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Healthcare Reform: A Microcosm and Exploration of New Public Management in China

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Summary

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Five key words: New public management (NPM), public-private partnership (PPP), new institutional economics (NIE), cost efficiency, resource allocation.

Purpose: Test the developments and predicaments of the ongoing health care reform in China with the new institutional economics (NIE) theories.

Methodology: Introduce theoretical materials and literatures and relevant facts and practices to show how the facts reflect the theories and how improvements can be made in practice. And through a survey study to create a better understanding of the current situation of public health and the ongoing health care reform in China and come to conclusion and give some suggestions of improvement. The theory which supports analysis is the institutional change theory of the New Institutional Economics (NIE) theory which is defined as one of the three major theoretical foundations of the NPM theory.

For Chapter 1, Chapter 2 and Chapter 3, information searched was from books and websites. For Chapter 4, information was collected from a survey research of 4 hospitals in Changchun City, Jilin Province, China.

Theoretical perspectives: NIE theories raised by Ankarloo (2006) and North (1993).

Empirical foundation: A survey on the NPM in hospitals in China theoretically based on North's (1993) five proposals to *define the essential characteristics of institutional change* with both close questions and open questions, completed by management of some local hospitals in Changchun City, Jilin Province, China.

Conclusions: There are both attainments and problems in public hospitals in the ongoing healthcare reform in China. Even though the ongoing reform has achieved some concrete results, for example, public hospitals have developed their core competence in market competition and are making effort to maintain competitiveness; there are still maladies in public hospitals that of which some are generated from defective interactions, some appear to be aroused by stereotype and some can be ascribed to path-dependence. However, as for the reason that there is a lack of information from private and PPP hospitals, the situation of such hospitals remains unknown and may lead the study to inevitable partiality.

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1. Preface

1.1 Introduction

1.1.1 General Situation

The NPM is considered as an efficacious way to improve effectiveness and efficiency in management control of public health for its market-driven and market-driving characteristics. Theoretically, it is a hybrid of economics and business management in public management. Because of its advanced adaptability and flexibility, the NPM has been widely applied to many fields and yield results. In China's health care reform, though still in an embryonic stage, the adoption of the NPM has shown an enormous potential in promoting resource utilization and remolding the role of the government.

So far, as a corollary of global development of social wealth, medical technology, living standard and educational level, it has come to the fact that health care has been playing an ever-growing role in human lives. However, there are signs that the existing system fails to keep pace with the times and a reform in the area is imperative. Meanwhile, due to a series of problems rooting in either external or internal backgrounds in many countries, the reform in health care has been defined as a cosmopolitan conundrum which is a burning issue. In China, there seems to be more barriers for the issue to be dealt with since numerous factors such as unreasonable resource allocation, highly bureaucratic centralization, legal limbo, historical problems, blind spots in planning, population ageing and economic inequality, especially the rural-urban gap and the coastal-inland gap, have become profound reasons of skewed supply and demand, imbalance in the development of publicly and privately funded health care, cut-throat competition, and deterioration of physician-patient relationship. From the premise, having to confront increasing opportunities as well as booming challenges, the government/county councils/municipals are under pressure to trigger innovation of their public

management in health care. Following the principle of gradual improvement, to dispel the inelasticity and explore possibilities of new public management, it is prudent to catalyze a structural reform through carrying out a top-down functional reform which is consistent with China's national conditions in health care.

In the NPM, new institutional economics (NIE) is a major theoretical basis through which resolution to problems related to public choice theory in practice may be created. Ankarloo (2006) presented that theory of evolution has been carried forward and refined by NIE at the economic level while *the concepts of markets, supply and demand, marginalism, factors of production etc.* are carried on from neoclassical legitimacy. On this basis, he recited five basic concepts of NIE: *bounded rationality*, *transaction costs*, *property rights*, *institutions*, and *the distinctiveness of NIE* (Ankarloo D 2006). Within the ambit of NIE, the institutional change theory is always defined as a mainstay of theories of NIE and constituted by formal restrictions (e.g. law and other effective written articles), informal restrictions (e.g. norms, culture and religion) and the way they work in practice (North DC 1990). North (1993) listed five proposals to *define the essential characteristics of institutional change*. First, *the continuous interaction of institutions and organizations in the economic setting of scarcity and hence competition is the key to institutional change*. Second, rivalry compels organizations to keep *investing in skills and knowledge to survive*. Third, the institutional structure directs the types of *skills and knowledge perceived to have the maximum pay-off*. Fourth, *perceptions are derived from the mental constructs of the players*. Fifth, the economies of range, complementation, and *network externalities of an institutional matrix make institutional change overwhelmingly incremental and path dependent* (North DC 1993). In the literature review, the literature will laterally support Ankarloo's theory. And in empirical analysis, the survey analysis will be on the basis of North's theory.

1.1.2 NPM in Developing Countries

Polidano (1999) indicated that when it comes to the implementation of the NPM in

developing countries, major elements that restrict managerial ability include *low pay levels* and fragile systemization of managerial framework. He also pointed out that low pay can result in another common problem in the public sector in many developing countries - corruption. In his studies according to Crook and Manor (1998) and Smith (1998), at the local level, the overall situation of improvement of NPM skills is usually not better but even worse that that at the national level. It is also mentioned that according to Caiden (1991) and Kiggundu (1998), the failure rate of the NPM reforms in an managerial way in both developed countries and developing countries is rather high. In his conclusion, it is claimed that whether an NPM can be considered successful depends on the same foundational deciding factors recognized by researchers linking to *previous generation reforms* rather than a simple judgment of 'good' or 'bad' (Polidano C 1999).

1.1.3 NPM in Healthcare Affected by National Culture

Peyton (2009) claimed that Darwin's famous theory of '*survival of the fittest*' is also applicable to the implementation of NPM in healthcare, though maybe in a rather indirect way. On this perspective, it refers to the statement that the processes of implementation of NPM should be suitable and adaptable to the circumstance, especially with consideration of national culture. Comparison between implementation of NPM in Denmark and the U.S. was taken for example, since even though the culture is quite approximate in the two countries, the U.S. culture which emphasizing competition and identification makes performance measurement widespread, while Danish culture which emphasizing equality makes performance measurement not that popular although the Danish Government insists on carrying it out to keep its international role, and there are still difficulties for NPM to become a control tool in healthcare in Denmark (Peyton MM 2009). In China, it is not peculiar that the management system is under the backgrounds of Chinese culture and strongly affected by its traditional roots. At the managerial level, utilitarianism, bureaucracy and human relationship are rather thriving, especially in the public sector, based on

which problems spring up and some even become thorny with time. Premised on this situation, the health care reform is carried out not only to improve the long-term outlook of national public health but may also provide a prototype for future NPM reforms in other fields.

1.1.4 A practice of the NPM in India's Public Health

Bennett and Muraleedharan (2000) interpreted the concept of the NPM as *a broadbased reform of government organizational structures, systems and even philosophy* the objective of which is to improve government effectiveness. The main factors of the NPM consist of being more responsible to customer demand, improving organizational framework which engage creation and rivalry, enforcing motivations for better performance and adopting more output-based mechanisms. According to Kaul (1997), all of the above are premised on the variation of the role of the government as '*from a concern to do towards a concern to ensure that things are done*'. For the purpose of ameliorating efficiency through intensifying rivalry and for the aim of exalting transparency in public financing, there has been a tendency that *contracting for services* becomes an acceptable method. Besides, another potential advantage of contracting is that accesses to services may be increased and improved by participation of private suppliers. For example, for India which has a comparatively large private sector and a preponderant bureau system, contracting is regarded as an attractive choice. However, among the great number of underlying contractors for majority of the supplementary services, in all the researched cases only a few tenderers showed interest in the contracts. Various reasons are given by winners in such tenders in Mumbai: high initial investment for market access; low *profit margins*; late service-outlay defrayal of the government and so on. It seems common that the government tends to be a *late payer* based on its honour, yet it is considered impractical for the running of small-sized businesses (Bennett S & Muraleedharan VR 2000).

