Designing Effective Health Care: Matching Policy Tools to Problems

Abstract:

Health care reforms often result in disappointing failures due to the misguided goals they pursue and the flawed means they employ. The paper proposes that effectiveness – defined as universal access to essential health care at a cost affordable to society – is a worthwhile, and achievable, objective. But to realize effectiveness, reformers need to discard their *a priori* preferences for markets or governments and instead select a range of policy tools targeting different problems. The paper will argue that a concerted use of regulatory, fiscal, informational, and organizational tools shaping the behaviour of health care providers, insurers and users can achieve effective health care. The paper will highlight the use and misuse as well as non-use of these tools in China to shed light on tools approach to health policy reforms. Lessons from China are highly relevant to developing countries around the world trying to reform their health sector.

Keywords: Policy Tools, Policy Design, Health Policy, China, Policy Effectiveness.

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1. Introduction

Achieving universal health coverage at a fiscally sustainable cost has been a key goal of governments in the developing world in recent decades, (Bonilla-Chacin and Aquilera 2013; Hanvoravongchai 2013; Somanathan et al. 2013; Marten et al. 2014;; Harimurti et al. 2013; Bali and Ramesh 2015). Despite their efforts in the form of increased expenditures and new programs, a large share of total healthcare expenditure in developing countries continues to be financed by out-of-pocket payments (OOP): about 50 percent of total health expenditure in China, India, Indonesia, Philippines, Vietnam, for example (WHO 2016). Such large expenditure financed without risk pooling poses severe challenges for households, pushing many into lifetime of poverty and indebtedness (van Doorsaler et al 2007). Governments in Asia are aware of the severity of the problem and have taken measures to address them but have had only limited success.

A critical difficulty in achieving universal health care at sustainable costs is due to inadequate attention to design features of health systems and the specific policy tools used to achieve goals (Paolucci, 2011; Roberts et al 2008; Liu 2003). These vital issues are often blind-sided by efforts to identify ‘models’ of organizing health systems and codifying them to promote improved outcomes through mimetic isomorphism: the Japanese social insurance model, the American private insurance model, the British tax-financed model, the Dutch managed-competition model, Singapore’s individual-savings model, and so on. This is not a useful exercise, as healthcare does not lend itself to policy mimesis due to the sector’s immense complexities. The “models” grossly oversimplify or neglect key design parameters and nuanced institutional features that shape performance (Marmor et al 2005). Such efforts fuel misguided reform, such as implementing “diagnostic related groups” when conditions for their deployment do not exist (Langenbrunner et al 2009; Preker and Langenbrunner 2005; Bali 2016)). Similarly, increased public funding of

healthcare without commensurate checks on provider behaviour is known to escalate healthcare costs (Ramesh, 2013; Ramesh et al 2013).

To achieve desired outcomes in healthcare, indeed in any policy sector, governments need emphasise the different causes of the problem and the range of policy tools necessary to address them (Dunn, 2012; Howlett 2011)). What is needed is a grounded discussion on the objectives of government's involvement in healthcare and how best to achieve it. This requires policymakers to place renewed emphasis on the design orientation in policy-making, i.e. connecting specific tools and settings with specific goals in an institutional-specific context (Howlett, 2011).

In the first instance, reforms in developing economies must focus on policy effectiveness, which in health care is defined as universal coverage while ensuring affordability for households as well as governments. To promote effectiveness in health care, policymakers need to discard their *a priori* preferences for a particular “model” of health care centred on markets, governments, or networks and focus on setting achievable goals and devising tools to achieve them. Reform efforts inspired by fuzzy goals of improving efficiency through sophisticated provider payment mechanisms or equity when more basic goals of access and societal affordability remain unmet show misplaced priorities (Rechel et al. 2011; Mirelman et al. 2012; Paolucci et al 2014; Koopmanschap et al. 2010).

