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EVOLVING ORGANISATIONAL STRUCTURES IN PUBLIC HOSPITALS IN CHINA: IMPLICATIONS FOR GOVERNANCE AND EQUITY IN ACCESS

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Abstract

This paper will examine the public hospital reforms in China post 1978, in phases and study the structural changes and evolution of hospitals to their present entities. Reforms in public hospitals in China have been one of the major reforms within the health sector. They deliver 90 per cent of inpatient and outpatient care and garner two-thirds of all health care spending and hence, are quite central to Chinese people's lives. The paper attempts to examine the evolving organisational structures of hospitals, the increasing commercialisation and the implications for governance, access and health services in general. The paper is based on secondary literature as well as primary data gathered through interactions and interviews with Chinese public health scholars and practitioners. The Chinese case of public hospital reforms is an important case to draw lessons from, especially for middle-income and developing countries.

Introduction

Several scholars have commented on the content and process of health reforms as encompassing both developed and developing countries and across political ideologies. They acknowledge that it is a global process informed by the principles of new public management (NPM).ⁱ These principles include the introduction of 'managed competition / public competition or internal markets as means to implement the reforms' (Tritter et al, 2010; p.33).

Tritter et al (2010) have elaborated the process and transformation of health sector reforms into two phases. The first phase focused on introduction of commercial principles in the public sector in order to reduce costs and improve efficiency. There was also emphasis on the separation of preventive and curative services. While the role of the state would be more prominent in the case of the former, markets would have an upper hand in the case of the latter. This phase was reforming the supply side of public provisioning. The second phase focussed on the private sector as a revenue earner for the economy and hence saw its productive role.

In most European countries the content of reforms is characterised by the first two phases. However, in several middle income countriesⁱⁱ, one would argue that there is a discernible third phase. During this phase of reforms there is a continuation of the commercialisation of public institutionsⁱⁱⁱ and simultaneously there is an expansion of the 'for-profit' sector. In this phase there is a concerted move to attract global finance in

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health services. These include hospitals, bio-technology, insurance, pharmaceutical and equipment industries thus giving rise to what Relman termed as the 'medical industrial complex' (Relman: 1980).

Governments in middle and low income countries sought to reform their public hospitals in order to make them efficient and better performing by the 1990s. This development took place in China too.

Broadly there have been four phases in public hospital reforms in China till now. The preoccupation with economic reforms that were promoted by Deng Xiaoping as market socialism during the late 1970s led to the complete neglect of the health sector in the 1980s. The first phase (1978-2002) included the change in the status of government institutions to State Owned Enterprises (SOEs) in the 1980s. The decentralisation of power and transfer of profits were the main reform features of the 1990s when incentivising hospitals and doctors was allowed to increase revenues for hospitals. As hospitals were left mostly to fend for themselves and 'autonomised', it led to a system where hospitals were owned by the state but due to major cuts in government subsidies, several market mechanisms were introduced in order for them to stay afloat. These hospitals behaved like quasi-commercial entities.

By the early 2000s, there was a second phase when several local governments started to experiment with autonomisation giving rise to a plurality of management models, incentive and governance structures. The outcome of these experiments across different counties illustrated the complexity and plurality across different provinces during the 2000s. There was clear separation in governance structures – especially between management and supervision. There was variety of models in the financing structure and access to private finances across the provinces. Some of these have been described in the paper. This was also a phase when social insurance schemes were introduced across China but largely lacked depth and coverage and therefore out-of-pocket expenses were still high. This did not change the behaviour of the already commercialised and profit driven public hospitals.

The next phase from 2009-2012 saw a new wave of reforms which was characterised by a course correction arising from the consequences of the first two phases. This part of reforms has been introduced to address the social unrest and dissatisfaction of patients due to high costs and overcrowding which has not reduced even though there is universal coverage through insurance. The reforms in this phase have mainly attempted to break the dependence of hospitals from selling unnecessary drugs and diagnostic services and to do away with incentives attached to these. In the fourth ongoing phase 2013-present, with the change with leadership, course correction continues but there is new emphasis on introducing newer structures by furthering markets in public hospitals. This has involved selling of public hospitals to private investors on one end and on the other, restructuring public hospitals by introducing new forms of partnerships and also allowing investments to expand private hospitals. This has led to the infusion of private capital and expansion of these institutions

based on ideas of business and profit models. There are now several models that have been piloted in the first tier cities and have in turn led to creation of new entities within and outside hospital systems and new governance mechanisms. The paper will explore the consequences these reforms will have on governance, equity and on the overall health service system.