According to Batley's (1997) studies, Bennett and Muraleedharan (2000) briefed

*task-specifi*c capacities that associated with *contracting with private provider organizations, directly providing these same services* and *regulating private providers* as follows:

Internal elements	**External elements**
Organizational and *Administrative* framework.	*Civil-public interaction.*
Competence and expertise of employees.	*Private-sector* advancement.
Practicability of *capital and financial control*.	*Political* framework and predilection.
	Legal and *administrative* composition.

Table 1: Aspects of Capacity (Bennett S & Muraleedharan VR 2000)

Table 1 shows which basic internal and external elements of *task-specifi*c capacities should be taken into account at the stage of PPP. In practice, the internal part and external part are complementary rather than independent, which requires subtle consideration and regulation of administrative management and control.

The studies of Bennett and Muraleedharan (2000) indicated that in the field of *catering services*, the costs of *contracted-out* options are remarkably lower than that of *in-house* options, whereas in fact the quality of *contracted-out* options is also lower than that of *in-house* options in the round. Nevertheless, in the authors' opinion, the problem of worse quality is not an inescapable consequence of contracting since improvement is still required at diversified levels in the management of such PPP system. Another problem is the overwhelming failure of regulation in the healthcare department, which is considered as a result of inadequate funds, and devaluation of registration fees due to inflation. In these circumstances, only a minimum of allowances is issued to *medical councils* by the government and there is also

dissatisfaction with the lack of discretion and freedom of *medical councils*. For policy-makers, the task of top priority is to emphasize to the private sector again that the government is significantly focusing on the quality of *health care services* supplied by both public and private sectors. Under the background of ingrained *bureaucratic traditions*, the highly centralized system of government has provided both motivations and obstructions to carry out the NPM, which means that for the purpose of actualization of the NPM, a reform in *power structure* is imperative and there will be great difficulty at the political level (Bennett S & Muraleedharan VR 2000).

1.2 Problem

As according to Li (2013) in Chapter 3.1.1, *high costs*, *poor quality*, *over-prescription* and *over-treatment* are defined as the four major problems in China's healthcare. Among the problems mentioned above, *high costs*, *over-prescription* and *over-treatment* are related to the concept of *transaction costs*, while *poor quality*, *over-prescription* and *over-treatment* are linked to the concept of *institutions*, both concepts of which are of the five basic concepts of NIE raised by Ankarloo (2006).

1.3 Purpose

Test the developments and predicaments of the ongoing health care reform in China with the new institutional economics (NIE) theories.

1.4 Method

Introduce theoretical materials and literatures and relevant facts and practices to show how the facts reflect the theories and how improvements can be made in practice. And through a survey study to create a better understanding of the current situation of public health and the ongoing health care reform in China and come to conclusion and give some suggestions of improvement. The theory which supports analysis is the

institutional change theory of the New Institutional Economics (NIE) theory which is defined as one of the three major theoretical foundations of the NPM theory.

For Chapter 1, Chapter 2 and Chapter 3, information searched was from books and websites. For Chapter 4, information was collected from a survey research of 4 hospitals in Changchun City, Jilin Province, China.

An important problem is that at the empirical analysis stage there is a lack of information from private hospitals or PPP hospitals since all participators of the survey stated the hospitals they work for as public hospitals. And considering local conditions, the survey can not be designed in a way of very open questions or in a way which may make a rather aggressive impression on the participators. Such situations may lead to deviation of the analysis and the result may not be comprehensive.

2. Literature Review

2.1 Textbook Review (NPM & PPP)

Moll and Humphrey stated that NPM reforms are widely carried forward by bringing in market systems as imitating the way of the private sector, on the basis of the assumption that it is worthwhile for the public sector to draw lessons from the private sector on programme management and capital formation. In virtue of NPM reforms, the transition of resource allocation procedures shows great influence on management accounting and the figure of management accountants in the public sector. In decision-making of both long-term fund raising and short-term running, accounting mechanisms are paid more attention to in public management. During NPM reforms, the focal point of the public management is reforged from lawful considerations with management to effectiveness and efficiency in service supply (Moll J & Humphrey C 2007).

Moll and Humphrey (2007) indicated that public–private partnership (PPP) programmes are effective in getting over disadvantages of infrastructure programmes through intensifying competition and spreading the risk between the public sector and the private sector. However, contractors of PPP may prefer to only guarantee that *their minimum PPP contractual service agreements* are away from being infringed rather than *maximize service performance*, since it has to be taken into consideration that the cycle of PPP contracts is capable to impair competence. Meanwhile, there is another problem that premised on the assumption that every competitor in the tender has harmonious relationship with the correlative *governmental contracting body/department*, private contractors may be discouraged by the costs occur during further tender procedures. In the public sector, it is necessary for management accountants to keep an eye on *financial accounting implications* of PPP contracts and comprehend to what level *contractual risks* are shifted to the private sector compared

with that shifted to the public sector, since severe unexpected sequels may come out for the elevation of *accrual-based budgeting and accounting systems in the public sector*. Besides, another crux is that PPP can lead to various conflicts and vague, the ignorance of which can push management accountants in the public sector and their groups towards underlying unveiled standpoints (Moll J & Humphrey C 2007).

2.2 Other Literature Review

2.2.1 Definitions of the NPM

Lu and Li (2007) claimed that on one hand, the NPM requires the research of management accounting to develop to public sectors, especially government departments, for which reason the content of management accounting is further enriched; on the other hand, the government management is changing from administration to public management, which anxiously requires the government to pay more attention to effectiveness and efficiency on the basis of routinization and conformance so that as a result the objective of governmental accounting is endowed with new substance. Under this background, the government is required to lay more stress on democratization, scientific nature and strict control of executive processes in decision-making. Therefore, it is necessary for the government to be supported with information by cost and management accounting information systems. The characteristics of the NPM including '3 E' (economy, efficiency, effectiveness), performance focus, consumer guiding, strategic management and so on are as the same as the objectives of management accounting at different stages of development in nature (Lu JW & Li GW 2007).

Osborne (2006) argued that the NPM is strong enough to improve transparency of the sophisticated operating processes of output management of *public policy process*. Sometimes, the NPM goes so far as to call in question the validity of public policy as a component of background of public management, stating that irrational democratic enforcement is forced upon the supervision and supply of public services. What is

considered most dangerous is that the NPM has been defined as restricted and mono-dimensioned in capacity to cause and facilitate the supervision and domination of *public services and public service organizations* no matter if the organization is subordinate to *the public, private or voluntary sector* in a growing diversified environment. Besides, it is also stated that the NPM is a combination of *neo-classical economics* and *rational/public choice theory*. It is relevant to a decomposed situation, in which policy making and execution are at any rate merged and unconstrained in some degree, and in which execution is by means of a gather of *independent service units* that are sublimated to be in mutual rivalry. It attaches most importance to *intra-organizational processes and management* while underlining *the economy and efficiency* of the units mentioned above in offering public services (Osborne SP 2006).

2.2.2 An Introduction of NPSM

Shaw (2004) introduced the concept of New Public Sector Management (NPSM) in systems of health care. He explained that it means to suppose that public sector management is operated with *business-like practices*, while an important precondition is that a business view in health systems is not that different from that in other fields. A basic precondition behind the urgency of NPSM is that *public sector managers* have been prevented from the same types of stress/motivation frameworks that is in vogue in the private sector, yet it is claimed that such lacuna has retained *inefficient bureaucratic organizations*, has caused barriers for innovational development, and has punished rather than prized business-related employees in public sector institutions. Supporters of NPSM then state that current backward performance in the public sector is a result of problems of guaranteeing suitable motivations to chase *the public interest*, insufficiency of suitable information to define *the public interest*, and insufficiency of suitable supervising systems to guarantee that consequences are in vogue (Shaw RP 2004).

