advice and treatment and embodied in goods such as pharmaceuticals. It is important to clarify that this analysis does not equate a market with the delivery of a (commercial) service but refers to the whole set of supporting functions and rules enacted by different sets of players (“public” and “private”) at different stages of the delivery, hence the use of the term “market system.” Along with financing mechanisms to provide equitable access, efficient operation of these markets depends on effective ways to address information asymmetry. This involves the setting and enforcement of rules and provision of accurate and timely information. Health systems tend to have complex arrangements for achieving these functions. How they operate in a specific social context is key to understanding how performance incentives and disincentives will play out.

Figure 2: Conceptualizing market systems



Source: Adapted from Elliot et al. 2008, figure 3.

Recent work looking at the question of how markets can be made to work for poor people (DFID and SDC 2008; Elliot et al. 2008) provides a useful starting point for understanding markets for health-related goods and services.⁷ As markets play a crucial role in mediating the relationships between providers and users of goods and services, it is important to understand these markets and their institutional contexts as systems that can perform well or badly. Figure 2 summarizes this approach to understanding market

⁷ The following paragraphs draw on a report and background papers prepared for this initiative, which presents the markets for poor people (M4P) approach. The overall purpose of M4P is to contribute to the reduction of poverty by “enhancing the poor’s access to opportunities and their capacity to respond to opportunities either as entrepreneurs, workers or consumers” (DFID and SDC 2008, draft operational guide, p. 10). We are very grateful to Rob Hitchins for help in applying this work to health market systems.

systems. At the center is the set of exchanges between providers and consumers of the relevant goods and services. These exchanges are governed by formal and informal rules, whose establishment and enforcement involve a number of actors. The informal rules strongly influence the degree to which formal rules are accepted. The supporting functions provide an environment within which the performance of market players can be enhanced. This environment includes multiple actors and organizations, legal regulations, and the norms and values of suppliers and users of goods and services. Elliot and colleagues (2008) argue that interventions that focus exclusively on either strengthening the management of a specific organization or changing macroeconomic policy are likely to fail. Reforms need to bridge micro and macro levels in building arrangements to support improved performance of markets.

Types of markets in health-related goods and services

Markets permeate health systems in complex ways. “Upstream,” they are embedded in research and development, for instance of drugs and vaccines; they interface at different points in the supply chain, for instance through the provision of specialized knowledge services and innovation. “Downstream,” they are also major suppliers of goods and services. These may be simple or complex, and with different degrees of connectedness to other markets. There are no simple sets of prescriptions for the organization of these health-related market systems, and they vary along multiple dimensions.

Different types of service transaction and degree of complexity

It is misleading to discuss markets for health-related goods and services in general, as if the provision of all of them will require a single type of organization. The design of an intervention depends on the characteristics of the health-related good or service. For some, there are only minimal problems with information asymmetry and users do not require much expertise to use it well and avoid harm. The main challenges are to develop a well-defined good and/or service, establish a distribution system, and inform potential users of its value. One example is the development and widespread use of oral rehydration solution for diarrhea. Interventions vary in the degree to which their effective provision relies on the expertise, effort, and integrity of the provider.⁸ Another difference concerns the importance of the knowledge, effort, trust in the provider, and ability to pay of the users of goods and services. The treatment of a minor ailment, for example, may simply involve access to good quality drugs and widely available knowledge, and may be best left to competitive markets. The management of a chronic, progressive disease requires quite high levels of trust in the advice of the service providers and a willingness to make changes to lifestyle or comply with drug treatments. Major surgical treatment requires high levels of trust, expertise, and a well-organized hospital. The incentives to provide these components of quality health care will be strongly influenced by the

⁸ Chakraborty and Harding (2002) differentiate health-related goods and services on the basis of their measurability and contestability. Leonard (2000) argues that, in rural Cameroon, people choose providers on the basis of the need for practitioner effort, patient effort, and medical expense. Van Damme and colleagues (2008) provide a typology of the types of services for meeting the needs of people with HIV and AIDS in terms of the degree of expertise required, the need for knowledge and effort on the part of the patient, and the inter-relationship between a variety of expert services.

institutional structures within which health-related goods and services are exchanged and by attributes of medical organizations. The consequences of a failure to ensure safety and effectiveness range from mild to severe.

Different clientele

One criterion for assessing an intervention to modify the performance of health-related markets is its impact on the poor. Some interventions may directly target their immediate needs. Others may aim at a longer term impact. For example, some interventions will reach a widening range of consumers as knowledge of it grows, costs fall, and the delivery of services spreads to poor localities. It is likely that the services will never reach the most remote or the poorest, for which other approaches will be necessary. Other interventions may be too expensive for the poor, and their overall impact may be to reinforce the segmentation of health-related markets with a deleterious impact on the poor. For example, a decision to restrict all eye surgery to hospital-based specialist surgeons would deny most poor people access to low-cost cataract operations. The same applies to many regulations that reserve the provision of services to highly qualified professionals and effectively leave the providers of services to the poor unregulated and outside the law.

Ownership, mission, and accountability of different market players

The categorization of market players in terms of their ownership, assumed mission, and accountability requirements may not be clear cut in countries without developed market-related institutions (figure 2). There may be blurred boundaries between public and private health service providers and between for profit and not-for-profit organizations. There is little systematic information on the pattern of incentives managers and employees of different types of organization face or their likely response to alternative organizational arrangements. Similarly, while there are likely to be formal accountability arrangements, it is often informal ones that determine incentives and outcomes. For instance, there may be tacit arrangements over which informal payments can be demanded and who shares in them.

Interconnected markets

The provision of medical services involves a series of interconnected markets for different goods and services. Van Damme and colleagues (2008) illustrate this with the role of laboratories and the procurement, distribution, and prescription of appropriate drugs in the treatment of HIV and AIDS. Where the patterns of incentives in one market are not aligned with the interests of the poor, other markets will be affected. Making health markets work better for the poor will often entail the need to address a problem in an interconnected or secondary market. In Bangladesh, for example, poor rural people obtain much of their health care from informal drug sellers. A recent study found that these drug sellers were strongly influenced by the large numbers of representatives of drug wholesalers, who have strong incentives to sell expensive products.⁹ These representatives are an important source of information to the informal providers. The health sector is also strongly influenced by existing markets for credit and insurance,

⁹ Personal communication by Dr. Mohammad Iqbal of ICDDR,B, Dhaka.

which affect the ability of households to cope with the high cost of a serious illness and of potential providers of services to poor people to establish a practice.

Local, national, and international market systems

Figure 2 does not define the geographical boundary of a market system. Some markets are mostly influenced by local, largely informal, institutional arrangements. For many others, there is an interaction between local, national, and international organizations and institutions. It is important to understand the links between national and global value chains (Gereffi et al. 2005; Smith 2004; Woodward 2005). For example, the organization of the global pharmaceutical sector strongly influences the performance of local markets through arrangements to regulate quality, protect intellectual property, and promote the use of new products. Also, international service delivery organizations play an important and growing role in many countries as do large consultancy firms and donor agencies that finance health services. In Cambodia, international nongovernmental organizations (NGOs) are working closely with local hospitals, to improve their performance and build their reputation, and with local NGOs, to establish health equity funds that ensure that donor funds are used to purchase hospital care for the poor. The rapid emergence of branded private hospital chains as a source of high-quality medical care and of medical tourism is another example of the interaction between national and transnational markets (Chee 2008). Global value chains in the health sector are changing rapidly, and measures to improve the performance of local markets will increasingly entail attention to supranational supply chains as they alter the patterns of incentives in local health markets.

Sustainability of an intervention

Interventions to make markets work better for poor people need to be based, first, on a systematic understanding of the reasons for current problems, the constraints to change, and the factors likely to lead to sustainable arrangements more able to meet needs. In the health sector, for example, this may involve the creation of new kinds of organization that encourage health workers to provide better quality services through a combination of direct management and the design of incentives, which explicitly acknowledge a marketized element in performance, especially among poorly remunerated front-line staff. This may also involve changes to formal regulatory frameworks and the participation of a much wider range of actors, such as health worker associations, private organizations, and citizen groups, in efforts to change understandings of the obligations of health workers and their appropriate income. There is often a trade-off between immediate benefits and the potential long-term impacts. This means that the design of interventions should take into account the likely impact on a variety of stakeholders and anticipate possible unintended consequences. Second, sustainability needs an analysis of who pays and how long-term viability is expected to be established. How can sustainable financing arrangements be put in place to encourage the provision of accessible, competent services to poor users?

What do institutional arrangements in health market systems do?

One way to understand the role of institutional arrangements in health and other sectors is as a means to foster “social contracts” between actors (Bloom, Standing, and Lloyd 2008). These contracts embody the expectations necessary for the establishment and maintenance of trust-based relationships, and they reflect broader understandings in a given society of expected social reciprocity. In relation to health care, they enable people to purchase drugs without worrying about their safety and efficacy and consult possessors of medical knowledge with confidence in their expertise and ethics. They also make possible the establishment of insurance schemes to which people contribute money in the expectation they will have support should they fall ill in the future.

These relationships also reflect and, to some extent, reinforce relationships of power. For example, in many countries the organized medical profession strongly opposes measures to improve the performance of nonprofessional providers mostly used by the poor (Dussault 2008). Large pharmaceutical companies often oppose measures that threaten their markets. Markets are frequently segmented, with actors that serve different social groups following different rules and behavioral norms. Institutional arrangements are always negotiated in relation to these realities. Strategies to alter the performance of market systems must be based on an assessment of the political and social context and identification of significant power relationships between actors (Bloom 2001).

In most countries, the performance of health-related markets has broader social and political consequences that mandate institutional actions. The legitimacy of a regime is linked, to some extent, to its ability to protect the population against major health-related challenges. Scandals about counterfeit drugs, contaminated blood, inadequate responses to disease outbreaks, and the impoverishment of households due to high health care costs can have a strong political impact. This will grow as countries become increasingly integrated into the global economy and local scandals influence the reputation of companies seeking global markets in pharmaceuticals or the provision of health-related services.

Institutional arrangements perform a range of functions in health systems, including reducing information asymmetries. Their overarching function is *the creation of conditions for trust in the competence and ethics of providers*. Trust is essential to the effective performance of health systems (Gilson 2003). Users also need to feel confident that money they contribute in taxes or contributions to insurance schemes will entitle them to care when they need it, years later. In the absence of such confidence, users may have to invest a great deal of effort to find a competent provider or forgo potential benefits of health care technologies. The other side of the social contract between providers and users of health-related goods and services is the reputation of providers. Providers need to believe that they will benefit from a reputation for skill and ethical behavior in terms of income, future career prospects, social status, and influence. Specific institutional arrangements are required to produce the following outcomes:

- *Avoiding harm*—for example, dealing with low-quality drugs, unnecessary use of dangerous pharmaceuticals, or incompetent surgery. These problems are mostly addressed by a combination of government and professional regulation, the

internal management arrangements of organizations with a reputation for the supply of safe goods and services, trade and other market associations, and laws that provide compensation for injury due to negligence.