This paper is examining the phases of public hospital reforms in China by drawing on available studies and government reports. Some of the findings are also based on primary data in the form of interviews with public health scholars and policy makers. It analyses in some detail the process and content of these reforms and its implication for the health service system and public health. This paper is divided into three sections. The first section provides an overview of the levels of care and the referral linkages that existed during the pre-reform period. The second section addresses the process and content of reform in public hospitals through the four phases during the reform period and the third analyses the implications of these reforms for the health service system.

The health service system in pre-reform China

Soon after the revolution the focus of the communist party was on preventive care and for this purpose they set up epidemic stations to monitor and control communicable diseases. Institutional growth at the secondary and tertiary level started in the 1960s. Existing public hospitals were strengthened and new ones were built. There was a referral linkage between the rural and urban areas. The cooperative medical scheme was integrated with the collectives and a comprehensive structure was created at different levels.

The expansion of health services was only marginal between 1949 and 1957. The growth of hospitals was largely an urban phenomenon. The period between 1957 and 1965 registered a phenomenal increase. Around a third of the services were owned by the state and the remaining was collectively owned. There was a huge spurt in the growth of hospitals and health centres between the late 1950s and mid '60s.

As Liu observes: "Before the economic system was reformed, the rural three-tier system (village health station, township health centre, and county hospital) was an integrated system with a formal bottom-up referral process for patients. Regular technical supervision was provided to the lower-level health facilities by the upper-level facilities" (Liu: 2004, p. 536; World Bank: 2010). Thus, from the mid-1960s to 70s the health services were funded by the government with a well worked out three tiered network of primary, secondary and tertiary services that integrated preventive, curative and rehabilitative services. This model of a health service system influenced the primary health care approach at the global level during the latter half of the 1970s. However, with the de-collectivisation process during the 1980s this well worked out system collapsed leading to a crisis in China's public health services. The collapse of the primary level of care in

rural areas meant that the referral system had been dismantled, which had serious consequences for comprehensive health services.

Public hospital reforms in the first phase (1978-2002)

The commercialisation of Chinese health services coincided with the larger economic reform that was promoted by Deng Xiaoping for market socialism during the late 1970s. In the first phase of the reforms, there was a complete neglect of the health sector which meant leaving the sector to laissez-faire market forces. This neglect led to the dismantling of the co-operative medical services in rural areas and brought in structural changes in urban and rural health service provisioning. There was a fragmentation between hospitals and other institutions that were responsible for preventive and curative services. The latter received no attention. As Liu observes:

"The problems associated with the commercialization of the health sector are most pronounced in China's rural areas.... In the two decades after reform, which were accompanied by the collapse of the rural Cooperative Medical System, China's rural health-care delivery system has become fragmented, with different health facilities competing for revenues from patients. Village health stations have largely been privatized. Although the national government has introduced a medical licensing system, whereby village medical practitioners have to be certified as "rural doctors"; these practitioners receive little supervision and professional training." (Liu: 2004; p. 536)

The focus of health sector reform during the '90s was on the secondary and tertiary hospitals. Several of these initiatives focused on introducing market principles in tertiary public medical institutions. The process of this reform led to the autonomisation of hospitals that was rationalised by the Bank. As the World Bank observes:

"In 1992, the Ministry of Health granted substantial financial autonomy to hospitals, allowing them to charge for their services and to sell drugs at a profit. They are now permitted to keep the surpluses that they generate, and they are responsible for their debts and operating losses. They can use their surpluses to invest in new facilities and services, or to finance salary enhancement systems. Prices for basic medical care are regulated. In general, medical services produce net losses, and drug revenues produce net gains. Hospitals have been given freedom to develop higher quality services for which they can charge prices above the levels reimbursed by social insurance. Public hospitals can also enter into joint ventures with the private sector. They are allowed to raise "social capital" from medical staff and retirees, which can then be invested in private for-profit units within the public facilities." (World Bank: 2010; p. vii)