To illustrate what the stress and motivations are depending on in the private sector but not in the conventional public sector, Shaw (2004) inserted a form of *Factors*

Affecting Managerial Incentives and Accountability as below:

Public Sector	***Private Sector***
1. *funds raised from taxes*	1. *funds raised by venture capital*
2. *ownership of assets by government*	2. *ownership of assets by shareholders*
3. *costs used to crudely estimate prices*	3. *market determined prices*
4. *clients vote through represent*	4. *clients vote with their feet*
5. *resource allocation based on non-transparent bargaining between interests groups & politicians*	5. *resource allocation follows rules of efficiency*
6. *bounded rationality - defined below - more severe in view of monopoly situation of public entity*	6. *bounded rationality less severe in view of information/communication associated with "market clearing functions"*

Table 2: Factors Affecting Managerial Incentives and Accountability (Shaw RP 2004)

Table 2 shows that factors in the public sector are closely related to administrative management and control while factors in the private sector are rather related to market conditions and performance. As can be deduced from the table, managerial problems due to uncompetitive prices, insufficient information for decision, sacrifice of efficiency, and monopoly may be more likely to occur in the public sector rather than in the private sector; while when it comes to problems due to rather unstable resource of funds and ownership of assets, it seems that the situation is inversed. Based on the rather ascendant financial situation, more market-driven strategies should be involved in the NPSM as to make up for its systemic shortcomings, for which reason learning from experience of the private sector is considered important.

2.2.3 NPM Reforms in Healthcare

In Kurunmaki's (2008) studies, it is analyzed that whether *market-based reforms* and *accounting systems* that are important to NPM reforms has successfully shifted the power chain in the field of healthcare. In *Finnish healthcare reforms*, strengthening *the value of economic versus professional capital* while promoting *the power of healthcare financiers* above that of service suppliers is considered as a main goal. Nevertheless, the marketization in Finnish healthcare has reached its bottlenecks. A reason is that mainly as a result of the small number of service suppliers, there seems to be no competitive advantages. And local governments are not intending to intensify competition for political reasons and it is rather difficult to establish supplier-demander relationships between health service experts. Another problem is that information offered to those liable for service procurement is rather finite and may not be credible. And against the assumption of healthcare reformers, it is considered that *the monetarization of health service transactions* through price and market systems has failed to identify differences in *cost efficiency or quality* of health service suppliers. Besides, it is suggested that hybridization should become a possible resolution to such problems which may even lead to structural changes of hospitals (Kurunmaki L 2008).

Correia (2011) analyzed how the NPM has been envisaged and carried out *in the Portuguese health sector*. According to his studies, a foundational change of hospital management includes *decentralization of competences* from perspectives of central and regional governments to the perspective of hospitals, premised on which the board of a hospital should take responsibilities of management at *asset*, *financial* and *administrative* level. It is claimed that if the *decentralization of competences* is going well, lower dimension of decision making has to be in the charge of high-dimension controls, which is considered as the only method that *a balanced Ministry-management-professionals relationship* can be created and biases between *contracted performance* and *actual performance* can be averted. And despite

requirement of great transparency in the operation of NPM, accurate public evaluation is rigidly restricted at the bureaucratic level under political backgrounds (Correia T 2011).

2.2.4 A Brief Discussion of Systems of PPS and DRG

In the studies of Abernethy, Chua, Grafton and Mahama (2006), it is claimed that improvement and generalization of *prospective payment systems* (PPSs) in *major health care systems* at the moment are worthy of most attention in health care reforms. PPSs refer to a foundational variation from public health cost financing to an *output-based* system, or described as *casemix funding*. In this approach of hospital financing, a complicated accounting arithmetic system premised on data of expenditure and amount is adopted for resource allocation. In *casemix funding*, patients will be ranked into *disease categories* (DRGs) and distributes to each DRG for expenditure examination. According to Fetter (1991), the expenditure examination is based on the assumption that consumption models of *groups of patients (DRGs)* are consolidated. According to Fetter and Freeman (1986) and Samuel *et al* (2005), expenditure examination manifests prices for different beltlines manufactured by hospitals. According to Bourn and Ezzamel (1986) and Nahapiet (1988), central financing pundits decide hospital financing through application of expenditure examination allocated to each DRG and the amount of inpatients under treatment in each DRG. In most of medicare governance, prospective payment programmes are carried out as substitutes for conventional assignment procedures in which financing was depending on departed cost levels and communication between medical institutions and central financing pundits. And according to Duckett (1994), it is claimed that *casemix funding* carries forward the developing understanding that conventional financing method remained impartial resource allocation and *inefficient clinical and other work practices*. According to Bourn and Ezzamel (1986) and Craig *et al* (1990), *casemix accounting* involves motivations to improve *efficiency and effectiveness*. Besides, the transparency of operations contrived by *casemix*

accounting offers the foundation for *organizational rewards and sanctions* (Abernethy MA, Chua WF, Grafton J & Mahama H 2006).

2.2.5 Comparison of Different Institutional Change Theories

Kingston and Caballero (2009) listed and discussed different theories of institutional change. First, they introduced *collective-choice theories* in which regulations are distinctly defined by *a collective political entity* inside which individuals and organizations criticize mutually to alter the regulations to get preferential treatment from such action. According to Ostrom (2005), both *exogenous causes* and *endogenous causes* are considered as reasons of institutional change. Second, they shared their view of e*volutionary theories* which root in Darwin's *evolutionary principles of variation, selection and inheritance*. It is emphasized that the major difference between e*volutionary theories* and *collective-choice theories* takes place at the stage of selection which decides which regulations eventually appear. In e*volutionary theories* there is no concept of a central system, while in *collective-choice theories* there is an explicit top-down operating mechanism. Veblen's (1899) evolutionary theory focuses on *habits of thought* while Hayek (1973) founded his evolutionary theory on *selection at the level of social group*. Levi (1990) underlined that some groups may be endowed with power from official regulations while groups that rather disadvantaged making effort to impel institutional changes by obtaining their agreement from current institutional plans. According to Williamson (2000), in *transactions cost economics*, transaction costs increase because of *bounded rationality* and *opportunism of transacting partie*s. As a confirmed successful empirical methodology, *transactions cost economics* (TCE) supposes that *the most efficient institutional forms will emerge*, as an outcome of which institutional optimization will be achieved through a specific transaction (Kingston C & Caballero G 2009).

2.2.6. The Coase Theorem

Felder (2001) explained the first Coase theorem as if there is no transaction cost, the initial distribution of tradable authorities does not influence the ultimate distribution or social welfare; and a deduction is that government can manage external factors through explicit and absolute allocation of property rights to one side or the other and then enabling those rights to be transacted. He also explicated the second Coase theorem as if there is transaction cost, the initial distribution of tradable authorities influences the ultimate distribution and may also influence the total amount of social welfare, when it influences social welfare, the initial distribution that leads to the larger social welfare is significant; and some deductions are (1) in determining between all-or-nothing allocation of tradable authorities to one side or the other, the government should choose the side that eventually relevant to *the largest possible social welfare, or smallest possible social welfare loss*; and (2) once an initial distribution of authorities is decided, there may be space for welfare developing transactions between private parties, however, transaction is expensive for positive transaction costs and transaction at best can only remove some but not all of social welfare loss linked to the initial distribution of authorities. In addition, he interpreted the third Coase theorem as if there is transaction cost, developments over and above those achievable through transaction are possible through a prudent allocation of delimited authorities, which supposes that the government can parallel and compare the welfare influences of optional delimitations of authorities at rather low cost and also supposes that the government can perform in a method that at least is close to dispassion and justice (Felder J 2001).