This paper develops a schema of regulatory, fiscal, informational and organizational tools and discusses how these can be employed to achieve the goals of effective health care: access and societal affordability. In the following section, the paper will argue that in most health systems, the goals of universal access and affordability remain elusive due to the endemic governance failures inherent in healthcare. The core purpose of the schema of tools developed in this paper is therefore to overcome the governance failures in the health sector by changing the incentives of stakeholders (i.e. users, third-party payers, and providers) and align them with the goals of effective health care. A coordinated use of the tools would not only help manage the systemic governance failures in the sector (which are discussed

in the next section), but also build leverage for the government to steer the sector and shape outcomes. The paper highlights the use and misuse as well as non-use of these specific tools in China to shed light on viable health policy reforms. Lessons from China are highly relevant to developing countries around the world trying to reform their health sector.

2. The Governance of Healthcare

Most mainstream conceptualisations of health care systems model the agency relationships between users (patients), providers (doctors), and third-party payers. The government's role is restricted to that of financing healthcare and/or providing services (i.e. it takes on the responsibilities of the third-party payer and provider respectively). There is limited government oversight apart from basic control exerted on these actors through a medical council or guidelines on the use of pharmaceuticals and technology. This is a flawed view of the health care system as it underestimates the severity of the failures in the relationships among the three actors that require a central and active role of the government to address the failures (Bali and Ramesh, 2015).

First, *information asymmetries* between providers, third party payers and users are so severe that the actor – typically the providers - with the most information and opportunities for using it are likely to dominate the relationship to its advantage. Second, the sector entails potential for *moral hazard* wherein both users and providers have incentives to over-utilize health services if costs are borne by a third-party (Zweifel, 2000; Cutler and Zeckhauser, 2000). If unchecked, this results in over-consumption of services and increased spending, and also higher prices in the long-run. Even the third-party has an incentive to engage in moral hazard by passing on costs of over-utilization to all insurees or members of the risk pool in the form of higher premiums. Third, the sector suffers from *adverse selection* wherein high-risk users seek generous insurance coverage, providers look for sicker patients so that they

can earn more, while insurers seek out low-risk users and engage in ‘cream-skimming’ and ‘dumping’ practices.

Conventional theories of market failures propose that these challenges can be addressed through appropriate government intervention. However, this ignores that the same complexity that leads markets to fail also make it difficult for the government to correct them through public provision or financing. The deep and interrelated nature of governance failures¹ among stakeholders requires a panoply of tools targeting specific behaviours of the different stakeholders simultaneously for delivering effective health care to the population.

The conventional reform orthodoxy in developing economies is that their governments do not have the requisite fiscal capacity to pay for health programs that will provide adequate financial protection to the society. The goals of effective health care do not necessarily require public financing of all health care services. It rather requires understanding of the sector, the objectives the government is trying to achieve, and devising and relying on the best tools available to achieve them. The purpose of these tools in this context are twofold: overcome failures that afflict the relationships among core stakeholders and align their economic behaviour with the goals of effective healthcare. This is only possible through a coordinated use of a range of counterweighing incentives and disincentives: i.e. rewarding prudent economic behaviour while simultaneously reigning in the propensity to engage in any form of malfeasance. The tools would be designed to incentivize users to be cost-conscious and practice preventive health; encourage providers to be cost-effective and neutralise their information advantage while providing quality care; and inhibit third-party payers and users from engaging in selective risk-pooling. This is accomplished through coordinated use of regulatory, fiscal, informational, and organisational policy tools developed in the subsequent section.

¹ As the challenges of information asymmetry, moral hazard, etc. are entrenched across modes of governance and not unique to markets or governments, they are better addressed as “governance failures” rather than market or government failures. Health governance is understood as ‘the rules that distribute roles and responsibilities among societal actors and that shape interactions among them’ (Brinkerhoff and Bossert 2008).

Figure 1 depicts the direction of governance relationships that are needed to establish the conditions for realizing the goals of effective health care.

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Figure 1. Idealized Model of Effective Healthcare System

In this idealized conceptualisation of an effective health care system, not only is there a reciprocal relationship among all key actors, the government sits at the centre of the relationships and actively engages with them through a coordinated use of policy tools. This differs from the generic conceptualisation where the state does not play a role in actively steering and managing the sector. The purpose of these tools is to reconcile the conflicting self-interests that the stakeholders face, and promote the core policy purposes and responsibilities as outlined in Table 1 below.