Rationale and content of hospital reforms

The rationale for these reforms was premised on the inability of the government to invest in health care. As the World Bank observes:

"The main purpose of hospital reform has been to alleviate the government's financial burden. Reforms introduced market mechanisms and changed ownership to a State-owned enterprise (SOE) model.... Private capital was allowed to enter the health sector by encouraging retired medical staff to pool funds to launch medical institutions. Charging for services was permitted, thus moving medical prices toward actual market prices.... In 1989, State Council developed SOE reform by promoting various contracting systems for medical institutions. It also allowed public hospitals to earn profits from specialty medical services and to charge more for higher-quality services. This reform injected new funds for hospitals through the new means of funding." (World Bank: 2010; p. 4)

As a result several market principles were introduced in order to make these hospitals financially self-sufficient. Newer organisational forms like the SOEs² were initiated in the health sector in order to augment financial revenues by introducing mechanisms like user fees, charging for drugs and diagnostics, contracting in, attracting private capital and opening tertiary care to markets. As a result, hospitals were now autonomous units within the health service system under the jurisdiction of local governments. They were individually responsible for their success or failure since the proportion of government funding started declining sharply in the 1990s. Government subsidies represented a mere 10 per cent of the total revenue of all public health facilities in the early 1990s (Yip and Hsiao, 2009).

Liu (2004) provides evidence from a 1998 survey which showed that apart from 5 per cent of village health stations that were funded and supervised by the township health centres, the rest were operating independently and were disconnected to other levels of care regardless of ownership. The referral system had completely broken.

This phase, till the early 2000s, resulted in a period of deep crisis in health care with severe inequities in access to health care due to high costs. This resulted in a new phase in reforms which was characterised by financial reforms (development of insurance schemes) to provide coverage to all as well as further public hospital reforms that was characterised by autonomisation.

The hospital reform process has broadly followed what Harding and Preker have postulated as the five organisational functions that create incentives shaping the ability of public hospitals and other healthcare

²SOE was an institutional arrangement created by the government in order to partake in commercial activities on its behalf.

providers to deliver on the government's policy objectives. Firstly, the authority or autonomy given to its managers; secondly, the market environment created by the provider payment mechanism and exposure to competition; thirdly, the extent to which the hospital keeps its surpluses and is responsible for its losses and debts; fourthly, accountability mechanisms; and lastly, the extent to which social functions of the hospital are explicit and fully funded (rather than being implicit or unfunded mandates) (Harding and Preker: 2000; World Bank: 2010). This process leads to what they term as autonomisation which is characterised by:

"First, ownership of service delivery is kept in the public sector. Second, hospitals are moved out of the core public service and transformed into more independent entities with greater control of management decisions. Third, hospitals are made responsible for the services they produce, often through contracts for service delivery." (World Bank: 2010; p. 51)

Phase II: 2003-2008

In the next phase the focus was more on financial reforms but autonomisation of public hospitals continued. Autonomisation is a complex process and there are several aspects related to it. On the one hand the focus could only be on financial autonomy, in other cases it could combine finance and governance. Global evidence suggests that the idea of autonomy gained currency in middle and low income countries to reduce public spending. Financial autonomy would encourage individual hospitals to augment their finances through a variety of mechanisms like user fees, contracting out and in of supportive services.

Some examples of autonomisation in China during this phase -

In Shanghai, a pilot project of particular importance for its structure of management and administration was initiated in most of the tertiary hospitals. Shenkang Health Management Centre, established in 2005, oversaw three-fourths of all tertiary public hospitals. This institute was independent of the government's health bureau and its main functions included supervision of resource allocations to public hospitals in terms of investments and loans, infrastructure building and mergers or acquisitions. It oversaw the annual budgets and fiscal subsidies allocated to public hospitals. It also procured drugs, equipment and bargains against insurers collectively for public hospitals. Hospital managers were periodically evaluated and could be fired for poor performance. Therefore, the supervisory institute advised on all investments made; the role of the health bureau was reduced to regulating quality of services and entry of service providers and the managers had to monitor the functioning of personnel, incentives and compensation to personnel and organisational arrangement. Beijing had a similar model where an independent institute supervised all public hospitals. In both Shanghai and Beijing, the independent institutes reported to the local government. There were similar models that were seen in Suzhou and Wuxi city and Jiangsu province that clearly showed the separation of