2.2.7 An Overview of China's Health Care Reform

2.2.7.1 Background of the New Reform

Ramesh, Wu and He (2012) found that the defeat of China's healthcare reform through 1980s and 1990s was in some degree for the reason of insufficient focus on core issues of health management. For example, strategic chain reaction among

government, *providers* and *users*, as the same as motivation framework that forms their inclination and performance. The newly launched reform is a flight of ambition yet the lack of concern for elementary management problems the department has been suffering from remains the soft underbelly. During the late 1970s and the early 1980s, the reform had made an unprecedented success for bringing about lower infant mortality rate (IMR) (3.4%) and longer life expectancy (68 years) at a rather low expense of 3% of GDP on total expenditure on health (TEH). On a generally public basis, the method of fee-for-service (FFS) is widely adopted by providers and the national population is covered by three insurance schemes: the *Government Insurance Scheme*, *Labour Insurance Scheme* and *Co-operative Medical System*. Since the decay of state-owned enterprises, the ability of healthcare insurance system has fallen short of social demand gradually and as a result it is becoming more and more difficult for consumers to afford healthcare (Ramesh M, Wu X, He AJ 2012).

2.2.7.2 Major Problems and Suggestions

Hsiao (2007) listed four contemporary problems in China's healthcare system: inadequate capital and supply of public health and precautionary practices; high cost; poor access; healthcare pauperization. Under the background of central planning and with high dependence on national finance and public supply, the public medical institutions have been saturated with inferior hospital beds and unprofessional staff. And both *Co-operative Medical System* in rural areas and *Labour Insurance Scheme* which has been transformed to *individual medical savings accounts/catastrophic insurance* in urban areas have reached their bottlenecks, which mean that a systemic evolution is imperative. He also argued that another problem is the conflict of interest (COI) between China's Politburo and ministries. In Hsiao's opinion, it is suggested that an independent agency as a third party to control and assess correlative work should be founded and put into use as a rather permanent solution to the problem (Hsiao WC 2007).

Yip and Hsiao (2009) made a summary of three cardinal creeds used as a baseline for

the reform: powerful government administration in healthcare; promise of impartiality; aspiration to make attempts postulates operating in a regulated market. Based on the failure of resolving systemic problems, it is suggested that a change in the payment method and an advancement of independent agencies should be carried out. And they presented that the ongoing *fee-for-service* (FFS) *payment method* is a significant root cause of indiscriminate overprescription and overmedicalization. As examples of applicable models of the *prospective payment method* for China, *Diagnosis Related Group* (DRG) *payment method* for hospitals and *risk-adjusted capitation payment method* for basic healthcare suppliers are introduced (Yip W & Hsiao W 2009).

Yip *et al* (2012) claimed that insufficient ability and stakeholders' objection have become major constraints on the reform in motivation framework for suppliers, public hospital management control and establishment of a more vigorous supervision system. Besides, it is emphasized again that a third party as an independent and result-based agency should be introduced as a qualified monitor and evaluator to carry out mid-term revise of the programme and keep suppliers and government figures at their responsibilities. In addition, they demonstrated that fiscal policies towards rather less developed regions are effective in narrowing regional gaps in public healthcare (Yip WC, Hsiao WC, Chen W, Hu S, Ma J, Maynard A 2012).

2.2.7.3 Tendencies of China's Hospitals

Barber *et al* (2013) explicated that based on their studies there are some tendencies of China's hospitals listed as follows: First, impatient insurance compensation ratio will rise premised on ongoing government strategies. Second, *retail pharmacies* will become mainstay in dosage. Third, screening and purchasing drugs and techniques will depend on t*he best therapeutic value for price*. Fourth, the growth in size of hospitals will slow down and restricted, and borrowing for such purposes will be proscribed. Fifth, the change of management models from mono-hospital to *health system* will deeply influence the strategy-making process for delivering health services. Sixth, the government will define particular fields to increase investment in,

for example, *salaries*, *public services*, *management* and *training*, based on *a more efficient planning model* (Barber SL, Borowitz M, Bekedam H, Ma J 2013)

3. Some Backgrounds and the Present Situation of China's Ongoing Health Care Reform

3.1 Major Problems and Visions of China's Public Health

When it comes to the field of public health in China, it has been put forward that *high costs*, *poor quality*, *over-prescription* and *over-treatment* are the four cruxes that a breakthrough should be made in. The introduction of the NPM requires transition of management control of the government from input-orientation to output-orientation, from hierarchical centralization to functional decentralization, from monopoly to competition, and from traditional conservative bureaucratic administration to focus of market-driven strategies (MDSs). Under the background of the chronic asymmetric relationship of supply and demand, a systemic reform triggered by a series of functional reforms is imperative. Through learning from experience of the private sector and actively participating in market competition, the strategies of dealing with the four cruxes mentioned above have achieved initial success yet there is still a long way to go.

3.1.1 Major Problems

According to Li (2013), since 2009, resolving problems of *high costs*, *poor quality*, *over-prescription* and *over-treatment* has been deemed to be key points of healthcare reforms in China. The *15% mark-up* on drug prices and the compensation paid to hospitals *regardless of the quality of care* trigger *over-prescription* and *over-treatment* from which health workers profiteer. To deal with these problems, Henan Province has carried out a series of initiatives of reform in rural public hospitals, consisting of applying *computerized clinical pathways* instead of the FFS system, *performance-based payment* for treatment suppliers, and *IT based* quality control in health service institutions, which resulted in progress at the grassroots level. For

example, in *the People's Hospital of Yiyang County*, *patients' hospital stay* decreased by more than one day and their medical expenditure was cut down by 5~8%, yet during the same period there was a growth of 8.7% in *the hospital's revenues* for the reason that better services attracted more patients. And the hospital staff was successfully motivated to improve daily performance. Since the establishment of *the performance-based system*, hospital staff across the county has experienced a monthly income growth of CNY 330 per capita. The use of *hospital-wide IT platform* improved employee performance recording process so that medical malpractice could be avoided by immediate control. Besides, it is also pointed out that as a result of better service and less payment, the physician-patient relationship has been improved and patient satisfaction has promoted across the county since the commencement of the reform (Li L 2013). At the institutional level, building an improved overall control system should be treated as a task of top priority for the reason that according to collective-choice theories there is a definite top-down operating mechanism, which will finalize the system of organizational performance and force related personnel habituated to the operating mechanism. In China, besides the lack of a rather advanced top-down control system, an additional problem is that there is also long-term absence of supervision from an independent institution as a third party. Moreover, a developed legal system would also help standardize the management control system and reduce operating against regulations.

To make a supplementary from a strategic management perspective, Zhong (Zhong Nanshan, director of the Guangzhou Institute of Respiratory Diseases and editor-in-chief of the Journal of Thoracic Disease) introduced three key benchmarks for the reform: whether the problems of poor access and high cost have been settled; whether the physician-patient relationship has been improved; whether the medical personnel that are the main force of the reform have been effectively motivated. In his opinion, there has been no significant improvement from these perspectives for the past four years, and in some ways there seems even deterioration. He pointed out that recent violence against and killing of health care workers mostly happened in

outpatient departments, emergency departments and operating theatres where time is tight and communication is poor in big hospitals; and the core issues in the reform have not been paid enough attention to. To settle the problems, the most important thing is to make a public hospital really ‘public’, which was explained as to let the public hospital be state-owned and privately operated. Besides, he admitted that physicians have ‘grey income’ and some hospitals divide a surgery into multiple steps to collect money, even anesthesia alone is cut apart. The salary of a physician in a big hospital only holds 25% of his/her entire income, hence to survive and supply health care workers with rather reasonable income, hospitals make changes through increasing sickbeds and admitting more patients, however, such moves also result in the increase of medical tasks. In general, a physician of some note handles cases of almost fifty patients every day and patients are used to ‘queuing for hours to see the doctor for minutes’. Consequently, it is claimed that the core issues are systemic problems, which requires clarification of how public interest is shown in the values of public hospitals, as the reform should bring about development in public interest rather than in marketplace. In addition, contradictions are concentrated in big hospitals so that if these problems can be solved, with the example similar bottlenecks elsewhere can also be broken (www.nandu.com 2014). Rooting deep in national conditions of China, such problems may be settled by specific institutional changes since under traditional hierarchical control, healthcare institutions and their staff must conform to the rigorous standards laid down by the department in charge. Furthermore, judicial practice may also be introduced as auxiliary means, be combined with regulatory framework and always be recognized and made flexible use of in relevant cases by managerial staff.