Table 1. Idealized Policy Purpose of the Stakeholders in the Healthcare Sector

Stakeholder	Core Purpose
Third-Party	<ol style="list-style-type: none"> 1. Pool and underwrite healthcare risks. 2. Purchase healthcare services on behalf of users at competitive prices. 3. Monitor <i>and</i> enforce contracts with providers.
Provider	<ol style="list-style-type: none"> 1. Deliver quality healthcare services at competitive prices. 2. Moderate access to non-essential services.
Users	<ol style="list-style-type: none"> 1. Contribute towards pre-payment for healthcare services. 2. Moderate demand for non-essential services.

Given the contradictory incentives of the different stakeholders, compounded by market and government failures, ensuring that third-party payers, providers and users behave in a desired manner is difficult. But in the absence of reconciliation of the contradictory self-interest of the three key agents, either significant proportion of the population will lack access to health care or the financial burden on the government and/or households will be unsustainable. There are four broad sets of tools that the government can deploy to shape the stakeholders' behaviour in a desired manner: regulatory, fiscal, organizational, and informational tools. These tools represent the range of resources that governments have at their disposal (Hood, 2007; Howlett, Ramesh and Perl, 2009: 117-135). Each of these tools are discussed below.

The purpose of *regulations* is for the state to employ its sovereign authority and legitimacy to ensure that agents do not engage in malfeasance. It is the main instrument of choice in the mainstream conceptualizations of health care wherein the government uses it to shape the interactions between users, providers, and third party payers. For instance, the government could address the adverse selection problem by mandating that all individuals must buy health insurance or be part of a risk-pool or a health plan. Similarly, it could mandate that individuals (with lower risk of illness) cannot opt-out of insurance schemes; and insurers cannot select members through

‘cream-skimming’ or ‘dumping’ practices. More importantly, regulations can be employed to curb the providers’ undesirable behaviour by, for instance, separating prescription and dispensing functions and mandating that doctors cannot profit from or own pharmacies or diagnostic centres. It could also require that all specialist care be rationed through gate-keepers and continued care be accessed only after utilisation reviews. The government could also shape users’ behaviour by requiring, for example, insured patients and users to make co-payments.

■ — *Fiscal tools* can substitute for or complement other policy tools and is a popular tool of choice among policymakers. There are a wide range of fiscal tools that may be employed, ranging from direct transfers to providers or users, to subsidies to the insured directly or through their insurers, tax incentives, tax penalties and so on. The most common fiscal tools in practice are fiscal transfers to providers (public or private) or insurers or insured individuals. The transfers are intended to expand access to health care but may also be used to alter providers’ behaviour. Public expenditures give the government leverage to alter the recipients’ behaviour and, conversely, its absence denies the government the leverage. The government may attach performance conditions to the grants or subsidy it offers providers or premium subsidy to users.

Instead of regulating or financing health care, governments may use *organizational tools* to alter the functioning of the sector. Thus, it is common for governments to directly own and operate public health care facilities. Indeed, in many countries – such as Cuba, the U.K., Hong Kong, Singapore and Thailand – government-owned and operated hospitals are the dominant form of providing inpatient care and public expenditures on them forms the bulk of the governments’ health care spending. In such systems, the government has strong leverage over the sector, and can easily shape the stakeholders’ behaviour as the owner and operator of public facilities.

Finally, governments may use *informational tools* to reduce the information asymmetries and especially the ability of any particular agent to exploit their information advantage. The tool is particularly useful for empowering users and third

party payers vis a vis providers who are in an advantageous position in the presence of information asymmetry. For example, governments could direct healthcare providers to make information available online on the average cost of common treatments, variance in the distribution of costs, clinical outcomes, and average waiting times for procedures, etc. Such information would enable users to compare providers and thus enhance competition among them (Blomqvist, 2011). However, information tools are difficult to use because there are only a limited number of standardised treatments – such as cataract or knee surgery – for which standardized data on prices and clinical outcomes can be prepared and published.

A tools approach to health care governance requires that the tools are used in a coordinated manner and coherently if the goals of effective health care are to be achieved. The concomitant and coordinated use of these tools is expected to enable the government to reconcile the competing core purposes of the three main stakeholders simultaneously. Conversely, their inadequate or contradictory use, not to mention misuse, can lead to more social and economic harm than good.