- *Reducing ineffective treatment.* Institutional means to address this issue include provision by specific bodies of relevant information and treatment protocols, licensing and accreditation, and the development of contractual arrangements that encourage providers to follow appropriate practice. However, more creative arrangements are required to deal with informal provision where there is often both ineffective treatment and reluctance to refer where needed. For example, in Bangladesh, informal providers tend to avoid referring patients to government hospitals because the doctors disparage them to their patients.¹⁰ Institutional arrangements being tried in this context include involvement of citizen-based Health Watch groups in monitoring performance of local providers.
- *Reducing unnecessary expenditure.* This includes the prescription of harmless but ineffective drugs and the encouragement of elective surgery, such as overuse of Caesarian sections. Institutionally, these problems require incentives for providers to build a reputation for effective services at an affordable cost and encouraging a service ethic. They can also be addressed by measures to enable people to become better informed consumers. The increasing importance of chronic disease in terms of the burden of ill health and as a potential market for goods and services is making this kind of decision about the management of a chronic condition increasingly important. However, it raises challenging issues concerning who should provide this advice and upon which evidence they should base it. It also raises questions about how people decide whose advice to trust and follow.

Institutional arrangements are a critical factor in *building the legitimacy of health system governance and development*. The sustainability of institutional arrangements and the expectation of compliance with rules depend on the degree to which they are perceived to be legitimate. This goes beyond the reputation of a specific facility or organization. It is related to the degree to which the rules are perceived by the population more generally to address major problems, take into account the needs of different social groups, and command widespread consent. One major challenge is the balance between the interests of specific stakeholders and an agreed public interest. In some contexts, it may only be possible to build a consensus around a very small core of particularly important regulatory issues.

Toward market order

Here, we describe some of the approaches to creating institutional arrangements for market order, drawn from the findings of our reviews of initiatives to make health

¹⁰ A number of studies have shown that the delay of a decision to refer a woman with a high-risk pregnancy or a child with severe malaria or pneumonia to hospital is an important cause of avoidable death.

markets work better (appendix 1) and on the current and potential impact of market-driven innovations in information and communications technology for health systems development (appendix 2). We focus on two areas of market order crucial to managing information asymmetry: trust and information flows.

As noted, a key function of institutional arrangements is to create the conditions for trust between providers and users of goods and services. Service providers have evolved various strategies for building a reputation for expertise and ethical behavior (Montagu 2002 and 2003; Mills et al. 2002; Prata et al. 2005). In health markets, users are frequently willing to pay a premium to providers with such a reputation. These strategies largely evolved in sectors such as financial services, restaurants, and hotels, but they are being adopted in the health sector. Formal approaches include the following:

- The development of services through large, well-known organizations, such as NGOs, hospital chains, and retail pharmacy chains, which have a strong incentive to protect their reputation through internal management systems
- The establishment of franchises, in which franchisees agree to adhere to certain standards in order to trade with a particular brand name
- The accreditation or licensing of a facility or provider by an independent agency. This may be a national accreditation body, a professional licensing agency, a trade association, or a variety of other trusted national or local organizations.

Although a variety of innovations has emerged using one or more of these approaches, there is little systematic evidence yet of their impact on different aspects of an organization's performance or on broader health market system reform (appendix 1). As approaches develop, it will be important to build in forms of evaluation that will allow more systematic comparison of processes and outcomes.

Bishai and Champion (2008), in a review of franchising, draw on a methodology developed by Maness (1996) to compare the incentives provided by franchising and vertical integration and conclude that the former provides stronger incentives for local entrepreneurship, while the latter is better at encouraging effort by the coordinating agency. They argue that major concerns with both models are the degree to which they encourage active coordination and quality control and the capacity of the coordinating agency to influence providers. This assumes managerial effectiveness and the existence of clearly defined and understood incentives. In addition, in developing a typology of agencies in terms of formal contractual arrangements and their influence on performance, both formal and informal influences on key actors need to be taken into account.¹¹ For example, how should one understand religious mission hospitals, where a sense of service and ethical standards moderate the financial incentives for opportunistic behavior? If the faith community has a high reputation in a country, it may be able to translate this

¹¹ Liu (2008) provides a fascinating discussion of how KFC adapted its use of direct management and franchising to the changing realities in China.

reputation into a capacity to maintain quality standards in other facilities. Similarly, where do associations of providers of services and drug sellers fit? Finally, how important are the international reputations of large NGOs and the consultancy firms to the success of pilot models they support? As new types of organization based on these kinds of approaches emerge and mature, we will need a new typology of market arrangements.

One source of reputation has been a link to organizations from the advanced market economies, where accountability mechanisms are more clearly defined. This may explain the tendency of people to purchase branded pharmaceuticals and the rapid growth in internationally branded service delivery organizations such as NGOs and hospital chains. The analysis of global value chains in other sectors suggests that the ownership of a brand with a good reputation confers great financial advantages.

The spread of retail pharmacy chains provides another potential way to distribute effective health-related goods and services (appendix 1). They tend to be either centrally managed organizations or franchises with a reputation regarding quality and cost of drugs. Some chains employ health workers to provide medical advice. These organizations present important opportunities and challenges. If they build a reputation for competent advice on low-cost ways to treat a health condition, they could become important mechanisms for making markets work better for the poor. On the other hand, they could establish close links with manufacturers of pharmaceuticals to collaborate in expanding the market for branded products, with limited regard to less expensive options for managing an illness. These considerations become particularly important concerning the treatment of the growing number of people with chronic disease. This illustrates the importance to the evolution of rapidly developing markets of the interaction between organizations (with their internal culture and incentives) with actors in other markets such as pharmaceutical production and wholesaling, formal regulatory agencies, the owners of the mass media, mobile telephones and the Internet and the providers of health-related content to them, and an array of formal and informal accountability organizations. The example of retail pharmacy chains raises the more general issue of the mission of an organization, the incentives its senior managers have for achieving it, and their capacity to influence people within their organization or associated with it as franchisees to take that mission into account. The formal and informal factors that create this organizational culture strongly influence performance. We need much more systematic information on this to explain the ability to build and sustain a reputation for competence and ethical behavior of some religious mission hospitals in Africa, large NGOs in Bangladesh, a variety of NGOs and social entrepreneurs in India, and government health services in a number of countries.

Informal mechanisms for building trust and reputation, based on local networks, are equally or more important in many contexts. These may be mechanisms for building a reputation for good behavior, linked to community-based accountability mechanisms. In China, rural people use local networks when they believe a village health worker has behaved badly (Fang 2008). In Nigeria, patent vendors, who are important sources of pharmaceutical products, are organized in associations that protect the interests of their

members but also apply sanctions for what are regarded as unethical practices (Oladepo et al. 2007). In many countries, traditional healers are organized in local and sometimes national associations. Studies have demonstrated the importance of word of mouth for the establishment and maintenance of a facility's reputation (Leonard 2007). In some contexts, initiatives are emerging that cannot be neatly characterized as formal or informal, as in the case of the intervention by a coalition of researchers, NGOs and civil society, and local government bodies with informal providers in rural Bangladesh (see below). The major challenge for the future is to build on effective local arrangements to create more extensive institutional frameworks.

The flow of knowledge and information is vitally important to the performance of health-related markets. Both providers and users, including many of the poor, increasingly live in a world where multiple sources of information are now accessible. These include from satellite and electronic media, whether directly or indirectly through knowledge intermediaries. For providers, formal and informal training and practical experience provide important channels for the spread of knowledge. One commonly finds people who have had some form of health-related job opening a private practice. Or, as documented in Bangladesh, village doctors may learn their trade by copying the prescriptions and practices of qualified doctors. A second major channel of health-related information to both providers and users is organized and financed by private companies, often with support from advertising agencies. Knowledge of new pharmaceuticals may be spread by "detail men" from large companies and by salespeople and other wholesalers. These companies may also pay for advertisements that target potential users of the products. Such knowledge flows are increasingly "globalized"—for instance, Chinese traditional medicine and associated products are now highly packaged for different international markets, including in developing countries, through targeted selling to particular population groups. Another channel comes from a variety of national and international advocacy and special interest groups, which provide information to the mass media, disseminate information through the Internet, and provide courses to practitioners. Finally, the mass media, mobile telephones, and the Internet have become important sources of health-related knowledge. Some of the content is provided by agencies with a public health mandate, but much reflects a commercial interest or a particular advocacy viewpoint.

This proliferation of sources of expert knowledge has created a new need for trusted knowledge brokers and new initiatives to fill this growing gap. A number of initiatives disseminate information on performance through citizens' report cards, publication of achievement of performance targets, and establishment of citizen complaint lines. Consumer associations play an increasingly important role in some countries (Peters and Muraleedharan 2008).

The participants at a workshop on Making Markets Work Better for Poor People, organized by ICDDR,B in Dhaka in August 2008¹² discussed a number of initiatives to enable people to become more effective users of health-related goods and services and managers of their own health. MoPoTsyo, a relatively new Cambodian NGO, organizes

¹² See <http://www.futurehealthsystems.org/themes/themes2008/healthmarkets/Dhaka%20meeting.htm>

people with diabetes to manage their own condition and negotiates with suppliers of drugs and providers of health services to ensure high-quality advice and reasonably priced drugs. It achieves this through training people with diabetes to become peer educators with the aim of creating expert patients in a context of a poorly performing formal health system. An initiative under development in China has identified the important role of advertising in generating demand for products to treat chronic conditions associated with aging and the need to provide alternative sources of information to the public. These innovations focus on strategies for enabling people to gain access to reliable and trustworthy expert knowledge and advice in the face of a rapid increase in the channels for information flow.

The Dhaka workshop identified several approaches for putting together effective interventions and making them widely available through existing market actors, whether formal commercial channels or informal drug sellers and health service providers. These approaches combine training, mechanisms to build reputations for good service and strategies to inform users. In Bangladesh, a private telemedicine company provides a 24-hour health help line through GrameenPhone, the country's largest mobile phone network, staffed by qualified doctors who follow clear protocols. The company is in the process of developing e-prescriptions, linked to authorized pharmacies to enable the help line doctors to provide prescription advice. The company has strict rules preventing any commissions to third parties such as pharmaceutical companies or distributors, and the service is funded entirely from call revenue. This has enhanced its reputation as a source of unbiased information.