3.1.2 The Recent Trends of China’s Public Health

In China, to keep up with the changes following accelerative urbanization and social reorganization, a profound reform is vigorously ongoing in public health care. Xiao (2013) has presented that at the moment, the reform of health care system in China

has a tendency towards ‘Merging Track’ that means socialized medicine will fade away and be replaced by a mixture of labour fundamental health insurance system and citizen fundamental health insurance system, which will include integrating socialized medicine with labour fundamental health insurance system; integrating new rural cooperative medical care with citizen fundamental health insurance system; and offering the choice to join either system to farmers whose land have been expropriated. It is suggested by Zhu (Zhu Fuling, professor of School of Insurance, Central University of Finance and Economics) that a clear distinction should be made between periods, which means that labourers have been covered by socialized medicine before an appointed time point can decide whether to join labour fundamental health insurance system, while those become a labourer after that time point are required to join the system. Furthermore, the gap between reward levels of health insurance will be bridged through supplementary insurance and the categories of premiums and proceeds will be defined clearly (Xiao D 2013). Such prospects look rather bright. Nevertheless, due to the late beginning, China still has a long way to go and is actively engaged in learning from successful experience of other countries.

3.1.3 The Launch of Pilot Programmes and Relevant Support

Like mushrooms after the rain, the pilot programmes have grown vigorously and been counted on to come to fruition so far. Liang (Liang Wannian, the head of the reform department of National Health and Family Planning Commission (NHFPC) and associate supervisor of the Health Office of Medical Reform of the State Council) stated that the next step of the reform will focus on launching pilot programmes in public hospitals including medical institutions founded by state-owned enterprises and averting public hospitals and other state-owned medical institutions being established or sold in an oversimplified and crude way through the process. According to *The Opinions on Promoting the Development of the Health Services Industry* issued by the State Council, the cities rich in resources of public hospitals should accelerate launching pilot programmes in medical institutions founded by state-owned

enterprises and the country should appoint some areas to launch pilot programmes in public hospitals, through the process of which the goals should be clearly defined; the enforcement and rhythm should be carefully controlled; and the pilot programmes launched should be able to fulfill the requirements of local health plans. Besides, it is suggested that the government should take action in founding and running public hospitals and other state-owned medical institutions in the spirit of accountability. For example, clarify the number, size and distribution of public medical institutions; keep the leading role of public medical institutions in supporting urban and rural residents with basic health care services; and encourage county councils and municipals to carry forward the reform through various methods as trust and cooperation. To prevent national asset from erosion and guarantee social stability, it is vitally important to normalize operation; protect national asset and equitable interest of employees; standardize liquidation, auditing and capital rating; properly complete personnel placement; and determine recipient on the basis of competitive selection. Meanwhile, it has been emphasized that there should be general consensus among county councils and municipals about the need for stronger post-reform management and control; more policy support to private medical institutions; leading post-reform medical institutions to achieve targets of high-level and large-scale; and more improved quality and standard of health care services (Lv N 2014). The suggestion that the government should give more support to improving public health is not a new proposition. Besides, a thorough plan and specific agenda should also be followed in order to effectively monitor and control the progress and quality through the whole implementation process.

In the blueprint stage, Liu (Liu Yandong, Member of the Political Bureau of the CPC Central Committee and Vice Premier) proposed to push forward linked reform in medical treatment, medical insurance and medicine; spread county-level public hospital pilot programmes to 1,000 counties; guarantee optimization of high-quality medical resources by controlling public hospital scope and building classification treatment system; improve private health care and multi-site licensing of physician;

offer multilevel and diversified health care services; raise resident medical insurance subsidy standard per capita to CNY 320; expedite building system of prevention and cure of serious diseases; consummate basic medicine system and improve public health to reduce incidence of diseases; regularize circulation and price system of medicine to avoid and settle problems of nominal high made by medicine; cultivate talents of health care, build a high-effective salary system and effectively motivate medical personnel; fight against violence against health care workers in accordance with law so as to establish harmonious physician-patient relationship (news.xinhuanet.com 2014). Such moves will prudently push forward structural changes in the field of healthcare and feedbacks of launched pilot programmes will become valuable for further plans and practice.

To achieve the goals of the reform, there is plenty of work that should be done at the basic level and social investment in health care should be more policy-supported. According to Li, county-level public hospitals are main body of health care system in China since they offer services to 0.9 billion rural residents. Currently, the deepening reform in health care is at a crucial turning point, a breakthrough should be made in the reform carried forward in county-level public hospitals so as to resolve the problems of poor access and high cost of health care for the masses of people. Complied with three principles of cooperation between higher and lower levels, internal motivation and external support, three guidelines are listed as a backing for the reform in progress: the abolition of ‘nourishing physicians with high medical charges’; the innovation in the system; and the motivation of health care workers. In addition, Liu (Liu Yandong) emphasized that an expansion of the scope of pilot programmes in county-level public hospitals is considered as a matter of great urgency. The number of counties in which pilot programmes are launched will be increased to 1011 before the end of the year 2014, which means 50% of counties and population of 0.5 billion across the country will be covered. Meanwhile, the optimization of health care resources should be driven on to build the system of initial diagnosis on basic level, classification of diagnosis and treatment, and bi-directional

transfer treatment. It is also suggested that illegal medical practice and false medical advertisement should be put on the government's hit list, an arbitration and risk pooling system for medical malpractice and disputes should be built, medical ethics of health care workers should be focused on, and information of hospitals should be made known to the public, which are beneficial for establishment and maintenance of a harmonious physician-patient relationship (news.sina.com.cn 2014). The support to local health care institutions is a long-term method which may help improve optimization of health care resources and narrow the urban-rural divide. Furthermore, under tight official control a new order of offering health services may be established by the government.

3.1.4 The Imbalance between Supply and Demand Calls for Marketization of Public Health Care

According to Wu (Wu Mingjiang, vice-president of Chinese Medical Association and member of CPPCC), the new reform has brought about fruitful results while posing an immense challenge to various interest patterns to date. Since many problems on the surface were smoothed away, more underlying problems have come out and required to be paid attention to. It is pointed out that the core of the systemic and structural issues is how to provide a rather consistent long-term framework. To fit in with a market-centered economic system, it is suggested that a hospital should be transformed to an independent economic entity and show independent legal personality, reasonableness of fundraising channels and government responsibility in management control while the original administrative structure is undergoing changes. The only solutions to problems left over by history, ongoing problems in the reform and problems newly appearing in the development are carrying forward the reform and the development. In the wake of development in the society, the reform has been strongly boosted by the eruption of social demand for health care, the success of which is depending on broad social support and a general consensus among ministries (Shen Y 2014). To accomplish the reform of framework from centralized-planned to

market-driven and market-driving, the restructuring transformation is considered a key section since the proprietorship determines the position and operation of public healthcare institutions.