functions. Another interesting pilot was seen in Anhui Province where five hospitals merged into a single hospital group in 2008. The hospital group procured drugs for all five hospitals. In several other pilots, for example in Shandong Province, personnel system was transformed to a contractual system. (Qian: 2011)

Even in the case of China the process of autonomisation was premised on the understanding that public hospitals should put public interest in the first place and be better managed to increase efficiency and quality of services, but the public interest did not seem to have received much priority.

Consequences of first two phases of public hospital reforms and implications for governance and equity

As Yip mentions, China's health policies have been driven by ideology and social values. The focus of the hospital reforms was on efficiency initially.

The trend towards autonomisation created many distortions in the hospital sector. Firstly, the health managers became important because they were vested with powers to garner financial resources. Often this meant that they were wooing investments that would produce high returns. For example, "a hospital manager has very strong incentive to invest on high end service/equipment by which he can charge patients with unregulated prices or to procure high profit margin drugs given the price markup for drugs" (Qian, 2011). Secondly, incentives were introduced into the hospital system and individual doctors were rewarded according to the number of patients they treated thereby generating profits for the SOE. This transformed the role of doctors from a lifelong, secure employment relationship with the government to a contractual one with the SOE. Thirdly, autonomisation led to unhealthy competition between enterprises and local governments leading to a great deal of variation in institutions in terms of quality and equity of access.

The reform of public hospitals raised many distortions regarding the administration, behaviour of institutions and their regional distribution. As Yip and Hsiao (2009) observe, these hospitals that were essentially publicly owned behaved more like for-profit private enterprises as a result of their autonomisation. At a deeper level it led to fragmentation of governance; distorted human resource deployment; overuse of drugs and diagnosis for revenue generation; created regional and socio-economic inequalities.

Human Resources – Deployment and incentives

One of the most important policies of the public hospital reforms in China has been the shift from a centralised personnel system of employment to a contractual based one between the physician and the hospital. This was a clear shift from the pre-reforms where hospitals were public service units, where personnel were closely controlled by government. Hospital managers were granted with more autonomy

over hiring, firing and promoting physician. They could also offer incentive contracts based on their performance. (Qian 2011)

There were consequences for training of human resources too. Shi et al observed, "Before the health reforms in China, public hospitals trained personnel for lower level hospitals without charges or for only a nominal charge. Secondary and tertiary hospitals also provided free training for medical students. Since the 1980s hospitals have charged trainees from primary hospitals, thereby weakening the social function and imposing an additional financial burden on lower level hospitals." (Shi et al 2003, p. 62)

The behaviour of providers, characterised by incentives and profits, became oriented towards bringing in more revenue and this took them away from rational care that is central to public hospitals.

Emphasis on high technology and drugs as a source of revenue generation

Shi et al (2003) observed that with deregulation there were many private players in medical care in China. This resulted in competition with the public sector functioning in a market environment. Therefore, the supply side introduced more high technology, medicines and procedures that were available at a price and this resulted in irrational practices and rising costs.

Reduced government spending and dependence on out-of-pocket payments and private sources of funding

As a consequence of the market environment in which the public hospitals behave like the for-profit ones, costs of care have risen and so have inequities in access. According to the China Health Yearbook (2010), out-of-pocket expenditure accounts for 38 per cent of total health expenditure. The average expenditure for health services and drugs for an urban hospital increased by more than 15 per cent annually from 2002 to 2009.