3. Health care Governance Reforms in China

Before reforms began in the 1990s, China's health care system was typical of the type found in centrally planned economies in which the population had almost universal access to basic primary and hospital care as well as pharmaceuticals. It was a relatively simple system characterized by public provision and financing and fixed provider payment. Nearly all health care was provided by the public sector and financed through government-organized health insurance.

In addition to an extensive network of public hospitals, health centres, and village clinics that offered health care services, government agencies and medium and large state-owned enterprises usually operated their own clinics, which provided free primary care to their employees. Most of the hospitals and other health facilities were owned by the government and prices were usually set below cost (Yip & Hsiao, 2001). Basic primary care and public health services in rural areas (where more than

four-fifth of the population lived) were provided virtually free by “barefoot doctors”, who were mostly middle school graduates, at a modest cost. All medical staff at all levels were salaried employees on fixed income.

One of three social insurance schemes covered most of the population: Government Insurance Scheme (GIS) for government employees, Labour Insurance Scheme (LIS) for the urban population, and Cooperative Medical System (CMS) for the rural population. The GIS covered all current and retired government employees, teachers and university students. The schemes was funded by the government, and members did not pay premiums or fees except for certain excluded services and pharmaceuticals. The LIS was financed by state-owned enterprises out of their welfare fund equivalent, and its members received health services for free, and their dependents could claim reimbursement of up to 50% of costs. The CMS was operated at the village level, and financed by rural welfare funds and contributions from members. The scheme provided 90% of rural population with access to basic care and covered around two-thirds of their medical expenditure (Liu and Yi, 2004).

The arrangements for providing and financing health care made for a tight governance relationship in which the government was at the helm. Users paid premiums to employer or community based insurers who, in turn, paid public providers under tightly regulated prices. The arrangement allowed little scope for malfeasance though the quality of service provision was admittedly basic.

Under the publicly provided and financed arrangements, the healthcare status of the Chinese population rose at one of the fastest rates witnessed in history: infant mortality rate (IMR) declined from 200 to 34 and life expectancy at birth increased from 35 to 68 years during the 30-year period between 1952-1982 (Blumenthal & Hsiao, 2005). These achievements were reached at a relatively low cost: total health expenditures formed less than 3% of GDP throughout the 1970s.

The institutional and economic foundations of China’s health system began to unravel with the launch of economic reform in the 1980s. First, the public healthcare

facilities faced acute financial difficulties due to rising costs and stagnant or declining subsidies from governments. Prior to the reforms in the 1980s, nearly half of public hospital revenues were from government financing. This declines to less than 10% by 2000 (Wang, 2004). Second, economic reforms severely undermined the capacity of many state-owned enterprises to pay healthcare for their employees. As many SOEs ceased operations across the country, their current and retired employees and their families were without any coverage. By 1998, only 45% of the urban population was covered by any health insurance (Meng et al., 2005). Of those who still had coverage, the benefits were significantly reduced and higher co-payments were required. Third, the dismantling of collective farms during the 1980s led to the collapse of the Cooperative Medical Scheme (CMS), leaving the vast majority of rural population without any form of healthcare coverage. Within a decade, the share of rural population that had access to reasonable quality care and some protection against catastrophic expenses (Ooi, 2005) declined from 90% to about 5%.

Amidst the great financial hardships that both providers and users were experiencing, the government continued to reduce healthcare subsidies, which rapidly declined to less than 10% of the providers' expenses (Eggleston, 2012). The reduction was not inadvertent but a part of deliberate policy to promote marketization of the sector by pressuring providers to earn fees directly from users to recover their costs. In addition to reducing fiscal burden on the government, this was expected to sharpen the providers' market instincts which were believed to have been dulled by central planning. Similar to the strategy used to reform state-owned enterprises, the government gradually reduced subsidies for hospitals and instead allowed them autonomy to earn income from sales of services and drugs (Wang and Wang, 2007).

As a result of the 1990 reforms, China's health care system that was ostensibly public, accounting for over 90 percent of hospital beds and inpatient and outpatient visits but for all practical purposes, however, these public hospitals were operated no differently from their private counterparts in their devotion to pecuniary goals. Similar to private firms that must work constantly to generate

profits for their shareholders, public hospitals in China maximize revenues so that they can pay salary supplements to their employees. Since hospitals had to generate most of their revenues from patients, they worked hard to attract users and sell them services to the extent possible.