At the moment, administrative monopoly of health care resources is still the crux of the matter. Since the scheme of the new reform was introduced in 2009, the problem of weaknesses in the health care service system at the basic level has not been resolved yet. On 19th Apr 2014, at the CN-healthcare.com 2014Healthcare Investment And Financing Forum, Cai (Cai Jiangnan, director of Healthcare Management and Policy Research Centre, China Europe International Business School) premised his argument with statistics that the share of tertiary hospitals has been growing sustainably even since the end of 2009; the number of outpatients of tertiary hospitals for the year 2011 has increased by almost 126% compared with that for the year 2005, while the number of non-graded hospitals was decreasing by at least 30%. Such event is so called inverted pyramid which was a conundrum that was intended to be solved through the scheme of the reform introduced in 2009. The inverted pyramid is referred to a fact that the health care resources which are supposed to be supporting the basic health care finally flood in big hospitals. Since the new reform is carried out in 2009, the public finance has favoured community health care and county-level hospitals, yet the problem has not been settled and has even been exacerbated. From 2005 to 2010, the number of hospitals that owns more than 800 sickbeds had increased by 202%, making it the group of the fastest growth; the number of hospitals that owns fewer than 500 sickbeds had increased by 13%, making it the group of the slowest growth. During the same period, some hospitals with over 10,000 sickbeds had come out, which were nicknamed ‘giant aircraft carriers’ by Cai. According to the scheme of the new reform, a health care service system that is reasonably structured while covering both urban and rural areas should be built, to achieve the goal of which the principles of keeping not-for-profit medical institutions as the main body with for-profit medical institutions as supplement, public health care as the keynote and promoting common development of non-public health care should be insisted.

However, as shown in a set of data published by the NHFPC in 2013, in the public hospitals which has occupied 55% of the total percentage of the number of hospitals in China, the number of sickbeds has occupied 86%, the amount of outpatients has occupied 90% and that of inpatients has occupied 88%, which reflects obvious monopoly (www.chinahealthreform.org 2014). Such data indicate that when it comes to health care resources, the gap between tertiary hospitals and other hospitals, and the urban-rural gap are still wide, which suggests that further effort should be made to resolve the problem.

As suggested by Cai, to solve the problem, a combination of policy instruments should be implemented simultaneously, which means that the reform in public hospitals, diversification of investment in health care, multi-site licensing of physicians and encouraging physicians to open their own clinics should be carried forward at the same time, since it is emphasized that to dismantle the administrative monopoly in resources, the leading role among hospitals should gradually be played by social not-for-profit hospitals and physicians should be endowed with more freedom that most of whom should gradually become self-employed professionals (Zheng L 2014). Since 2009, the new reform has promptly extended the coverage of medical insurance and reasonably eased the burden of patients, as a result of which many people who could not afford seeing a doctor are supplied with accesses to health care services. Along with an increase of demand for health care services, the supply of health care resources is growing, which is mainly reflected by a better medical environment. The growth of number and scale of hospitals has been remarkable, the equipments for diagnosis have been updated, and the projects of health care services have been developed. Nevertheless, among various health care resources, the core resource is defined as talents. In China, the lack of health care talents has become an unprecedented crisis, which is represented by the fact that almost half of 2,000,000 physicians do not have a bachelor's degree, causing an excessively low ratio of qualified physicians to the population. During the recent decade, most graduates of medical colleges have not chosen their career as a physician, bringing about

deterioration for the problem of the demand exceeding the supply in health care. It is deduced that the key issue of the stagnation of number and quality of talents in health care in China is the long-term constraint of prices of health care services and the ossified pricing system. The prices of health care services have severely departed from supply and demand, compared with prices of other services, which seem to have been trapped in a ridiculous cycle that the price of an outpatient is lower than that of a haircut in a barber shop or a cinema ticket. Such circumstances have caused a series of serious results: the open income of physicians is too low which demotivates outstanding students to go into medicine and graduates of medical colleges to practise medicine; physicians can only depend on excessive prescription and examination to make up income, which fuels contradiction between physicians and patients further; limited talents flood in big hospitals, which adds to the inverted pyramid and worsens the problems of poor access and high cost in health care. Therefore, building a reasonable and effective pricing system for health care services to guarantee that the prices of health care services reflect supply and demand has become a mission of great urgency (www.chinahealthreform.org 2014). There seems to be weird contradiction in the problem of recruiting physicians: on one hand, there is constant deficiency of qualified physicians; on the other hand, there have been plenty of complaints from presidents of public hospitals on the situation that they have to accept and find a place for any medical graduate allocated by Ministry of Health (MOH) without qualification even if the graduate is not competent for the position, which may be seen as an allusion to the hidden danger that corruption appears at a higher stage.

At present, according to the new policy issued by the National Development and Reform Commission (NDRC), the NHFPC and the Ministry of Human Resources and Social Security (MOHRSS), non-public medical institutions are allowed to carry out market-centered pricing on health care services, which has proved to be a milestone in the new reform for providing valuable experience to the whole pricing system for health care services. It is agreed that the market-centered pricing on non-public health

care services will be beneficial to diversification of social investment in health care which will bring about competition between public hospitals and non-public hospitals and the market prices accepted by non-public medical institutions may become references for public medical institutions to change the situation that the prices of public health care services have severely departed from supply and demand. Meanwhile, under the background of public medical institutions still playing the leading role it is supposed that the prices of health care services offered by non-public medical institutions are not likely to grow dramatically for the reason that the prices of non-public health care services are restrained by public health care. To change the vulnerable position of individual patient in the health care market, a price negotiation system for payers of health insurance and suppliers of health care services should be built step by step. Moreover, the government should strengthen price management and guarantee fair play through intervention as a third party, fighting against price distortion caused by monopoly, fraud and unfair competition. Under the background of long-term fixed prices of health care services, there is wide bias that various problems appearing in the health care system are due to the insufficiency of government investment. However, increase of government investment is never the only or sustainable solution. As suggested, the key to resolve the problem of compensation for medical institutions is to build a reasonable pricing system, for which a series of other problems can be settled as well (www.chinahealthreform.org 2014). So far, the combination of economic planning and market regulation has been the leading direction of China's economy which has driven structural transformation of most civilian industries. As pushed by the general trend, the public health institutions are also suggested to take active participation in market competition rather than survive under protection of central planning.

3.1.5 The Results, Origins and Suggested Resolutions of Administrative Monopolies

So far, the administrative monopoly of health care resources has caused two serious

results: the situation of the inverted pyramid structure of health care resources has gone even further; the insufficiency and waste of physician resources have been existing simultaneously and the conflict has been sharpened. According to Cai, the key problem in the health care system at present is the contradiction between administrative monopoly of health care resources and the socialization of health care resources. In China, since income and expenses are operated in different tracks, general practitioners are more like civil servant-to-be, while most general practitioners are multi-site licensed and working in clinics throughout the world (e.g. in the UK). As he pointed out, the administrative monopoly has covered two dimensions of administrative monopolies and seven instruments to come true. The first dimension is the control of public hospitals from the government. During recent years, though the number of private hospitals has increased fast, it is still public hospitals that definitely predominate. The second dimension is the control of resources of physicians, drugs and examinations from public hospitals, while these four categories of main health care resources are separately ascribed to four independent organizations in many countries (www.chinahealthreform.org 2014). As a rather common situation under control of a strong centralized government, such administrative monopoly of resources is considered as the headstream of a series of problems not only in the field of health care but also in variety of other areas in China, as a result of which the way to an exhaustive reform is usually long and hard to go.

The two dimensions of administrative monopolies are actualized through seven instruments: the first is market access, referring to the permission; the second is planning; the third is administrative grading, which hierarchizes hospitals and physicians into different ranks and is criticized by Cai for the reason that an advanced system of quality management control and patient comments are valid enough for evaluation of hospitals and physicians; the fourth is formalized staffing, which is a threshold that difficult to cross in development of private health care and competition of public health care; and the rest three are research outlay, social health insurance and governmental pricing. It is claimed that if the seven policy instruments mentioned

above are not changed, it will be impossible for the goal of rising the percentage of sickbeds in private hospitals to 20% to be achieved. In the future, if socialization of health care resources has come true, a hospital, no matter public or private, will no longer belong to any government sector or individual, which means that its facilities and equipments are open to the society and for use by signatory physicians; while a physician is legally permitted to sign contracts with multiple hospitals and work for multiple hospitals as a result of socialization of physicians (www.chinahealthreform.org 2014). The discussion of the seven policy instruments has covered the main 'short slabs' and also future developing directions in further marketization of China's health industry. And with complete socialization of health care resources, it will be possible for signatory physicians to acquire a franchise for independent therapy and prescription.