Regional and socio-economic inequalities

There is enough evidence to show that there was variation in public hospitals across provinces in terms of facilities, equipment, and human resources. This was largely due to decentralisation and inequalities in finances. Therefore, in poorer areas there were severe shortages of government funding compounded with low capacities for revenue generation which further resulted in poor retention of human resources. This was well documented by Liu (2004) who observed:

"Without appropriate mechanisms to transfer and equalize payments, decentralization naturally leads to increasing variations in investment by provinces, cities, towns and other entities in public health capacities, as well as to variations in the performance of health systems across China. So while some regions may be

able to detect and control major epidemics in their area (e.g., Guangzhou and Beijing, which are among the best developed regions in China), others may simply be unprepared for major public health challenges. Particularly disquieting is the lack of an adequately functioning public health system in China's vast rural areas. Even though each county has an EPS, public health work at the township and village level has been weak due to under-funding and a lack of supervision and coordination among rural health-care providers" (Liu, 2004).

The change in ownership of hospitals to an SOE and the subsequent reforms of decentralisation of power to local governments to generate revenues did not take into account goals of quality or equity. It has been observed that, "Hospital autonomization by itself can reduce equity, reduce the less visible dimensions of clinical quality, and contribute to excessive intervention in profitable areas of treatment. Equity, clinical quality and cost-effective medical practice are not likely to be achieved without complementary reforms to strengthen accountability for these dimensions of hospital performance, and to use financing, contracting, and provider payment to create." (World Bank, 2010)

Lack of a referral system

The referral system that was the strength of the health service system in the pre-reform period has completely broken down due to the move towards autonomisation. While pilots on creating a system of referral is on in some provinces it is too early to say whether these would be successful and be replicated to other provinces.

Brixi observes, "The uneven capacities of public hospitals contribute to the flight of the sick toward specialists, which in turn, contributes to low utilization of hospitals and health centers at the lowest level, as well as overcrowding of the renowned specialized hospitals." (Brixi, 2006) This clearly shows the lack of a referral system that was one of the strengths in the past of the Chinese health services system.

All the above consequences indirectly raise concerns for equity and comprehensiveness of health services. This found echo in the eleventh five year plan in 2006 that proposed increasing government efforts. Hu Jintao stressed on the welfare nature of public medical and health activities and advanced health system reforms. There was reassertion of role of public resources in hospitals; mobilising enthusiasm and innovation among medical staff; improving hospital management and quality of services; promoting efficiency utilisation of medicines and reducing patients' expenses; and strengthening pharma supervision to guarantee safety.

New phase of reforms - 2009-2012 and 2013-present

By 2009, the pro-government and pro-market ideological divide was sharper within the government. A task force commissioned top Chinese universities (Fudan and Peking); the Development Research Centre; the World Bank; the World Health Organisation (WHO), and McKinsey and Company to each develop a reform proposal to bridge the divide. The result was a compromise proposal that sought to strengthen the public health services but did not address the commercial interests within and outside the public sector. This led to the 2009 reforms – where there was a consensus on financing but there was ambiguity in the delivery of services. The 2009 reforms were brought about to rectify the fault lines and distortions that were created. This had to do with all the consequences listed above.

There were systemic corrections and amendments made to the existing policies keeping in view the 'social function' of hospitals that was said to be a priority. The zero mark-up policy for drugs was introduced with no profits and incentives attached to sale of drugs in hospitals; a national essential list of medicine was developed; there was a move towards merging the insurance schemes so as to provide comprehensive benefits to all; the policy was willing to integrate preventive and curative services; and strengthen primary care services.

The stated goals were quiet on what was envisioned for public hospital reforms. It became clearer by 2011 that the process of autonomisation was being furthered and there was a clear separation being introduced in governance structures – between the ownership and the management/supervisory role.

There was a perceptible shift in 2013 with the change in leadership to a pro-market approach. Public hospitals were now allowed entry of private capital and investors were allowed to build for-profit hospitals and to increase their market share by 20 per cent. Private insurance was given the signal to provide supplementary insurance for long-term care along with social health insurance.

The piloting of public hospital reform in 17 cities in this phase is said to include the following - separation between ownership and regulation; separation of government administration from hospital management; separation between for-profit and not-for-profit; and separation between drug sales and hospital revenues.

Public-private partnerships are the new mandate of reforms and have several forms.