The hospitals, for their part, responded enthusiastically to the government's policy. They not only began to charge fees, they incentivized the managers and physicians to earn more by tying their compensation to the revenues they generated. Aggressive prescription of expensive drugs and diagnostics rapidly became widespread (Liu and Hsiao, 1995; Xu et al., 2010). In rural areas, "barefoot doctors", who had formed the backbone of the rural healthcare system, became independent entrepreneurs who earned their livelihood by selling drugs.

The simple policy measure of reducing subsidies and encouraging providers to charge users directly with negligible restriction had the effect of establishing a nearly free market in health care in one quick swoop. The results were on the ground were swift and dramatic: OOP spending and TEH rose exponentially while access declined sharply. While the increase in OOP was expected, the rapid growth of TEH and reduction in access was not.

In an effort to help users access basic services, the government set artificially low prices for primary care, essential drugs, and standard diagnostic tests and surgeries while allowing hospitals to set their own charges for the rest. But this did little to address the problem, as hospitals increased their supply of services not covered by the restrictions, such as prescribing expensive diagnosis and pharmaceuticals and longer hospital stays (Liu, Liu & Chen, 2000; Meng & Eggleston, 2008). According to a conservative estimate, 20-30% of China's overall healthcare expenditures were spent on services and drugs that were unreasonable or unnecessary (Zhong, 2001).

The 1990s reforms transformed a tightly integrated system into one in which the government played no direct role in shaping the behaviour of other key actors. In

the new governance architecture, there was a direct payment relationship between users and providers, a relationship which inherently favoured the providers. With the decline of insurance coverage, insurers had been reduced to a negligible force in the system.

Following the reforms, government's health spending declined from 40% of TEH to under 20%, at a time when insurance coverage declined from 70% of the population in 1981 to 20% in 2003 (Development Research Centre of State Council, 2005). Notably, though unsurprisingly, total health expenditures rose from 3% of GDP before the reforms to 4.4% in 1998, at a time when the economy itself grew rapidly. The OOP payments increased to fill the gap, from 20% of TEH in 1978 to 58% in 2005. The rising OOP spending placed a significant burden on households: 60% of respondents from the poorest income quintile reported that they did not seek medical care when ill (Ministry of Health, 2004).

By the late 1990s the government was aware that its policy was causing immense hardship which would have political repercussions unless addressed. But instead of focussing on the root cause of the problem – the market relationship between providers and users unimpeded by government – it responded like most economies struggling with rising costs and crippling access began to expand insurance programs to make the rising costs more palatable to users. It launched the Urban Employees Basic Medical Insurance (UEBMI) in 1998 and expanded it subsequently. The first program to be launched during the new millennium was the New Rural Cooperative Medical Scheme (NRCMS) for the rural population in 2003. Participation is voluntary, but over 97% of the rural population has joined. The next scheme to be launched—on a pilot basis in 2007 and nationwide in 2009—was the Urban Residents Basic Medical Insurance (URBMI) for the urban migrant workers as well as the non-employed (children, students, elderly, disabled). Participation is voluntary, but over 60% of the target population has joined.

A report by the Development Research Centre under the State Council (2005) was harsh in its assessment of the 1990s reforms, concluding that they were "basically

unsuccessful". After extensive consultation, in 2009 the government published a report "Opinions on Deepening Pharmaceutical and Healthcare System Reform" which offered a road map to establishing a universal health care system by 2020. To attain the goal, the government has committed RMB 850 billion to the "four beams" of reform: public health, medical care, essential drugs, and health insurance (Meng and Tang 2010).

The Chinese government has struggled with controlling pharmaceutical costs for nearly two decades and is only now coming to grips with it (Dong et al., 1999; Zhang et al., 2002). To compensate for reduction of government subsidy, the government had allowed hospitals to earn revenues through sale of drugs other than those designated as essential. The hospitals got around the restriction by concentrating on selling drugs not on the list at exorbitant prices. To reign in rampant price gouging, the government took several feeble measures, without success. Expenditures on drugs continued to rise, forming as much as half of TEH (Meng, et al., 2005; Yu et al., 2010; Li, Chen and Powers, 2012). In 2009, the government published a list of 307 types of basic medicines that were to be available at all public health centres at purchase price, without mark-up. Subsequently, an auction system for purchasing medicines was adopted to introduce transparency and reduce prices through open competition.