Another example from Bangladesh, where informal health care providers and drug sellers are the largest source of treatment for many poor people, is the preparation of a book of treatment guidelines and development of a newly established association of informal providers to agree on mechanisms to encourage members to improve their performance and with local Health Watch associations of users to monitor provider performance. In India, similarly, an NGO called First Care has established a small network of informal providers linked through the Internet. It is providing training in appropriate health care and plans to build the reputation of its associates by awarding a certificate and creating a franchised brand. Nigeria's patent medicine vendors are a major source of anti-malarial drugs. They are organized in associations, which have expressed an interest in providing training and monitoring their members' performance in supplying only quality-assured drugs and providing up-to-date advice on their efficacy. Several associations are working with Ibadan University to design an intervention to implement this strategy and also to involve community groups in using low-cost kits for testing the efficacy of drugs. All interventions with informal providers face challenges in building links with government or statutory bodies to ensure efficient referral of people who need more intensive treatment, improving the performance of drug distribution markets in providing reliable information and reducing incentives to over-prescribe, and in ensuring that providers can compensate for any income lost by reducing sales of unnecessary drugs. They also need to address laws that prevent the incorporation of these providers into a legal framework.

The lack of a strong regulatory state at different levels has created a vacuum into which other actors are stepping to provide some kind of market order. This often involves a partnership with the national or local state to co-produce regulation (Joshi and Moore 2004; Peters and Muraleedharan 2008). These partnerships may involve private companies, business associations, professions, and community or citizen groups. These raise important questions about how “public interest” is constructed out of this complexity of interests and which sets of actors dominate in this process. One of the big unanswered questions about the development of health market systems is the relative roles that local, national, and global reputations and actors will play. This will depend on the balance of local, national, and global interests involved and the degree to which governments and international bodies can implement effective regulatory arrangements that go beyond the level of the local.

4. Institutional Innovation in Health Care Markets

In this section, we explore strategies for stimulating and accelerating the spread of institutional innovations in health market systems. Much analysis of innovation in low- and middle-income countries focuses on technology. Bell and Pavitt (1993) argue against a dichotomy between development and diffusion of innovations. They point out that the adaptation of a technology to a new context requires both technical capacity and favorable institutional arrangements and suggest that these factors explain a lot of the inter-country differences in development experience of technological innovation. We apply a similar approach to analyzing the origin and spread of innovations in health system organization. We also follow Gardner and colleagues (2007) in recognizing and exploring the impact on institutional arrangements of innovations in technology, such as the development of information technology which is making new forms of institutional arrangement possible.

As noted earlier, one reason for slow institutional innovation in many health-related markets has been political resistance. Governments have been unwilling to renege on their commitments to the creation of state-led health services. Stakeholders have resisted changes to the law that would legitimate health care markets. Although this resistance has been, to some extent, an expression of sectional interests and ideological preference, it has also reflected serious concerns about the negative consequences of the rapid consolidation of health-related markets. Although one can imagine the emergence of well-ordered markets for health-related goods and services, one can equally imagine disorganized markets driven by short-term gain, which provide expensive and often ineffective services for those who can afford to pay and at the same time reinforce a segmented health system with a deleterious impact on the poor. As discussed above, the belief that government has a duty to protect the population’s health has created major constraints to measures perceived to be risky. Governments and civil society have been reluctant to embark on a poorly understood process whose outcome is uncertain.

Where innovations arise

One understanding of the creation and spread of the global market economy has been that innovations in type of organization have mostly arisen in a few core countries and subsequently spread around the world. In this case, the appropriate strategy for accelerating improvements to the performance of health market systems in low- and middle-income countries would be to facilitate learning from the advanced market economies by encouraging companies to extend their operations to other countries, organizing opportunities for entrepreneurs to learn from the advanced market economies, supporting demonstration projects and so forth. Here, we present four arguments against this perspective: (i) innovative approaches from one country need to be adapted substantially to a different context; (ii) local adaptations are important sources of institutional innovation; (iii) a number of dynamic market economies outside the core countries are fast becoming sources of institutional innovation in global markets; and (iv) innovations both reflect and are influenced by segmented markets. For instance, the rapid entry of global companies that provide highly organized services aimed mostly at the better-off could draw skilled personnel away from the public and private providers of care to the poor and affect the structure of the market for a very long time.

Research on the diffusion of technological innovation has demonstrated the degree to which additional effort is needed to adapt a new technology to a different context. The M4P approach argues, along similar lines, that attempts to transplant organizations to different contexts tend not to have a sustainable impact, unless they are part of an overall strategy for strengthening a market system's institutional arrangements (DFID and SDC 2008). Analysts from several perspectives emphasize the role of local innovation in developing effective ways to address new challenges. For example, Joshi and Moore (2004) reached similar conclusions on efforts to strengthen public sector management in low- and middle-income countries and advocate local solutions to local contexts. They describe how local governments have established partnerships with civil society organizations to collaborate in delivering a service or regulating a market. Writing from a historian's perspective, Fukuyama (2004) argues that institutional arrangements need to be embedded in local contexts. These analytical conclusions apply particularly to unorganized health markets that need to involve local accountability structures to construct sustainable institutions.

The advanced market economies have spawned a number of market-driven organizational models that include retail pharmacy and hospital chains, and franchises for a variety of health-related products. These models are diffusing through the expansion of organizations to other countries and by replication of these models by local entrepreneurs. Several donor programs have attempted to adapt these models to meet the needs of the poor. There is little evidence, to date, about the degree to which these efforts have been successful in substantially altering the performance of health market systems (appendix 1). However, a number of our examples, and the innovations discussed in the Dhaka workshop, indicate promising directions in adapting more generic models to local circumstances (see section 5).

The rapid economic growth of Brazil, China, India, and other countries is creating new international centers for technological innovation (Mashelkar 2005; Leadbeater and

Wilsdon 2007). The demand for health-related goods and services is rising very rapidly in these countries. One can anticipate the emergence of quite different types of market organization that reflect current technologies, the economic and social context, and the regulatory environment in these countries. If these companies can build a reputation for providing trustworthy services at an affordable price, they could expand very rapidly, to become important actors in the global health economy.

A number of factors affect the impact of an innovation on the poor (Kaplinsky 2008). First, innovations reflect segmented markets in that different kinds of innovation address the needs of the better-off and those of the poor (Leach and Scoones 2006). The former are more likely to arise in a mature market economy and the latter closer to where poor people live. A program aimed at strengthening health market systems needs to include strategies for identifying and disseminating innovations from these different sources. Second, it needs to address the health system as a whole by recognizing that provider organizations and other agencies will need to be involved in co-producing more ordered markets that take into account negotiated agreement on the public good and the needs of the poor. In the light of the evidence about the path-dependent nature of health market systems, it is important that key actors can construct mechanisms to include the needs of the poor in institutional arrangements that determine the development of these markets.

Entrepreneurship and (market) learning

Entrepreneurs play an important role in the creation of new organizational models. They operate at every level from local unorganized markets to national and global health care markets. The literature on innovation emphasizes the importance of clusters of innovation and of the need for opportunities for learning between entrepreneurs. It also emphasizes the need to identify and disseminate lessons from successful innovations. The emergence of pluralistic health systems attests to the volume of local innovation. One commonly finds a bewildering variety of providers of health-related goods and services in many different practice settings. One can also find many examples of local approaches to build trust and address information asymmetry. The major lack has been in mechanisms to associate these providers with larger scale organizations to extend access to the benefits of health care technology to larger segments of the population.

There is growing interest in the role of social entrepreneurs in health-related markets. The term is usually used to refer to a focus on the creation of social value and a number of attributes of innovation, risk taking, and a willingness to try something new (Peredo and McLean 2006; Weerawardena and Mort 2006). An alternative definition refers to organizations that “borrow a mix of business, charity and social movement models to reconfigure solutions to community problems and deliver sustainable new social value” (Nicholls 2006, p. 2). Both Nicholls (2006) and Austin and colleagues (2006) suggest that social entrepreneurs work in the public, private, and social sectors and that they are often involved in organizational innovations across these sectors. This makes them particularly interesting in the context of heavily marketized health systems with blurred boundaries between public and private roles and functions.

At the Dhaka workshop, a number of such examples were discussed. A recent development is the design and production of low-cost eyeglasses for people with age-related vision problems and the development of distribution systems, to ensure wide availability. Scojo has led the latter in India and a number of other countries. It has established its own distribution network in some cases, but elsewhere it has linked to organizations that already have a local distribution network. In Bangladesh, for example, it has agreed to work with BRAC, a very large NGO with a major health program. BRAC has trained many village health volunteers, who, among other things, have played an important role in the implementation of directly observable therapy for tuberculosis. A recent review of BRAC's experience with female community health volunteers has emphasized the importance of BRAC's good reputation in motivating them, but it identified the need to ensure they can also earn some money and maintain a livelihood in a context where there are increasingly other opportunities for them to earn a living (Standing and Chowdhury 2008). Distribution of low-cost eyeglasses would serve both a growing need in rural populations and provide income for its health volunteers. Scojo, on the other hand stands to benefit from the established network and BRAC's good reputation.

A variety of actors are developing and refining other specific goods and services.¹³ The Scojo experience underlines the need to put together a complete package that can be used easily by local entrepreneurs with relatively little training. It also illustrates the advantage of linking to a network of local providers with a strong capacity to train providers and encourage good performance and a reputation for addressing the needs of the poor. These networks could include the different forms of organization of formal or informal providers of health-related goods and services described in section 3.

Several authors highlight a tension between a pressure to expand rapidly to meet previously unmet needs and a need for innovative approaches to ensure sustainable changes to existing market systems (Bradach 2003; Dees et al. 2004). The way organizations manage this trade-off reflects the constraints they are attempting to overcome. Sometimes, the unmet needs arise largely from the poverty of potential clients and a major aim of the social entrepreneur is to identify new sources of finance or attract existing public funding, with the focus on rapid scaling-up. In other cases, the major constraint is the need to lead a process of market system reform and the focus is on sustainable change to the operation of markets.

The boundary between social entrepreneurship and responses to commercial opportunities can shift. For example, banking through mobile telephones has evolved from being an act of social entrepreneurship to a major business opportunity. The same applies to micro-credit. A recent assessment of micro-credit confirms its success in achieving growth in access by people previously excluded from the organized economy (Greeley 2006). It has substantially improved the performance of credit markets by using

¹³ One example is the ongoing effort to design low-cost and easy to use methods for the diagnosis and treatment of malaria.

innovative approaches for identifying good credit risks, appropriate to the institutional context of many low-income countries. Successful schemes are linking to commercial financial organizations. This in turn may create new ways of delivering insurance-based health protection.

There is a significant risk that institutional innovations will create new types of market segmentation in which more people are able to benefit from efficient markets, but some are still excluded. In this context, Greeley (2006) points out that there is limited evidence that the very poorest people have benefited from commercial micro-credit. He emphasizes the importance of monitoring the performance of innovations in meeting the needs of the poor. Measures to meet the needs of the excluded are almost certainly going to require subsidies from government or other sources, with associated specialized institutions to ensure these subsidies reach the target population.

5. Strengthening Health-Related Market Systems

In this section, we draw together the different elements of the analysis to outline an initial framework for making health-related markets work better in meeting the needs of the poor.¹⁴ What this review has drawn attention to is the need to go well beyond the immediate setting of the interactions between “private” providers and users of goods and services in health systems. These interactions are part of complex health market systems that vary in many particulars and are embedded in contextually specific social, political, and economic environments and associated institutional arrangements, spanning the local to the global. While there is much to be learned and adapted across different contexts, “what works” will be a balance between more generic findings and innovations that draw from specific experience. We have argued that institutional innovation will arise predominantly from this intersection.