The partnerships range from-

- i. Public hospitals managed by private investors/companies
- ii. Public hospitals transferred to private hospitals
- iii. Co-location of specialty services a private unit in public hospitals

- iv. Medical parks set up in economic zones investments by private but managed by public hospital team of doctors
- v. Contracting-out of non-clinical services
- vi. Medical tourism being promoted by public hospitals as a revenue earning mechanism.

Some of the examples are -

A type of PPP in Shanghai is the management of public hospitals by private companies. There is also colocation of select specialities by private hospitals within public hospitals. An example of this is the colocation of Chindex's United Family Health Care in tertiary public hospitals in Shanghai.

There are a number of PPPs, mostly in clinical services – pay clinics at ten times the cost. A patient can fix an appointment with a specialist and consult them. These clinics are also called VIP clinics. There are also examples of pharmaceutical companies being allowed to set up pharmacies in public hospitals. Contracting-out is the common form of PPPs observed even in China as in India (Interview with Hu Shanlian, Director, Shanghai Health Development and Research Centre, May 2014).

We also have outsourcing to private sector in Shanghai – cleaning, catering, laundry, security in public hospitals is contracted out to private hospitals. The second is clinical support service like drug supply, inventory control, laboratory services or medical equipment examination. Last one is the specific clinical service – these are the three kinds of contracting out. We have PPPs in Shanghai – public hospitals managed by private companies; there is also privatisation- public hospitals transferred to private hospital; there is also colocation – set up of private hospitals like United Family Health Care. (Hu, May 2014)

Another form of arrangement is for private investors to build separate specialised clinics for those who want to pay in government hospitals in a PPP mode. Certain specialised services like In Vitro Fertilisation (IVF) in a public hospital are being set up by a US corporation promoted by a person of Chinese origin. Another example is a Gamma knife unit in a government hospital. Singapore based Parkway hospitals are partnering with Renji Hospital in Shanghai. The doctors from Renji hospital in Shanghai run pay clinics in a private hospital named Rich in Nantong town, Jiangsu province.

There have been several pilot projects that have taken the concept of a franchise model. An example of this is Beijing Anzhen Hospital where the hospital is the franchiser which sets up other medical institutions by investing private capital and is allowed to use the hospital brand, logo, technology, services and management expertise. The franchiser's income consists of two parts – a fixed payment from the franchisee for using the brand name and fees from franchisee as stated in the agreement which is a management fee. The health and

family planning department, health finance department and the management bureau provide guidance and supervision and decide on the fees. The hospital is answerable to the Ministry.

The other interesting pilot model is that of the Renji Medical Group in Shanghai associated with one of the oldest hospitals in Shanghai called the Renji Hospital. The Group is a professional management platform and also invests capital into public hospitals across six provinces. The group functions like any commercial entity and invests to make profits. It seeks separations at two levels – ownership and business operations and at the hospital level, there is separation between management and supervision. (Seminar on 'PPPs in China and India', May 18 2016, Shanghai).

Division of responsibilities and dispersion of power for the functioning of public hospitals shows the different ministries and multiple actors involved. This definitely raises concerns for effective governance and coordination between different ministries and their respective departments.

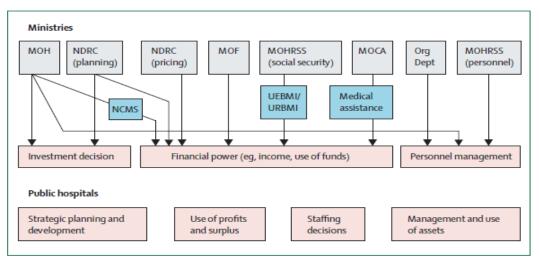


Figure: Dispersion of power between ministries and public hospitals

MOH=Ministry of Health. NDRC=National Development and Reform Commission (detailed function in parentheses); MOF=Ministry of Finance. MOHRSS=Ministry of Human Resource and Social Security. MOCA=Ministry of Civil Affairs. Org Dept=Organisation Department of Chinese Communist Party. NCMS=New Cooperative Medical Scheme. UEBMI=Urban Employee Basic Medical Insurance. URBMI=Urban Resident Basic Medical Insurance.

Source: Yip et al 2012.