The government next turned its attention to reforming public hospitals by developing a performance-based compensation structure. A variety of pilot programs were subsequently launched across the country, many focused on developing a fee structure that reflected true costs, unlike the past when fees were kept below cost, which forced hospitals to earn income from other sources. Recognizing that fee-for-service (FFS) payment is a major cause of the ills of the Chinese healthcare system, the government is experimenting with different provider payment reforms (National Health and Family Planning Association, undated). It is particularly focusing on introducing diagnosis-related groups (DRGs) for inpatient services, which is an enormous challenge in a vast and diverse country like China.

To expand the primary care system and improve its quality, the government has substantially increased funding for village clinics, township health centres, and urban community health centres. It has also launched a program to develop a modern version of “barefoot doctors” with better trained GPs (Eggleston, 2012). This is a challenging task as patients continue to prefer hospitals even for simple primary care.

The national government has also taken measures to improve governance of the sector. It has established the Health Reform Office (HRO) of the State Council to lead the sector’s reforms. In recognition of the central role of local governments in healthcare reform, the HRO signs “accountability forms” stating commitments with provincial governments, which in turn enter into contracts with local governments. Moreover, the criteria for evaluating local government officials have been expanded to include their record in implementing healthcare reforms, giving them strong incentives (Eggleston, 2012).

The new healthcare system that is emerging is characterized by complex relationships with government playing an active and central role (Ramesh et al 2013). With the expansion of insurance coverage, third party payers are playing a substantial role in the relationship, despite the fragmentation within and across schemes that undermines their effectiveness. Providers are subject to many restrictions regarding payments and prescriptions which significantly limit scope for malfeasance. Efforts such as the National Essential Medicine System, though in its early stages, can help reduce expenditure devoted on pharmaceuticals. Users are only just beginning to assert their interests, which often takes the form of violence against providers (He and Qian 2016).

4. Health Policy Tools in China

China had a functioning health system till the 1970s, which provided universal access, involved modest expenditures, and generated one of the best health outcomes in the developing world. This was accomplished by relying mostly on organizational tools: defence and security forces, local governments, state-owned enterprises and

rural cooperatives owned and operated nearly all health care facilities while government-organised insurance covered the entire population. Medical personnel were paid fixed salaries and so lacked the incentive to over-charge or over-service despite third-payment by which they were paid. The only fiscal tools the government employed were premium subsidy for employees of various levels of government. Regulatory tools were largely unused to manage the conventional challenges of 'physician agency' as these challenges were stymied by strong organizational tools which kept pecuniary motives at bay.

The 1980 and 1990s saw change in the mix of policy tools used in the health care sector, as summarized in Table 2 below. The government reduced transfers to health care facilities (while retaining ownership) and encouraged them to generate revenues directly from users. Upon realizing that providers' unhindered ability to generate income was making healthcare unaffordable in the absence of health insurance (which had collapsed as a result of economic restructuring), it introduced seemingly stringent price controls on essential drugs and services which the providers found easy to get around in practice. For regulatory controls to be effective, compliance needs to be promoted with a combination of penalties and incentives that were largely absent in the new system. Not only were the regulatory controls ineffective, but the scaling back of fiscal and organizational tools which earlier stymied providers now led them to take advantage of their information advantage to generate legitimate and illegitimate income directly from users.