The table below provides a descriptive matrix that brings together the major components influencing health market systems. One conclusion of the Dhaka meeting was that innovations aimed at changing provider performance are unlikely to result in sustainable changes to health market systems unless complemented by changes to other aspects of the market system. This may involve the creation and enforcement of new regulations, the engagement of a variety of actors in regulatory and/or accountability partnerships, and strengthening access to reliable and trustworthy knowledge. It is impossible to separate the performance of the supplier organizations from the market system within which they are embedded. Thus, in assessing the challenges and viability of an intervention/innovation, a key step is to map it in relation to the wider health market system.

This mapping process provides a basic template for situating an intervention or innovation in relation to market functions, players, and potential institutional

¹⁴ The authors would like to acknowledge the help provided by David Leonard and Rob Hitchens in developing the framework for analyzing interventions.

arrangements. It provides the basis for asking a series of further questions about the potential to achieve the following outcomes:

- Does it reduce information asymmetry and enable patients to better assess whether the health services they are acquiring are appropriate to their condition?
- Does it align incentives better or worse with patient welfare?
- Does it relieve or exacerbate constraints on competence, finance, and management?
- Is there evidence that it results in better health-related outcomes?
- Does it provide benefits to the poor and/or does it support the creation of sustainable arrangements to meet the needs of the poor in the longer term?

Health market systems framework for mapping of interventions

Market Factors	Supporting Functions and Rules	Product Variation	Product Organizational Attributes	Institutional Factors	Market and Non-Market Actors Engaged in Producing Market Order
Level of formalization	Infrastructure	<i>Level of:</i> Clinical/practitioner skill	Managerial competence	Payment systems, both by patients and to practitioners	Formal regulatory authorities—local, national, international
Degree of segmentation	Information flows	Clinical/practitioner effort	Financial resources—quantity		
Complexity of supply chain	Related services	Clinical practitioner integrity (trustworthiness)	Financial resources—source	Segregation or integration of various medical services	Informal organizations, local, national, international
Interconnectedness of markets	Laws	Price		Extent and quality of external state regulation of quality	“hybrids,” e.g., private or independent agencies with “public” mandate
Global, national, and local market systems	Sector-specific regulations and standards	Accessibility—subdivided into distance, hours of practice, languages spoken, and social distance	Governance structure (and its alignment with patient interests)—ownership; values; extent of patron-clientage; influence of financial source	Extent and quality of external and internal regulation of quality by professions and other associations	Private companies
Source/driver(s) of innovation	Informal rules and norms including those of health workers	<i>Level of:</i> Patient knowledge		Extent of implicit regulation and training provided by the referral system	NGOs/non-state service provider organizations
	Non-statutory regulations/codes	Patient effort (including compliance)			Providers’ associations
	Social values	Patient trust (Note that a patient may trust a provider who is not trustworthy)			Citizens’ bodies, co-producing arrangements
		Patient ability to pay		Extent and quality of internal regulation of quality by the health organization	Media and other sources of health-related information
				Visibility of reputation, including via franchises, “report cards,” and sharing of experience between neighbors	
				Inter-relationship with global organizations and institutions	

The devil is then in the detail. The evolution of market actors depends strongly on the specific interactions between direct financial incentives and the countervailing influences of reputation and a variety of regulatory and accountability arrangements. Successful management of institutional change involves the construction of new rules and widely shared understandings of what constitutes legitimate and illegitimate behavior. A recent paper on the factors that influence the investment climate in developing countries by Moore and Schmitz (2008) contrasts an idealized view that advocates the construction of highly organized institutional arrangements as a prerequisite to economic growth with a messier reality within which private actors create informal arrangements to facilitate trust-based market transactions and governments establish mutually beneficial relationships with private actors to create some degree of market order. They argue that the political economy strongly influences the degree to which these arrangements lead to economic growth and the eventual creation of rules-based market order, or to a descent into low-efficiency “crony capitalism.”

Similar factors influence the trajectory of health-related markets in which informal arrangements and a variety of partnerships between governments and private actors play important roles. In some circumstances, the state is unlikely to do more than prevent very dangerous practices such as the sale of counterfeit drugs, leaving local actors to create informal arrangements to bring some order to health-related markets. These arrangements are unlikely to be efficient except with regard to very simple goods and services. In other circumstances, the state and/or other actors play a leadership role in a process that can eventually lead to a rules-based regulatory system. Where state regulatory behavior is not functional, it may be possible to create alternative institutions that can improve quality but not in a manner that is economic in the short run. These changes are likely to demand philanthropic/donor investments that will see the new institution through the period in which it is gaining recognition in the market of health consumers.

Countries face a major challenge in managing a transition from a situation of largely chaotic and inefficient health-related markets to more ordered market systems underpinned by some form of social contract. This will involve experimentation and learning by a number of actors and the gradual development of appropriate rules, behavioral norms, and mutual expectations. The Chinese use a compelling metaphor to describe their management of multiple transitions¹⁵ as “crossing the river while feeling for the stones.” This captures the iterative nature of a process that is driven by local innovation and adaptation and where a legal and regulatory framework is evolving to incorporate lessons from local innovations that have worked well and in response to scandals and major negative outcomes. It is much too early to assess the success of China’s efforts to improve the performance of its health system. And there is lots of room for debate about the applicability of this approach to countries with very different administrative and political systems. Nonetheless, this metaphor encapsulates an important message about the management of the kind of complex change processes that

¹⁵ China is experiencing the following rapid transitions: transformation from a command economy to a market economy, rapid urbanization and industrialization, demographic change, epidemiological change, and major changes in access to all kinds of information.

many countries need to manage in their health-related markets. The following section describes recent thinking about the role of monitoring and evaluation in structuring a learning approach to the institution building.

6. Learning Approaches to Institution Building

A recent study by Peters and colleagues (2008) reviewed the factors associated with successful implementation of strategies to improve health services delivery in low- and middle-income countries. This section draws on that study and considers the lessons for innovations in health markets. Throughout this report, we have emphasized the need to understand these markets, highlighting the complex and multifaceted relationships between a range of actors. Such knowledge is a necessary though not sufficient prerequisite for promoting effective collaboration and communication between these actors. But its acquisition and use often pose serious challenges, particularly if the purpose is to engage and benefit the poor, who often have little voice or access to knowledge. Here we focus on the design and application of learning approaches that can help to overcome those challenges.

There are many practical reasons to focus on learning approaches as a means to improve provider performance. As described above, one major motivation is to overcome the information asymmetries that are inherent in health sector markets, so as to change or reinforce the rules of the game, and develop new social contracts. Chambers (1997) advocates the use of participatory learning approaches as a means to empower vulnerable groups, who are most likely to suffer from an existing institutional regime—the poor are often among these vulnerable groups. Senge (1994) argues more generally that large and complex organizations need to become “learning organizations” to succeed over the medium and long term. Similar arguments have been made in the health care field to rationalize continuous quality improvement and related management approaches for improving the performance of organizations (McLaughlin and Kaluzny 2006; NIST 2008). If provider performance can be defined, in part, by providers’ ability to meet the needs of the poor, then learning approaches need to be oriented toward those interests.

There is a growing consensus that traditional approaches derived from project-oriented monitoring and evaluation often do not deliver the systematic learning essential for determining not simply what types of innovation succeed or fail, but why and under what conditions those outcomes are more or less likely and for which stakeholders. Partly this is because they tend to adopt a very linear view of the learning process involving the following:

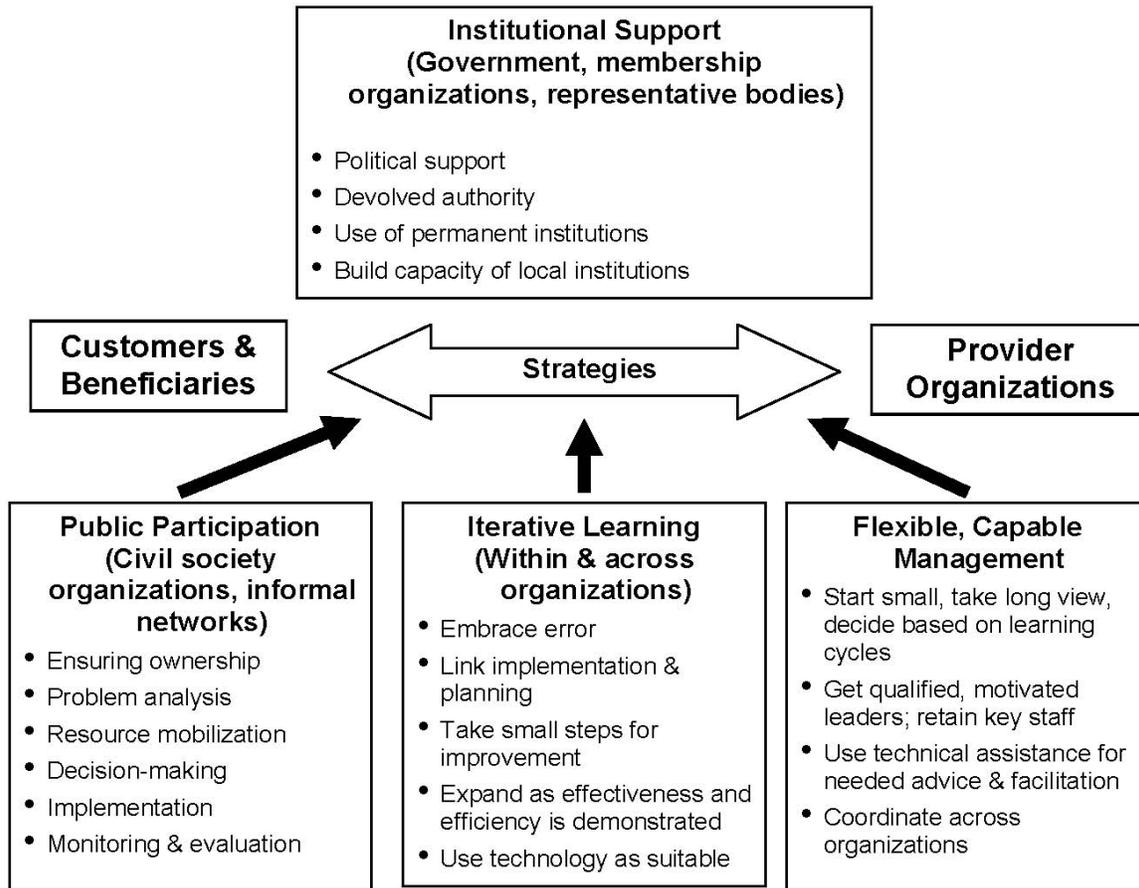
- Intervention formulation—planned activities, targeted objectives
- Intervention implementation—monitoring, management
- Intervention outcomes—evaluation

- Evidence-based learning—intervention design revised
- Impact evaluation

In the real world, intervention formulation and implementation are often inextricably combined, and crucial decisions are often taken by minor actors far removed from the original designers. Unpredicted effects are the rule rather than the exception. The expectation that “All other things are equal” almost never occurs, and context (location, population, institutions) is usually highly relevant. Predetermined indicators and targets may be useful if that context is well understood, but more often there is a need for much greater flexibility both in the types of information used and the modes of production. Many in the broader evaluation community have responded to this challenge. In a recent article, Stern (2008), editor of the journal *Evaluation*, highlighted an increasing focus on “theory-based approaches and a renewed interest in methods and the nature of evidence” (often identified with the “Realist” approach); a move away from simply assessing performance; the need to “synthesize and achieve coherence between sometimes incompatible evaluation objectives and questions”; the need for ever closer “engagement with civil society—including communities, the private sector and public service users—to identify acceptable ways of managing public initiatives and mobilize consent”; and the requirement to move beyond single evaluations to “synthesis reviews and meta-analyses.” However, it is as yet far from clear what new methodologies and methods might be required to meet these objectives.