Levels and types of separations in public hospitals

In 2011, there were separations of several kinds listed under the new hospital reforms –

- i. separation of administrative government from public hospital (separation of government functions from those of institutions);
- ii. separation of hospital management from operations;

- iii. separation between for-profit and not-for-profit hospitals; and
- iv. separation of prescriptions from dispensing drugs

Separation of government functions from those of the institutions

The separation of government functions from those functions internal to the hospitals was brought around to break the government 'control' and 'surveillance' of institutions over these institutions. These separations have two different patterns when implemented – the management agency is under the jurisdiction of the health bureau. In a sense, the goals of reforms are in line with those of the government. In the second kind, the management institute is an independent agency and therefore, independent of the health bureau (Zhang et al 2016).

Qian lucidly observes the first two separations that are listed above: "The agenda for hospital reform includes two "separations" regarding to governance structure of public hospitals: separation between administrative government and public hospitals and separation between the function of hospital management and regulation/supervision. Purpose of first "separation" is to give hospital managers discretionary power in personnel decisions while purpose of the second "separation" is to closely supervise hospital's investment behaviour and financial conditions. The effect of these "two separations" may offset each other to some extent. Hospital managers are given more power to manage human resources while less power is granted for financial resources. (Qian: 2011; p. 17)

While this separation might make the hospital efficient by decentralising decisions on human resources, and other investment patterns but the drawback might be that the public goals of a hospital stand to suffer. The focus is mostly on efficiency. The fragmentation of governance from administration is observed in the models that were implemented in various provinces. There is no uniform model and there are multiple authorities and the agency who retains the most power varies depending on whether the management agency is involved with the health department in the ministry or is separate from it.

"The degree of separation between management and surveillance is closely related with the composition of personnel in public hospital management agencies, such as the proportion of health officers from the Health Bureau, who leads the public hospital management agency, and whether the leader is full-time or part-time. When a small proportion of personnel is from the Health Bureau and the leader of the public hospital management agency is not related with health administration departments and is full-time, there is likely to be greater separation between management and surveillance." (Zhang et al 2016).

Separation of management from operations

This includes separation between the management and business operations of a hospital. There are different bodies that are being created – like a trusteeship where an independent third party operates and manages even though ownership is retained by the government, like introducing a Council system where the hospital establishes its own Council for looking into operations. The operations look at targets and funding issues linked to sustaining hospitals and keeping the institutions functioning.

Separation between prescribing and dispensing drugs and separation between profit and non-profit

As far as separation between drug prescribing and dispensing goes, this has been piloted in many hospitals but not all. The zero mark-up policy and making profits from selling drugs have stopped in some hospitals but this has been the most difficult reform to introduce and implement. This has been the means of revenue generation for most hospitals. It has been difficult to find the alternative sources of funding. In pilots where hospitals have stopped generating revenue from sale of drugs, the government has increased its subsidies and new private capital has been introduced in some to increase investments. In some there is a revision of pricing of inpatient and outpatient services where the costs have increased and here the compensation is being provided by the insurance, therefore burden has shifted to the insurance. These reforms have not had much impact on the patients seeking care. There has been a lot of confusion with payment methods and seeking ways to compensate for lack of revenues in the hospital. Violence in public hospitals is still prevalent, one of the reasons the reforms were brought about. The new reforms announced a year back has talked of putting the family doctor model in place so as to route all patients coming directly to tertiary hospitals to come through a referral.

A Lancet study on the initial implementation of public hospital reforms in 16 pilot cities showed that very few hospitals clearly defined profit and non-profit interests and what would be public interest. The authors clearly state that reforming irrational incentive structures do not eliminate for-profit behaviour by the doctors or hospital staff. The government also needs to reform government structures and bring in regulations so as to align their work with that of public interest (Yip et al 2012).

An extensive survey conducted in the 17 pilot cities where the public hospital reforms are underway show that all the four separations have encountered many difficulties (Zhang et al 2016). These hurdles have mostly been seen in separation between government functions and institutions and in those between prescribing drugs and dispensing them. To curb revenue from drugs and separating the prescribing from dispensing, the focus in many hospitals have shifted to increasing money for in-patient services and outpatient visits but on the other hand has also seen increasing subsidies by the provincial/municipal governments. But the data also showed that the salaries of medical personnel are very low.