Table 2: Health Policy Tools: Changing Patterns of Use in China

	Mid-1970s	Mid-1990s	Recent
<i>Organizational Tools</i>	Public Ownership and Funding of health facilities through local governments, SOEs, and rural cooperatives	Public Ownership of health facilities continues, but public funding reduced severely which resulted in the collapse of several government organized insurance pools collapsed.	Use of an independent coordinating agency setup. Continued but lower public ownership of health facilities.
<i>Fiscal Tools</i>	Premium subsidy for government employees. Providers reimbursed on salaries and fixed payments.	Reduced government spending on health care; and used out of pocket payment by patients to providers.	Increased public spending on healthcare. Out of pocket payments exist but are increasingly replaced by insurance payment.
<i>Regulatory Tools</i>	Limited role. Guidelines on charges for diagnostic and prescriptions.	Stringent but ineffective controls on prescription and pricing of drugs and diagnostic. No meaningful control on providers' behaviour.	More effective price controls Increased regulation of providers' behaviour Expanded DRG payments.
<i>Informational Tools</i>	None	None	Almost none, though media increasingly shedding light on the sector.

China's reforms over the past decade have placed renewed emphasis on the use of a combination of regulatory, organizational, and fiscal tools. It started by separating its own role as a service provider and financier with that of stewardship over the sector. At the same time, the government increased public funding for health

facilities which gave it enhanced leverage to steer their activities. It also established health insurance schemes that rapidly came to cover nearly the entire population. Increased budget and insurance funding was accompanied by strengthening of regulatory controls on prescription and dispensing of pharmaceuticals by providers. Moreover, while provider payments are still based on fee-for-service, government has made strides in shifting to prospective payments (such as DRGs and capitation) which alters the fiscal incentives providers face when treating patients.

5. Conclusion

The paper began by highlighting the need for promoting effective health care as a desired policy goal and outlining a functional model that would promote it. To achieve these goals, governments will have to actively manage and steer the sector using a range of policy tools instruments to address different government and market failures that afflict healthcare. Using these tools will no doubt require critical capacity endowments, and reforms in healthcare organizations and institutions.

The governance of health care (Savedoff 2011; Brinkerhoff and Bossert 2008; Balabanova et al. 2009); and the importance of the design parameters in how healthcare is purchased and paid for (Liu, 2003; Paolucci, 2011; Preker and Langenbrunner; 2005) have received significant attention in the recent scholarship in health policy. This paper contributes to the literature by showing that in the absence of an overall policy framework which reconciles the incentives of core stakeholders in any health system (i.e. users, providers, and third-party payers), governments will find it challenging to ensure access and control costs. The paper illustrates this with case study on China's successive healthcare reforms.

China's health system in the late 1980s was simple but coordinated which produced necessary health outcomes at modest costs. China was able to rely mostly on organizational tools backed by fiscal subsidies and nominal regulatory controls as the governance relationships were still functional. The non-pecuniary nature of the physician agency that underpinned the health system, ensured that there were no

significant governance failures and the stakeholders' core goals were reconciled. The 1990s witnessed the expansion of out of pocket payments, but without effective regulatory controls on the physician agency and on user-provider interactions resulted in over-servicing and over-charging that had devastating impact on access and costs. Subsequent reforms that dismantled key components of the existing arrangements and the discernible worsening of health care indicators underscored the importance of concerted use of multiple policy tools to address problems. They also highlighted the need for coordination and coherence in use of multiple tools so as to enhance their synergetic advantages and mitigate the mutual contradictions. Recent reforms indicate conscious efforts to rebuild the governance structures along these lines.

It is only over the past decade that China has utilised organizational, regulatory and fiscal tools in combination that placed counterweighing incentives and controls on the key stakeholders. The active stewardship of the sector was accompanied by expanded insurance financing, increased fiscal transfers that strengthened regulatory controls on providers. Only information tools remain to be used widely. Recent evidence shows that out of pocket payments has declined though there is a long way to go before access will improve.

China's healthcare reform offers valuable lessons for other developing economies implementing similar reforms. Its experience is a sobering lesson in caution on the perils of misguided action – failing to recognize the problem or the means to address it. China's experience also resonates with the contemporary challenges public administrators face (see for example: Oliviera et al 2015). In addressing these challenges, administrators and policymakers, must focus on specific policy challenges, and using the most appropriate set of tools to address them. For example, the conventional orthodoxy that underpins healthcare reform in developing economies is that increased public spending on healthcare is key to improving access and coverage. While increased public spending on healthcare may necessary in many cases, but as the Chinese case study illustrates unless it is accompanied with measures

to strengthen governance relationships (to address the core challenges), it will do little to improve coverage.

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