As an initial step, building on the work of learning approaches in development (Brinkerhoff and Ingle 1989; Bond and Hulme 1999), we propose a conceptual framework that recognizes key market players and institutions and focuses on the concrete activities they can undertake (Figure 3). This framework is not a reflection of how public institutions may have been designed (e.g., with assumptions about Weberian motivations) or how they currently operate (e.g., depending on street-level bureaucrats or front-line staff who use their discretion in implementing central policies) (Lipsky 1980). Nor is it limited to learning processes within private organizations or civil society organizations. Rather, this is an action-oriented framework that builds on all these experiences.

Figure 3: Framework for applying systematic learning to health markets



Source: Adapted from Bond and Hulme 1999.

The framework is intended to be a flexible guide to different types of learning process, and its application is expected to vary considerably based on local market conditions. At different stages in the design and implementation of strategies to improve the provision of health-related goods and services, a variety of actors will play important roles. Consumer organizations may be directly involved in problem solving, resource mobilization, and monitoring. Yet, consumer organizations do not necessarily represent the interests of the poor (Peters et al. 2004), which may lead to continued negotiations of formal and informal rules between their stakeholders and the organization. The interests of consumer organizations may also be in conflict with providers or other key players, which may result in providers being less forthcoming with information, or less willing to collaborate. Service provider organizations will work best if they are able to identify and retain qualified and motivated staff, communicate effectively across organizations, and use professional facilitation and advice in targeted ways (as distinct from the tendency in many development agencies, which see technical assistance as a driving force for change). Critical institutional support includes government policies that encourage local participation and innovation by service providers, using permanent and local

organizations for administration and regulatory functions, and a willingness and ability to reorganize and refocus these institutions as needs are identified.

A common problem in the health sector in developing countries is limited capacity for implementation of strategies. Trying to find the right fit between intervention goals, the expectations of beneficiaries or customers, and the capabilities of implementing organizations, governments, and communities is an ongoing challenge. We propose that part of the solution involves continually questioning capacity constraints, and being aware of the effects on other market players. Do the constraints lie in the lack of specific human skills, infrastructure, or management systems that organizations need to perform their work, or is there a more important problem in the setting and enforcing of rules across organizations, or in communicating information between different actors? If the constraints lie within a key organization, such as a service provider or regulatory agency, radical reorganization is often considered, even though the costs to morale and productivity can be substantial. Can such problems be addressed by more subtle changes that minimize these costs while better aligning responsibilities, authorities, resources, and accountabilities with the objectives and tasks of the organization?

Knowing when the pace of change is outstripping the ability of organizations to deliver quality services effectively requires intelligence gathering and processing with both implementers and service beneficiaries. Simply asking which units within an organization appear to be performing well and which do not may provide early warning signs. Although any well-functioning organization will try to monitor the performance of its own constituent units, government regulatory agencies are traditionally seen as having the main role in assessing performance across organizations. Yet, in health market systems, the leading players in assessment and in setting rules on provider performance may also include consumer groups, research agencies, the media, professional bodies, or insurance companies. Whatever the origin of information concerning provider performance, it is important to consider the roles of other market players and their responses to that information.

Processes that encourage learning and good decision making

A range of existing tools can be applied to reinforce iterative learning that links implementation and planning, and encourages appropriate risk taking and promotes a forward-thinking perspective toward expansion of services that builds on what is learned. Participation in learning processes that involve other organizations involves risks, as it cannot be assumed that stakeholders will always see a benefit in their participation. A culture within organizations that accepts error may be needed, as well as trust between organizations. In the absence of trust, actors may undermine learning processes by manipulating information.

Processes that encourage learning, decision making, and action based on learning have been shown to be particularly effective in improving implementation (Peters et al. 2008). There is little evidence to suggest that specific types of organization must take a lead in driving or facilitating such processes in a given context. They tend to rely on the

involvement of multiple stakeholders. A learning-based approach focused on the implementation of policy may involve some of the following processes:

- Seeking out local innovations and local innovators (in communities, health service providers, etc). People can also be encouraged to test new approaches, and not be limited to ideas generated within the health sector
- Identifying and documenting the implementation of new and existing strategies for strengthening health services, and the roles played by key stakeholders over time
- Making agreements, either formally or through informal mechanisms, that the results of innovations and other strategies will be assessed and communicated. Formal evaluations of results and lessons learned should be incorporated as part of the process of strategy development. Any such evaluation will need to recognize that different market players will tend to have different values and priorities that sometimes come into conflict. For example, a priority to meet a financial “bottom line” may lead an evaluator to a different conclusion than one focused on meeting the needs of the poor. Mechanisms to facilitate learning from successes and failures from different perspectives should be structured into any strategy.
- Finding ways to understand local institutional arrangements and markets, and to involve key actors in the innovation and learning process
- Engaging government, civil society, and professionals in the learning process—all will likely need to alter their roles
- Developing more systematic ways to understand and anticipate the outcome of different strategies and innovations—to provide better frameworks within which the learning process can be structured

Types of question to ask in a learning strategy

Based on an extensive review of strategies that have been used to improve the performance of health workers and health service organizations, a number of key questions have been identified as associated with good learning strategies. These include the following:

- Are there positive and negative outliers in providing health services? For example, are there differences between states within a country, communities within a district, or neighborhoods within a community? Are there differences between vulnerable groups and other segments of society? Are there differences across different service delivery organizations? Differences may exist in terms of high and low performance or in population groups. Look for a range of available sources of data, including both routine health information systems and informal

mechanisms—for example, key informants or the media. Consider the way in which analysis is related to actions taken by decision makers, be they front-line providers of services, managers within a service delivery organization, senior executives or policymakers, or regulatory and membership bodies.

- What are the unintended consequences of the strategy? When implementing health interventions, most people tend to look only at the intended results, but it is also important to look at any unintended consequences, possibly well outside the narrow focus of the intervention itself.
- Does the strategy create the right incentives for critical organizations and people to work toward a common purpose? Changes in laws, regulations, leadership, macro organization changes, or economic/political shocks can radically affect the way health services are implemented. Trying to anticipate many of these shocks may be very difficult, but it may be more important to be able to recognize when they are occurring as soon as possible, and to take corrective steps. This again involves good information gathering and feedback mechanisms.

One conclusion of the proposed learning-based approach is that interventions and institutional changes should not be undertaken in isolation. One reason is to be able to identify and address the unintended consequences of any reform effort or attempt to influence markets—they are likely to affect the different players differently. Another reason is that partnerships are needed, not only to ensure sufficient scale of service provision, but to construct new social contracts and institutional arrangements within which providers are embedded. There are many learning technologies and processes that should be integral parts of any major efforts to strengthen health market systems, but it is just as important that they should involve all actors likely to influence their outcomes. If the outcomes are to benefit the poor, their participation in learning processes to influence health markets is particularly important, along with institutional arrangements that focus on achieving these benefits.

Appendix 1: Innovations to Improve Provider Performance

By Claire Champion, Sarah Dry, and Gerald Bloom

This appendix identifies innovations shown to affect the performance of providers in meeting the needs of the poor and likely to have a major impact on health-related markets in the future. The authors faced major challenges in putting this information together. There are no definitive inventories of innovations in health-related markets and there is relatively little scientific literature on the performance of these providers. Much activity takes place outside a formal regulatory structure and is not subject to reporting requirements. Some of the most populous countries are experiencing very rapid increases in the demand for goods and services and in the growth of local companies. It is difficult to obtain information on these companies and the strategies they are formulating to capture market shares. Finally, it is impossible to generalize about a wide spectrum of low- and middle-income countries which differ in almost every way.

Informal sector

This section builds on the review by Bloom and Standing (2001) of the growing role of unorganized markets in the provision of health-related services to the poor and the reviews¹⁶ by Shah, Brieger, and Peters (2008) and Cross and MacGregor (2008) of current knowledge on informal providers. It is difficult to draw a boundary around these markets. Informal providers include traditional practitioners, relatively untrained sellers of drugs, and providers of medical services and categories of health worker who provide expert services in the public sector but are not entitled to private practice, such as nurses and midwives, in some countries.

Shah and colleagues (2008) undertook a systematic review of the published evidence on interventions to address problems with dangerous practices, ineffective treatment, and unnecessary costs. The analysis is not complete and the full findings will be presented in the final draft of this report. One striking finding is the small number (88) of distinct interventions on which evidence has been published over the past 15 year, of which 49 percent were in Africa. These interventions targeted a variety of providers, including commercial medicine vendors (30 percent), traditional birth attendants (26 percent), and community health workers (30 percent). The majority of the interventions were direct training (70 percent), and a small number employed other primary strategies such as supply provision, franchise creation, branding, regulation, and so forth. Many interventions combined training and other strategies. The review of the evidence on the impact of these interventions is still under way and will be reported in the final draft of

¹⁶ These reviews were co-financed by the DFID-funded Future Health Systems Consortium, and three will be published as Future Health Systems Working Papers.

this report. Their preliminary conclusions are that training of lay health workers to play a role in the formal health system can be effective in extending access to health services. Also, measures to improve the knowledge of drug sellers can improve the quality of prescriptions. However, training alone seems not to be adequate to ensure appropriate use of drugs, if not combined with measures to design incentives that do not encourage overuse of inappropriate drugs.

Cross and Macgregor (2008) point out the wide variety of people offering health-related goods and services and the difficulty in defining who is an informal provider. They emphasize the degree to which they work within a social context that influences their relationship with clients. They also emphasize the need to understand their livelihood strategies and their need to attract and retain clients. They draw attention to the role of a variety of informal arrangements that influence the performance of informal providers, including associations. They point out that associations often play a dual role of excluding competitors and maximizing the benefits of members, as well as protecting the reputations of members. They also argue that the growth of markets for pharmaceuticals and the aggressive efforts of the manufacturers and distributors of these products to increase their markets strongly influence the performance of informal providers. Interventions aimed at influencing the performance of these providers that do not take these contextual factors into account are likely to have unintended consequences.