Many medical personnel also believed that it was difficult to balance the non-profit and for-profit goals as there was an inherent contradiction and over 40 per cent of the staff interviewed thought that the for-profit goals would affect the 'public welfare' goal of the hospital. The fault line still exists as the ways of compensating the public hospitals post-reform. The study by Zhang et al shows that simply cross-subsidisation will not work in addressing the question of public welfare. The compensation of revenue that the hospital earlier used to raise from selling of drugs must be well-thought out. At the same time the study warns that the hospital staff cannot be ignored in this process and their interests must be central to whatever decisions the government takes (Zhang et al 2016). In another study by Zhang et al (2017) on out-of-pocket spending on in-patient expenditure in Hubei province, it was seen that there was some decrease in OOP in medicines but the total OOP spending had increased between 2011 and 2013.

Further fragmentation

The different governance structures have fragmented the system further by creating plurality of forms. This has had implications for access to services especially for the poor patients who might not be fully covered by insurance. In a survey done on medical personnel across provinces most did not understand the idea of public welfare (Zhang et al. 2016). The pro-market ideologues within, are waiting for the corporatisation of public hospitals as the next phase where the rights to appoint managers, dispose assets and decisions for finances and investments are completely deployed to the hospital. The government at the local level has still the greater power which they would like to see minimised. The pro-state ideologues would like the government to retain the pricing, asset disposal and investment decision power to keep the priority of the public in mind. Scholars are studying the hospital system closely in order to understand whether the reforms are heading towards greater corporatisation in the lines of SOEs. This would include defining the legal status of public hospitals as well as regulatory frameworks to monitor departments and actors involved in implementing reforms for better accountability and effective functioning.

Given the top-heavy system, there is a huge influx of patients at the tertiary hospitals and a long waiting time that causes dissatisfaction among patients. A rise in the reporting of violence and outrage that shows conflict and resistance between health personnel and patients in both China is indicative of deep crisis in health services. The patients who are attackers are victims in their own right, marred by poor quality of care, denial of care, high fees for service and corrupt practices. The health personnel are part of a system that behaves in a commercial manner and is fragmented. Reforms are meant to be transformative but a lot depends on the politics of interest groups and priorities made at the policy level that then determine the direction of reforms.

Conclusion

The case of public hospital reforms in China is an interesting one given that it has seen several phases which have fundamentally transformed the workings of these institutions over the last three decades or more. Given the political ideology of China, there are several contradictions to the ways in which these reforms have shaped up. These have transformed public institutions to function as commercial entities which has undermined its public welfare functions. There is an ideological tussle to prioritise the social function of these institutions but China is clearly venturing into more complicated forms of partnerships and governance structures that have features of marketisiation with for-profit motives and are oriented towards the middle and the upper classes who will have the capacities to access these. The new organisational structures and separations that have evolved in hospitals in China and in its attempt to balance the for-profit and non-profit activities and create 'efficient' systems, this transformation of institutions make China an interesting comparative case for public health scholars studying health sector reforms in developing and middle-income countries. In China, one sees the culture and behaviour of public hospitals more akin to the for-profit sector. This raises a lot of questions that are linked to the very culture of public institutions especially hospitals that must be accessible and provide equitable services to all.

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ⁱ Larbi (1999) observes that "NPM reforms shift the emphasis from traditional public administration to public management. Key elements include various forms of decentralizing management within public services (e.g., the creation of autonomous agencies and devolution of budgets and financial control), increasing use of markets and competition in the provision of public services (e.g., contracting out and other market-type mechanisms), and increasing emphasis on performance, outputs and customer orientation" (p. 4).

ⁱⁱ This has been studied in the case of India, Brazil and China.

iii Examples of this includes public-private partnerships; selling of public assets and NGOs managing public facilities.

^{iv} Relman discusses the context of 'Medical-Industrial Complex' in the context of the American health care system in 1980, where he sees the network of several corporations in health care that work in collaboration to provide health services but with a clear motive of profit. The priority therefore clearly shifts from a patient-centred approach.