In a narrow sense, the power of market can be defined as the power of profitability, according to which Cai held an negative opinion on either the government or the for-profit market to play a leading role in health care and argued that to let not-for-profit health care prevail in the area represents the fundamental law of the industry and the general trend throughout the world. To realize socialization of health care resources, it is important to let not-for-profit hospitals in the society play the leading role progressively, let most physicians become self-employed professionals, forge diversified links with hospitals, and build a price negotiation system that contains both sides of supply and demand. It is also to encourage social investment in health care, foundation of not-for-profit hospitals, motivational policies as in taxation, control of the percentage of for-profit hospitals, and transformation of current public hospitals through absorbing social investment, holding shares, hiving off and so on (www.chinahealthreform.org 2014). At this stage, the policy support to allow private capital to participate in health care and to generalize self-employment of physicians should be carried out in a planned way, for which it is suggested that the government should also work on developing a market environment with more opportunities of fairness.

To enlarge on the topic, Cai listed four ways, the first of which is the reform in public hospitals, defined as the reform of storage. For incremental reform, it is strongly recommended to trigger the development of physician owned clinics. In the reform in public hospitals, the structural reform of legal person management should be carried out in most public hospitals, which means that the power of management of personnel that is of special essentiality, finance and properties should be released to hospitals by the government. The formalized staffing and the administrative grading of hospitals and physicians should be abolished through 'Double Track' step by step, while diversified participation and cooperative management are encouraged for some public hospitals to be converted to social not-for-profit hospitals through assimilation of investment from enterprises and the society. Besides, a system transformation can be gone through in some hospitals like worker's hospitals attached to some large enterprises. The second is diversified operation of hospitals, which means that founding social not-for-profit hospitals should be encouraged, for which reason large enterprises and the society should be encouraged to invest in social not-for-profit hospitals through motivational policies as a deduction in tax, and the percentage of the number of for-profit hospitals should be moderated. During the transition period, some policy support as low-level profit sharing and disinvestment of seed capital after an agreed date can also be taken into consideration. The third is carrying out multi-site licensing of physicians, which means that the decision of whether the physician can work for the hospital should be made through negotiation between the physicians and the hospital. And exchange of physicians between public hospitals and private hospitals should be encouraged, in which way to enhance cooperation between public hospitals and private hospitals. The fourth is encouraging physicians to open their own clinics, which means to encourage and help physicians to found private clinics, cooperative clinics and clinic chains that focusing on offering services of basic health care and general practice to attract patients to let their demand of basic health care, treatment of common diseases and frequently occurring diseases to be met in physician owned clinics (www.chinahealthreform.org 2014). Here all the four ways mentioned above are designed in order to create a better market environment

which would effectively reflect market readjustment in regulation of the market of products and services of health care.

3.1.6 The Urban-Rural Divide

Wang shared his opinion that whether the reform is successful should be assessed as depending crucially on whether the short-term and the long-term goals designed when the reform was started in 2009 have been achieved. For example, the comments of the reform does not depend on whether the index has been done or whether the reform in a community hospital has succeeded but depends on whether the problems of poor access and high cost in health care have been settled since it is included in the initial short-term goals. At the moment, there are 960,000 medical institutions including clinics and rural health centres, and 24,300 urban hospitals among which 13,440 are public hospitals while about 10,000 of the rest are private hospitals (health.sohu.com 2014). Such data shows a fact that in the urban area, the number of public hospitals is a third more than that of private hospitals. However, taking the amount of admitted patients into consideration, the gap between public hospitals and private hospitals may become even wider. Besides, another fact is that an overwhelming majority of patients heading for general hospitals would prefer public hospitals; while it is as the same deeply ingrained in their mind that private hospitals are not worth visiting unless considered as special hospitals for some particular diseases. Such deepseated bias has also added fuel to preventing China's healthcare industry from further marketization and socialization.

According to the statistics from the NHFPC from January to October 2013, during the period the number of national outpatients has been 5.81 billion, 2.19 billion of which were from urban hospitals while 3.43 billion of the rest were from rural hospitals. The number of national inpatients during the same period has been 0.152 billion, overwhelming majority of which were from urban hospitals while about 960,000 were from rural hospitals. Meanwhile, the number of health care workers across the country was about 9.12 million, almost 5 million of which were from urban hospitals. 89.9%

of the amount of national outpatient treatments was from urban hospitals, 90% of which was from urban public hospitals, which means that 85.1% of the amount of national outpatient treatments was from secondary and tertiary hospitals. When it comes to national inpatients, 88.8% was from urban public hospitals, 86.6% was from 8,395 secondary and tertiary hospitals and the turnover of sickbeds in tertiary hospitals has reached 103.8%, though the turnover of sickbeds ought not to exceed 100% theoretically. Such high turnover is a result of too many sickbeds having been added in the wards and even the corridors of hospitals, which means that the number of inpatients is far beyond the load capacity of the hospital (health.sohu.com 2014). To date, to give a perfect solution to the problem of poor access for equitable distribution of rather limited health care resources is still ‘a hard nut to crack’. From a perspective of long-term causal relationship, such trouble can also be viewed as disastrous effect of original irrational allocation of health care resources.

3.1.7 Total Cost Level and Self-supporting Level

It is pointed out that the about 8,000 big public hospitals have become core areas of poor access and the aporia of the reform in the past two or three decades. In the past reform, secondary and tertiary hospitals which composed 90% of the main body that offers health care services have never been involved, which should be defined as the main contradiction in the reform. During recent years, the costs of outpatient and inpatient treatments have still been growing, which means that the problem of high cost in health care has never been resolved and there is even deterioration. For the year of 2012, the total cost in national health care has been CNY 2,891.4 billion, CNY 2,135.8 per capita and an increase of 18.7%; while the total cost was about CNY 2,400 billion for the year of 2011, of which 30.7% was covered by central and local public finance, 34.6% was covered by the society, and 34.8% was at patients’ own expense. Compared with the situation in Japan, only 12.8% of the total cost in national health care was at patients’ own expense. In China, the total cost in national health care accounts for 5.15% of GDP, which is lower than that of 9.2% in South

Africa, 8.8% in Brazil and 5.6% in Russia but higher than 4.2% in India. If the percentage in China rises to 10%, the total cost in national health care will rise to 4,000~5,000 billion while the percentage at patients' own expense dropping from present 40% to about 35%. Nevertheless, the absolute value is keeping growing and much higher than that of developed countries (health.sohu.com 2014). In China, a fact is that permanent labourers attached to state-run enterprises and public institutions have been supported with much more advantages in achieving public health services than labourers in other situations, which reflects the problem of economic and social partiality upon resource allocation in the national public health system that also requires concern.

3.1.8 Three 'Vague' Circumstances

According to Wang, there are three circumstances of 'vague' in the reform. The first is that it is unclear that how much money public hospitals should spend, though the income of public hospitals is rather clear that the revenue from sales of medicine accounts for 3% in outpatient treatments and 41.1% in inpatient treatments. If the status of 'nourishing physicians with high medical charges' has been debarred, it is not an alarmist talk that public hospitals may not be able to exist for a month since 50% of their earning is from sales of medicine. At the moment, public hospitals are busy making profit most of the time while relying on the government for the rest. In another word, there are actually no public hospitals in China except for their state-owned assets, since none of them provide services of public interest while all maintaining operation on the basis of sales of medicine (health.sohu.com 2014). To carry forward improvement, it is of significance for the government to find out the legitimate cost of public hospitals, crack down on cases of exorbitant medical charges, and build an effective monitor and control system based on scientific standardization and performance measurement, while exploring new economic growth points for public hospitals.