One particularly important area of concern is the interaction between the markets for health services and for pharmaceuticals. A study in Chakaria District in Bangladesh, for example, found dangerous use of certain drugs, ineffective treatment of many conditions, and substantial amounts of unnecessary drugs. The study explored a number of reasons for these outcomes. One important finding was the role of the wholesalers of drugs. The study team found that there had been a very large increase in the number of people selling drugs to informal providers. These people had powerful incentives to promote the use of expensive products and may have influenced prescription behavior. A similar study in Nigeria also emphasized the importance of the flows of information on appropriate use of drugs as well as the structure and incentives associated with the wholesale network.

Innovations in the organized sector

This section presents the findings of an inventory of innovations in the organized sector compiled by Claire Champion. It is largely based on several years of participating in networking meetings and undertaking field work with social entrepreneurs and international organizations that provide technical assistance to the private health sector, supplemented with information from the Web sites of umbrella and implementing organizations.¹⁷ Although every effort has been made to be comprehensive, the inventory

¹⁷ The Nextbillion.net platform (www.nextbillion.net/blogs/topic/health) brings together social entrepreneurs, business leaders, NGOs, policymakers, and academics to exchange information about innovative business models. It has published a number of case studies in health. Dominic Montagu, of the Global Health Group at UCSF, has developed a list of private sector initiatives

is biased in favor of interventions supported by donor agencies, those inspired by developed country experiences and imported by developing markets, and models initiated by well-established local organizations. Those undertaken by private companies and local actors are likely to be greatly underrepresented. It is difficult to assess the relative importance of these different sources of institutional innovation.

The models presented in the inventory show common trends, but they differ greatly in their missions, forms, funding sources, and implementing mechanisms. It can be misleading to use an ideal-type categorization, such as “social franchising” adapted from advanced market economies, to describe an organizational arrangement in a very different context. We have tried to avoid misleading simplification.

Innovations are taking place at all levels of care from community-based services¹⁸ to specialty hospital care.¹⁹ Some organizations focus on one level of care and refer patients to the public or private sectors. Others provide two or more levels of care with referral mechanisms.²⁰ These organizations cover a large spectrum of health services. Some address family planning or HIV/AIDS and TB needs, whereas others offer a broader approach such as meeting essential drugs needs. Innovations have also taken place in the laboratories and diagnostic services industry.²¹

The self-defined mission of organizations include nonprofit, commercial, and faith-based. Whereas the commercial for-profit model has a clear mandate for financial sustainability, nonprofit status is not a clear indication of the mission or financial objectives of the organization. Some nonprofit organizations have introduced an up-front objective to reach financial sustainability within the first few years of their activities, and others anticipate a need for subsidies for a very long time.²² Little is known about the degree to which different sources of finance affect the values and management of an organization. There is a proliferation of bottom-up and commercial models in Asia. This is most likely due to the better entrepreneurship environment of the region as well as growing and recognized market opportunities. Africa seems to favor imported models such as franchises as well as faith-based initiatives. However, this is not the case in all countries (e.g., Nigeria or South Africa). In addition, the inventory might not provide adequate representation of volume and types of initiatives per country and per continent. One

(www.ps4h.org/Private_Sector_Health/Resources.html). The IFC, in collaboration with the Gates Foundation, commissioned an overview of health care markets in Africa (IFC 2007). Ashoka is one of the leading networks of social entrepreneurs. Finally, USAID has funded PSP-One, a program for private sector development in health that focuses on reproductive health services (www.psp-one.com).

¹⁸ E.g., Business for Health in Ghana, Living Goods in Uganda, Janani in India, or BRAC in Bangladesh.

¹⁹ E.g., Aravind and Narayana Hrudayala in India.

²⁰ For example, ProSalud provides primary, secondary, and tertiary services to its patients, ranging from community outreach activities to services provided through their referral hospitals. The CFWshops franchise has two levels of care: the outlets run by a trained community health worker and the small clinics run by a nurse. Referral mechanisms have been put in place from the outlets to the clinics.

²¹ E.g., Bio24 in Senegal and Radmed Diagnostic Center in Nigeria.

²² This is the case, for example, for Business for Health, Living Goods, or CareShops. ProSalud has a cost recovery of 98 percent (Discussion with Carlos Cuellar, Abt Associates).

noticeable trend, however, is that most for-profit ventures target an urban market.²³ A few recent initiatives have tried to target rural areas with full cost-recovery targets,²⁴ but many recognize the challenge of working in rural areas because of lower population density and the higher cost of monitoring and controlling quality.

Innovations have a number of sources. Some are the results of local or international entrepreneurs spotting a commercial and social opportunity.²⁵ Existing companies have also looked into opportunities to extend their outreach to lower income populations and create their own distribution systems.²⁶ Some health franchising models are a direct extension of previous social marketing activities, in which a franchising agreement has been signed with distribution outlets to increase incentives for quality.²⁷ Other initiatives are the result of independent health providers looking at improving their work efficiency and quality and deciding to create their own association or network.²⁸ Lastly, the faith-based organizations provide services out of their religious mandate and fill the needs unmet by the public sector.

We identified three types of quality control mechanism: a mix of management incentives and strict monitoring, a contractual approach with a branded franchise, and an accreditation mechanism. In the accreditation model, quality control is outsourced to the local authority,²⁹ while franchises internalize quality control. Franchisees are motivated to abide by the law of the franchise so that they can remain part of the franchise and benefit from its advantages (e.g., brand recognition, quality and affordable drugs, training, and professional network). In some franchises, franchisees are allowed to provide additional services that do not fall under the franchise rules,³⁰ while in others the franchisees are only authorized to provide a limited list of services and products.³¹ Other organizations use a mix of management incentives and strict monitoring and quality control activities. They set up standardized procedures and guidelines and create a strong corporate culture for quality improvement.³²

²³ E.g., Farmacias Similares pharmacies and ProSalud are located in poor neighborhoods in urban and peri-urban areas.

²⁴ Business for Health in Ghana, Living Goods in Uganda, and the Shatki entrepreneurs in India.

²⁵ The CFWshops franchise was started by the Health Store Foundation, funded by a U.S. lawyer.

²⁶ In India, Hindustan Liver Ltd. partnered with self-help groups to start a network of women entrepreneurs to distribute their products in rural areas. Farmacias Similares was set up by a generic drug manufacturer to expand sales coverage to low-income areas through quality services. The network now comprises 3,000 pharmacies throughout Mexico.

²⁷ This has led the Ghana Social Marketing Foundation, after years of successful family planning and social marketing activities, to create the CareShop franchise, a network of 270 licensed chemical sellers recruited. Population Services International (PSI) and Marie Stopes International started several franchise initiatives for the same reasons (e.g., PSI Top Réseau Network and PSI Sun Quality Health).

²⁸ K-MET started as an association of for-profit medical practitioners from peri-urban and rural areas in Kenya.

²⁹ An example of accreditation scheme is the ADDOShops initiative in Tanzania. Accreditation to the ADDOs network is granted to those who meet and keep predefined standards of quality.

³⁰ E.g., Greenstar and Blue Star.

³¹ E.g., CFWshops and CareShops.

³² The success factors of ProSalud and Aravind, for example, lie in their high-quality delivery system, including standardization and strict quality control.

Brand and reputation are generally of prime importance. The asymmetry of information between the providers and their patients creates the need for patients to base their decision on reputation and signs they can recognize. Many of the organizations have developed large marketing and community outreach activities in order to enhance trust between the patients and the organization.³³

There is a lot of evidence of rapid institutional development in the pharmaceutical sector. Both China and India have large firms that are becoming important global suppliers of pharmaceutical products. The development of the wholesale and retail markets has been slower, and there are serious problems with cost and quality in both countries. One important development in India has been the rapid creation of retail pharmacy chains. A review for this report identified seven which have announced plans to establish 8,000 shops over the next few years. Most shops are in urban areas, but there are also plans to establish low-cost rural pharmacies. These chains have involved a number of different actors, including a large pharmaceutical manufacturer, a U.S.-based pharmacy franchise, a large hospital chain, and a network of rural shops. It is difficult to predict the ultimate alignments that might emerge between these actors, or how this will affect the quality of drugs supplied and the kind of advice provided on prescriptions. This raises important challenges concerning regulation and consumer information. It is conceivable that India will become an important source of institutional innovation in retail pharmacy.

Many of those innovations are still at a pilot stage. There is very little information on their performance. We reviewed the available evidence in peer-reviewed journals and grey literature identified through a search of PubMed, Popline, and Google and visits to Web sites of umbrella organizations. Most reports are of case studies. Although they do not provide formal and rigorous evaluations, they are an important source of information. We found a few general reviews of evidence on private for-profit sector interventions (HLSP 2004; Mills et al. 2002; Patouillard et al. 2007; Prata et al. 2005). Other reviews focus on family planning (WHO 2007; Peters et al. 2004; PSP-One 2006), accreditation and certification (Shawn 2001), or on faith-based organizations (Reinikka and Svensson 2003). All these reviews mention the lack of systematic evidence on impact and the need for rigorous evaluations. Most studies concern highly subsidized models such as social franchises and models that focus on family planning and reproductive health services. Three main outcomes have been studied: client satisfaction, quality of services, and access by the poor. The first has been assessed in the majority of the studies, but very few studies measure quality of services and access to the poor. We could not find any evaluation on population health outcome or on the macroeconomic impact of those innovations.

Franchising models have been found to increase clients' satisfaction and perceived quality and have tended to lead to an increase in service use (Agha et al. 2007; PSI 2007, Plautz et al. 2003; Stephensen et al. 2004). The few studies that explored objective

³³ E.g., Aravind organizes community outreach activities to increase awareness about its services and build trust. PSI initiates media campaigns to promote its franchise brands. Farmacias Similares have built a strong image of quality around the person of Dr. Simi and his motto "Lo mismo pero más barato" (the same but cheaper).

measures of quality had mixed results. Impact varies within a same organization with important differences between locations and across services and chosen criteria to measure quality (PSI 2007; Prata et al. 2005). When Stephensen and colleagues (2004) assessed family franchises in India (Janani), Pakistan (Greenstar and Green Key), and Ethiopia (Biruh Tesfa, Ray of Hope), they found an increased volume of services but did not find any association with reproductive health outcome.

The very few studies that assess access by the poor show mixed results. A study by Montagu et al (2005) in Kenya concluded that the K-MET network did not increase inequalities in access to health services in rural areas. Hennink and Clements (2004) showed that even if the services are offered in poor neighborhoods in Pakistan, “users of the services are not the urban poor themselves but select sub-groups of the local population.” Several papers outline the trade-off between serving the poor, offering quality services, and making a profit (PSP-One 2006; Lonnroth 2007). Patouillard and colleagues (2007) emphasize the need to assess the impact of interventions on the poor.

A review of accreditation schemes by Shawn (2001) found that they seem to work well in middle- and high-income countries but have shown few results in low-income countries. However, an evaluation of a network of accredited drug dispensing outlets in Tanzania showed a major decrease in the availability of unregistered drugs in the intervention group, suggesting an increase in drug quality (Sigonda-Ndomondo et al. 2003).

Another strategy that builds on existing structures has been the efforts by associations of nurses or midwives in Central and Eastern Africa to enable their members to practice privately. In many of these countries, the nurses have established a powerful position in the public sector but have been excluded from private practice. More recently, these restrictions have been removed, but institutional arrangements to support their establishment of a practice and build their reputations are not well developed (Rolfe et al. 2008).

Another source of legitimacy in many countries is the many different faith communities. Reinikka and Svensson (2003) found that faith-based hospitals provided higher quality health services at a lower cost in Uganda. Studies have demonstrated the great importance of networks associated with a religious denomination in building trust in many parts of Africa. A variety of health-related initiatives have built on this social capital. One example is the community health insurance schemes that have been linked to a church hospital or the church hierarchy. Another is the reputation that church hospitals tend to have for competence and ethical behavior. In fact, studies have shown a considerable amount of variation in the performance of different church hospitals (Tibandage and Mackintosh 2005), depending on local relationships. Nonetheless, it would appear that the identification of a hospital with a well-known religious denomination tends to enhance its reputation (Leonard 2002).

Appendix 2: Provider Performance and Information and Communication Technologies

By Henry Lucas, with research assistance from Sarah Dry

There has been much discussion of the role that recent advances in information and communication technologies (ICTs) can play in improving health provider performance, though as yet there seems to be little reliable, independently verified evidence to support the claims of those who initially viewed the new ICTs as offering “a revolution in global healthcare management” (Séror 2001, p. 1). In particular, limited systematic attention has been given to the application of ICTs by private providers in developing countries, with most of the international agencies concerned with these issues tending to focus on large-scale public sector innovations (e.g., Chetley 2006; WHO 2006).

One established requirement for the successful implementation of innovations in the private sector is a receptive “technological system” (Stewart 1977), where required inputs are readily available and delivered outputs satisfy existing demands. One reason why some specific developments in ICT have had such a major impact is that they addressed long-felt and well-understood needs. To take an obvious example, small businesses, including those in the health sector, have probably always recognized the value of being able to communicate reliably and in a timely fashion with both suppliers and customers. The arrival of the mobile telephone addressed this specific issue to an extent previously unimaginable, allowing instant communication even in some of the most remote and least developed areas. It has similarly been long understood that maintaining current information on stocks, customers, activities, and cash flows was enormously valuable in making good management decisions. Again, the development of relatively inexpensive, easy-to-use personal computers simply made it possible for such activities to be undertaken much more efficiently and reliably within existing management environments. ICT capital equipment purchases could be justified in terms of improved performance of existing tasks. Once acquired, its inherent flexibility encouraged more innovative applications.

Such low-key, relatively uncomplicated applications have probably spread rapidly within the health sector as elsewhere, but most go unreported and unremarked (Kaplan 2006). They tend to emerge into public awareness only if they are taken up by the specialist media, donor agencies, or curious academics. Two such examples originate from South Africa. On Cue, a company established by a TB specialist, uses a simple computerized telephone system to send text messages reminding patients to take medication at predetermined times.³⁴ The Cell-Life project (Khan 2004) is supported by the mobile telephone company Vodacom. It involves the use of mobile telephones by a team of locally recruited counselors to monitor the treatment and health status of around 800 HIV patients. Health care staff at an HIV/AIDS clinic can access this information via a central database and intervene if problems arise. Similarly, paramedics and community volunteers attached to the Bombay Leprosy Project have been provided with mobile

³⁴ See www.bridges.org/publications/11.

phones and pagers to link patients with clinic doctors, for example, to reach rapid decisions on emergency treatment.³⁵

On a larger scale, the Health Information and Service call center provided to mobile telephone subscribers by GrameenPhone in Bangladesh (GrameenPhone 2006) is said to be widely used by informal health providers when they have doubts about a diagnosis or treatment. Voxiva, a communications company that has pioneered the use of information systems based around mobile telephones, has established a number of regional health networks. The Health Watch disease surveillance project in Tamil Nadu³⁶ was set up following the tsunami disaster in 2004, and a system whereby rural healthcare providers use mobile telephones to provide routine assessment data on high-risk pregnancies to centrally based senior staff³⁷ is operating in the Ucayali region of Peru.

Reliable information on the use of computer-based management systems by health providers in developing countries is even scarcer than that on mobile telephone applications. However, the importance of a receptive environment is well illustrated by recent reviews of two broadly comparable innovatory exercises in Ghana and Mexico by the World Resources Institute (WRI). The retail pharmacy chain CareShop was established by a for-profit subsidiary of the Ghana Social Marketing Foundation (GSMF) in 2002 (Segrè and Tran 2008). It is a franchise of licensed retailers of over-the-counter drugs, operating under GSMF guidelines that are intended to improve the quality, accessibility, and affordability of essential medicines. When a donation of 100 new computers was received, they were allocated over time to franchisees on the basis of their performance. However, the great majority were never used, and at the time of the WRI review they were typically either not in working order or not connected to an electricity supply. Their owners were theoretically interested in using the computers to record sales data but had been deterred by practical difficulties or cost implications. They apparently valued the computers highly but only as symbols that they could put on display to indicate the success of their business.

On the other hand, the Mexican pharmacy franchise Mi Farmacita Nacional was said to have fully integrated computerized patient records and inventory control into its management processes (Coronado, Krettecós, and Lu 2007). Though Mi Farmacita is a fully for-profit company, it has adopted a social entrepreneurship model similar to that of CareShop, aiming to provide essential drugs and health services to low-income populations. Each franchisee is responsible for hiring a relatively inexperienced though qualified doctor. Each time these doctors diagnose and write a prescription, details are entered into a centralized computer system via a terminal located in the facility, generating the data required for monitoring professional performance. The computer is also used for inventory management, allowing franchisees to monitor their stocks and place orders. The associated sales database can be accessed across the franchise chain, and franchisees are encouraged to compare product sales and prices to promote competition.

³⁵ See www.edc.org/GLG/gkd/Sep_2001/0032.html.

³⁶ See www.voxiva.net/tamil.asp.

³⁷ See www.voxiva.com/nacer.asp.

First Care³⁸ is a health care initiative by Rural Technology and Business Incubator (RTBI), a society set up by the Indian Institute of Technology to promote technology-based business ventures in rural areas. It aims to create a network of trained and accredited primary care providers by working with “rural medical practitioners,” informal private providers who typically operate as solo practices in rural communities. They form the largest cadre of private health providers in rural India and are by far the most popular source of care for the rural poor. First Care regards ICT as absolutely central to its project. First Care plans to link clinics with Internet- and mobile-telephone-enabled kiosks that will provide access both to distance learning materials and to physicians and hospitals that are willing to offer advice, laboratory testing, and referral support. First Care also intends to introduce personal-computer- and mobile-phone-based record keeping systems that will allow quantity and quality monitoring of services. At present, just one pilot activity is under way with a small group of rural medical practitioners in a rural area of Tamil Nadu.

An alternative approach to rural health care in India, deliberately bypassing informal providers, is being piloted by Drishtee,³⁹ a for-profit franchise organization that aims to use ICT to promote entrepreneurship in rural areas. They have established a network of around 1,000 kiosks across six states, with each kiosk having a catchment population of around 1,200 households. They were initially focused on providing access to a range of key information sources—for example, government records and commodity prices—and assisting applications for licenses, certificates, and benefits. They have also set up a range of training courses, particularly in computer literacy and spoken English. In 2006, working with Microsoft India (Microsoft 2007), they set up kiosk cooperatives in a small number of villages in the Madhubani district, one of the poorest in Bihar state, to provide video-conferencing facilities that allow diagnosis and prescription by doctors in an NGO health center in the capital, Patna. This involves the use of a recently developed remote diagnostics unit that captures blood pressure, heart and lung sounds, oxygen saturation, temperature, and pulse rate. The health center maintains computerized patient records for those using the kiosk and has links to a referral hospital that can undertake laboratory tests and provide a referral service. The kiosks can also be used to arrange purchase of prescribed drugs from an accredited pharmacy.

A third variant on this theme is currently being piloted in Pakistan. Sehat First, a joint venture between d.o.t.z. Technologies (a social enterprise) and the Acumen Fund (a nonprofit venture capital fund), has set up ICT-based health centers in five locations in Bin Qasim Town in the southeastern part of Karachi. The first started to receive patients in April 2008,⁴⁰ and the ambition is to establish 500 centers across Pakistan by 2012. Again, the model is based on franchised health centers which in this case incorporate a multipurpose tele-center, pharmacy, and general store, with the aim of ensuring financial viability. They are targeted at areas with very limited formal health services and aim to provide basic care, pharmaceuticals, and a similar tele-consultancy service to that

³⁸ See www.rtbi.in/home1.html.

³⁹ See www.drishtee.com.

⁴⁰ See www.sehatfirst.com/#/objectives/4527966722.

envisaged by Drishtee. Support for these services is provided by partnership agreements with Aga Khan Medical Services and Unilever Pakistan.

As the above examples show, the general franchise model can take a variety of forms. One key dimension of this flexibility is the degree to which they are centrally directed and regulated. ICTs have greatly extended the possibilities for both centralization and decentralization. The availability of reliable communications and a stand-alone computer in each facility has the potential to increase the ability of local managers to be self-reliant—for example, maintaining their own supplier, customer, and inventory databases, and keeping track of their own sales and finances. On the other hand, the same equipment can allow a central authority to undertake detailed monitoring of their activities. An extreme example of the latter, though in a retail chain rather than a franchise operation, is provided by an independent evaluation study covering the period 1998–1999 of what was then the largest and most widely dispersed chain of private urban clinics in South Africa (Palmer et al. 2003).

The clinics offered ambulatory care to patients who either paid a flat fee or were members of an affiliated insurance scheme. The aim was to provide an attractive and trustworthy service, including on-site availability of doctors, laboratory tests, X-ray, ultrasound, and drugs, at a price that would allow access to a wide range of urban workers, not only those in well-paid employment. The average cost per visit was around 42 rand (US\$7). It would appear that the ICT system was a key factor in holding down costs and hence allowing the company to adopt this pricing policy. Each clinic was linked to the head office of the company over a computer network that handled both clinical and management information. On entry, a patient would initially be seen by a health care worker who entered personal details and symptoms into the computer network. This could access a database of more than 2,000 algorithms for diagnosis and treatment derived from the Cochran Collaboration Reviews. The reliability of this database was central to the overall operation, given that computer-based diagnosis is not a trivial undertaking (Peters et al. 2006). Three outcomes were then possible. The health worker might use the information system to arrive at a diagnosis and recommended treatment; pass the patient on to a clinic nurse; or tell the patient that the clinic was not able to assist him or her. A similar procedure would take place for patients referred to the nurse, except that in these cases an onward referral would be to a clinic doctor.

Health care workers, nurses, and doctors were all expected to follow recommended treatment protocols, and decisions to act otherwise would be systematically recorded and reviewed by clinic and central managers. Any drugs provided from the clinic dispensary would be similarly compared with those implied by the recommended protocol and all deviations identified. The system thus allowed not only for routine clinical audits but detailed daily reports on revenues and costs relating to each patient visit. Overall, controlling access to clinic doctors, use of expert systems, and strict adherence to protocols enabled staff costs to be less than half and drug costs around one-quarter those at comparable private general practices. The independent evaluation reported favorably on both the cost and quality of services provided.

Some might argue that the clinic chain exhibited two common characteristics of private sector engagement in service provision: “Cherry-picking” areas where treatment was relatively straightforward and profitable, leaving the public sector to deal with the rest (Pollack 2001); and de-skilling staff by requiring them to follow the dictates of expert systems (Hanlon et al. 2005). These complaints are familiar from discussions of European health care systems, as are the counter-arguments: Private provision in selected areas can “reduce the overall burden” on the public sector, allowing a focus on areas of greatest need; and services should be run in the best interests of patients, not providers. This is not the place to address these long-running debates. The key observation for the present discussion is the crucial enabling role played by the computer system in the implementation of the adopted business model and in the fine-tuning of that model in pursuit of profitability. The example suggests that ICT may sharpen the debate on public versus private provision by increasing the range of strategies open to private companies seeking to establish profitable investments in the health sector.

The model described above is crucially dependent on the use of accurate diagnostic software. Development of such software is a far from being a trivial undertaking (Peters et al. 2006). It has become a rapidly expanding area of specialization for software companies, and there are a considerable number of competing products in this market. One of the more interesting, because the intention is to distribute copies free of charge in developing countries, is NxOpinion. This was developed by the nonprofit Robertson Research Institute⁴¹ in collaboration with Microsoft Research. It is a real-time diagnostic tool intended to assist the diagnosis of around five hundred illnesses and forms part of an integrated software package that also supports electronic health records and performance monitoring. Thus far, it has been piloted by missionary hospitals in the Dominican Republic and by a medical NGO, Doctors on Call for Service,⁴² in the Democratic Republic of Congo. In 2008, the Elaj Group, which provides medical services in Egypt, Qatar, Saudi Arabia, and United Arab Emirates, signed a memorandum of understanding to distribute and promote the software, initially within its own centers and then to providers in Libya, Morocco, and Tunisia.

ICT and the health knowledge economy

The above discussion has focused on the deliberate use of ICT by health care providers to improve access, efficiency, or quality of services. However, these technologies have also very much changed the information environment within which providers operate. Bloom, Standing, and Lloyd (2008) suggest that health care is now best regarded as part of an emerging “knowledge economy” in which people are moving from being essentially passive recipients of care to active participants in their treatment. One key driver of this change has been an explosive growth in the volume of health-related information flows. Many who would previously have relied on the judgments of local health providers, possibly supplemented by advice from family and friends or vaguely remembered

⁴¹ See www.robertsontechnologies.net/.

⁴² See www.docs.org/.

newspaper articles or stories broadcast by local radio or television stations, now have access to, and in some cases are directly targeted by, a vast array of competing sources of information. Over the past 20 years, an explosive growth in the number of radio and television channels, print publications, and mobile-telephone- and Internet-based services has resulted in a step-change in the range of material available and the speed with which access is possible. Health care providers who have previously found it relatively easy to dismiss the doubts of those self-diagnosing from a medical dictionary or self-treatment guide are now confronted by patients who may have instant access to thousands of apparently authoritative information sources that appear to address their specific health concerns.

This revolution has been associated with the emergence of a great variety of content providers with very different aims and incentives. In addition to a diverse range of qualified and unqualified health workers, these include public health information agencies, producers and sellers of health-related goods and services, advertising and public relations agencies, international and national NGOs, advocacy groups, and media companies seeking audiences. Some of these will offer valuable information and guidance. Others may dissuade seriously ill individuals from seeking appropriate treatment or encourage the worst fears of the worried well in order to sell them a guaranteed cure. The overwhelming majority will be subject to no external quality control procedures and have almost complete freedom to claim qualifications they do not possess, make wildly exaggerated or simply false statements as to the efficacy of treatments they recommend, invent evidence to support such statements, and even conceal their true identities or allegiances.

This rapidly changing health knowledge economy provides both opportunities and challenges. One widely accepted distinguishing characteristic of health markets is the imbalance of power between possessors of expertise and those hoping to benefit from it—the problem of information asymmetry. The new technologies can in principle redress this balance. A poor woman in a Bangladesh village can use a mobile telephone to access the GrameenPhone Healthline (GrameenPhone 2006) and ask a qualified doctor if the drugs being prescribed by a local provider will make her condition better or worse. A member of an Internet-based AIDS patient group can compare experiences with thousands of sympathetic fellow sufferers, some with professional expertise, and gain the confidence required to challenge substandard treatment. On the other hand, the capacity to communicate information faster, more often, in more attractive formats, and in a much more targeted fashion offers enormous opportunities for those who wish to exploit the technologies for maximum commercial or political advantage, irrespective of the cost to specific individuals or the population at large. Medical “quacks, charlatans, mountebanks, cranks and hucksters” (Wahlberg 2007) have been an integral part of the history of health care, probably since its inception. They have often proved both highly adaptable to changed environments and highly innovative in their use of new technologies. It is not surprising that they have enthusiastically grasped the opportunities offered by developments in ICT.

The new technologies thus raise complex challenges in terms of equity of access to health information, the quality of that information, and the trust that users can place in information providers. Mechanisms are needed that can both promote beneficial applications—for example, improving the ability for service users to make better informed choices—and limit the opportunities for misuse. They imply a need for new ways of thinking, both about the nature of regulation and the extended range of actors and modes of accessing health information and services to which that regulation should be applied. In the OECD countries, this will probably involve further development of existing institutional arrangements such as professional codes of conduct and formal regulatory regimes, which evolved partly to mediate the relationship between providers and users of expertise to mitigate the potential adverse consequences of information asymmetry. However, these are weakly developed in many developing and middle-income countries, where the combination of increasing marketization and largely unmediated access to information and services has created opportunities for harmful behavior as well as potential gains. To highlight one obvious example, health workers, drug sellers, and pharmaceuticals suppliers often have powerful incentives to encourage a costly style of medical care, involving over-medicalization of self-limiting conditions and unnecessary health expenditure. Combining those incentives with a capacity to conduct extensive media-based advertising campaigns alongside highly targeted information flows to specific provider and patient groups, or even specific individuals using computer databases, the Internet, and mobile telephones could greatly exacerbate an already extremely worrying situation.

On the other hand, the spread of relatively low-cost information and communication technologies may also contribute to addressing such issues by providing alternative forms of knowledge mediation that can be linked to effective regulatory mechanisms. It has the potential to disseminate expert knowledge and respond to requests for specific kinds of information—for instance, through Internet-linked mobile telephony—at a cost that is at least in reach of poorer populations. (By 2007, there were 250 million mobile telephone subscribers in Africa, which was also the most rapidly expanding regional market (IPS 2008).) It can enhance the agency of local health service user groups, empowering them to create their own knowledge base and take more informed decisions, perhaps in collaboration with supportive health professionals from outside their own region. Such innovations can be small-scale and relatively inexpensive—for example, blending Internet and community radio services as in the Kothmale project in Sri Lanka (James 2005) or the Nakaseke Community Multimedia Centre in Uganda (Nakaseke 2007). New institutional arrangements in health and other social sectors are also emerging to allow the use of information technology to monitor provider behavior and make information on that behavior public. An interesting example is provided by recent developments in China, where the introduction of Basic Medical Insurance schemes in urban areas (Tang and Meng 2004), and the parallel New Cooperative Medical Schemes (Mao 2006) in rural areas, have resulted in a computerized inpatient record system that, though primarily intended for accounting purposes, has considerable potential in terms of allowing local government to oversee the activities of notionally public sector but largely autonomous and market-orientated hospitals.

The new health knowledge economy reflects the increasing role of non-state actors in health systems, particularly where markets are playing an increasing part, and raises complex governance issues. Health system analysts often speak of public-private partnerships, but this language is inadequate to describe many of the institutional arrangements emerging at the interface between states, markets, and civil society. These often tend to be locally generated strategies responding to the need to establish or reestablish trust in providers of information, goods, or services. The “tele-center” or “tele-kiosk” concept provides an interesting example of the possibilities and potential pitfalls of such strategies. These are primarily small to medium scale, typically private sector franchise enterprises with donor, NGO, or government subsidies, that aim to act as community communications centers, combining telecommunications, Internet, e-mail, fax, photocopying, printing, and sometimes local radio as in the Kothmale and Nakaseke examples cited above (Fillip and Foote 2007). The idea has proved extremely popular with governments, international agencies,⁴³ social entrepreneurs,⁴⁴ and some private companies. Microsoft’s Project Saksham has recently agreed to set up 5,000 rural kiosks in India and has suggested an eventual target of 200,000 using satellite-based broadband.⁴⁵

Many of these supporting organizations have indicated that the provision of health-related services should be a key component. Run by managers dedicated to serving the community, and employing trustworthy and benevolent local institutions and individuals—e.g., hospitals, health NGOs, and local doctors—to mediate information flows, they might seem to provide at least a plausible route to bridging the digital divide in the health sector. However, this attractive scenario makes two key assumptions: first, that questions relating to health issues have but a single correct response on which all reputable mediators can agree; and second, that mediators will be both incorruptible and beyond the influence of local economic, social, and political pressures. In practice, hospital doctors, for example, might well use Internet resources to disparage remedies advocated by respected traditional healers or insist that people should not purchase drugs in markets run by local community leaders. They may take these positions based on considered clinical judgment, professional hubris, or commercial interest.

How would such disputes between potential mediators on health issues be conducted and resolved? Probably on the basis of local popular opinion and/or the degree of influence that the various parties can bring to bear on the tele-center management. Where governments or other donors are providing support, they too will clearly be in a position of influence but will typically not wish to be seen as micro-managing an institution explicitly identified as a local resource. The more successful the tele-center, the more it tended to lead debates on health issues, and the greater the level of trust conferred on it by local community members, the more incentive there would be for capture by one or other local elite groups. The key point is the familiar one that health knowledge has a high value—not only in commercial terms but also in terms of social, cultural, religious, and political currency—and valuable assets attract the attention of those who see

⁴³ See www.unescap.org/icstd/applications/cec/.

⁴⁴ See www.grameencommunications.com/upcoming.html.

⁴⁵ See www.microsoft.com/india/keynote.aspx.

potential advantage in their ownership. If tele-centers were to become a serious source of health information, their governance structures should merit at least as much consideration as their technical capacity.

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