The second is that the real utilization rate of the premiums of the three main basic

health insurances is obscure. Meanwhile, the combination of the three main basic health care insurances of the *Labour Insurance Scheme*, *Government Insurance Scheme* and *Co-operative Medical System* is always called for since the current system is considered unequal. For example, it is unfair that a farmer can only acquire a farmer's insurance while a cadre acquiring a cadre's insurance under the background that they are both residents of China. In 2013, it was declared during the two sessions (NPC and CPPCC) that the three insurances would be merged and in the charge of one department, and a schedule was soon issued by the State Council, in which it was required that the combination and handover should be accomplished before June 2013. However, such work has not been done so far, which is due to the power struggle between departments, though covered with a varnish of a strict selection of the route to reform (health.sohu.com 2014). Through nationwide reconnaissance, the government would be clear about the reality of utilization of the premiums of the three main basic health insurances, or else a new scheme as a combination of different schemes would be put on the agenda. And to prevent progress from being held up through bureaucratic processes such as the power struggle between departments, it may be necessary to establish a new agency to deal with relevant issues as a third party which is qualified, task-centered and result-measurable.

The third is that the result of evaluation of investment in public insurance that raised by the government is unknown. During the two sessions in 2013, according to the budget for health insurance submitted by the Ministry of Finance, among CNY 995.2 billion that has been raised for the three insurances, CNY 308.2 billion was raised by fiscal, accounting for 31.4%; the expenditure was CNY 880.5 billion and the surplus was CNY 114.7 billion, rolling savings were CNY 912.4 billion. Nevertheless, in the *Labour Insurance Scheme* of CNY 618.9 billion, only CNY 7 billion was raised by the government, though the *Labour Insurance Scheme* is defined as the most significant part among the three main insurances. So it is questioned that where the CNY 880.5 billion raised by the government has been spent on, how it has been

working and what effect it has brought about. However, even whether these perspectives have been appraised is doubtful (health.sohu.com 2014). To make better financial management and refrain from corruption, it is suggested that the government should improve cost transparency and introduce a more advanced supervision system within which public officials can be held accountable for their actions.

3.2 The Trial of PPP in China's Public Health

In China's health care reform, it has been claimed that benchmarking is rather difficult since there is misalignment between investor's and the hospital's evaluation of assets. Besides, there is insufficiency of criteria to measure the hospital's invisible assets as brand and governmental academic support. However, it also seems that the PPP has achieved excellent results in development of private health care and reallocation of local health resources, which indicates that it is worth perpetuating across the country as a kind of successful experience. Furthermore, a more advanced and open grading system supports private hospitals and hospitals of PPP with better efficiency through grading processes and more equal opportunities to compete with public hospitals in the market.

Since the failure of property rights reform in the last round of the reform, the NHFPC has been prudent in PPP all through. At the moment, as the exploration of the reform is carried forward, the discussion of the PPP has been refined to a high degree, yet the political circle, the industrial community and the academic world still have not reached an agreement on the PPP in the field of health care. In supporters' opinion, it is widely endorsed that the foundation of multi-invested hospitals can be realized through generalization of the PPP since social investment is an external boost and the PPP is a functional solution to the problems of low flexibility, effectiveness and efficiency in the public hospital system. Gao (Gao Jiechun, head of Hospital Management Research Institute, Fudan University) affirmed that the technology of public hospitals and the capital of private enterprises are mutually complementary, with the brand effect of foreign capital management which would set a best example

of the reform in public hospitals. In fact during the earlier years similar projects have been researched and tailored in Shanghai. Nevertheless, the opponents claimed that the PPP may cause erosion of state-owned assets since there are legal and moral queries on public resources being invested in for-profit hospitals. For example, if a not-for-profit hospital is founded on the basis of the PPP, facing the limitation of non-dividend, social investment may profiteer through 'grey operation' in sacrifice of interests of the hospital and even patients (www.jkb.com.cn 2014). The opinion from either side is based on some reality in China's health care. To avert erosion from 'grey operation', there is not only a call for system reform in health care but also requirement for restructuring at a higher level, which is rather sophisticated and of more difficulty in operation; and to achieve the goal of which the level of individual risk-taking is another critical factor that retards qualified public officials from taking the task.

According to Zhong (Zhong Dongbo, associate director of the NHFPC of Beijing City), the purpose of social investment in not-for-profit hospitals is always tax advantage, and private not-for-profit hospitals are not going well due to the limitation of current policy. It is also mentioned that the decisive role the market plays in resource allocation is only suitable for economic reform and does not fit social reform, for which reason the PPP in the field of health care should be dealt with at the discretion. Besides, the PPP is not the only avenue to realize the foundation of multi-invested hospitals since other means as reasonable policy support can also contribute to development of private hospitals. Though there is still theoretical argument, the reform in public hospitals including those adopted PPP has been generalized across the country. Dong (Dong Mei, partner of Beijing subsidiary of KPMG) said that among her clients, a common fact is that the investor's and the hospital's evaluation of assets often mismatch and there is a lack of standard to measure the hospital's invisible assets as brand and governmental academic support. Chen (Chen Fang, vice-president of Anzhen Hospital) indicated that the hospital introduced social investment for cooperation and the government also agreed to grant

a piece of land. However, the issue has been hung up for two years since the hospital is not able to raise fund for land transfer fee of CNY 0.2 billion and the firm which has been established for the cooperation is not allowed to accept the land as a for-profit institution. Zhu (Zhu Hengpeng, director of Public Policy Research Centre of Economic Institute, Chinese Academy of Social Sciences) claimed that a principle of public and transparency is of vital importance in the reform in public hospitals. If public hospitals expand on the basis of their monopolistic and dominant position, social investment will have to be in the control of big public hospitals. Liang argued that there are various forms for the reform in public hospitals including property rights reform, management system reform, operation reform and so on. Reasonable positioning is important and local health planning and medical institution planning should work. It is emphasized that basic government responsibility should be supervised, while national assets, labourer rights and social stability being guaranteed in the reform (www.jkb.com.cn 2014). All standpoints above are premised on the existing circumstances of public health in China and are around the national ideal of construction of harmonious society, which should be taken into careful consideration during implementation of the reform and necessary supports should be provided to adapt to local situations and emergencies.

In answer to the call, large amount of private capital is put in merger and foundation of hospitals, which triggers fresh enthusiasm of investment in health care. In an interview, many investors indicated that the corresponding rise of investment in county-level hospitals is a result of price scissors of supply and demand in the area of health care. And it is suggested by some experts that the government should conscientiously play the role of ruler and public interest defender so as to activate dynamic of social investment in health care. At the moment, a trait of social investment in foundation of medical institutions is racing to top out in the value chain of the industry. During the recent two years, pharmacy enterprises, medical instruments and financial funds all have accelerated processes of foundation, takeover and custody of hospitals. For example, during two months in the year of 2013, Fosun

Pharma, headquartered in Shanghai, has taken over two big hospitals which are Nanyang Tumour Hospital of Guangzhou City and Central Hospital of Chancheng District, Foshan City, both in Guangdong Province. Meanwhile, Hengkang Medical Group, headquartered in Gansu Province, has taken over equities of five private hospitals including Better Tomorrow Hospital of Deyang City and Well-being Hospital of Qionglai City, both in Sichuan Province and so on (news.xinhuanet.com 2014). The tendency reflects a bright prospect of privatization and marketization of health care services in China. It also implies a reallocation of existing health care resources through the process of which further progress has been made to achieve the optimization of total national health care resources.

According to statistics from the NHFPC of Hubei Province, the number of private hospitals that newly sanctioned to be built across the province was 32 for the year of 2012, while the number was 130 for the year of 2013. So far, social capital has been frequently flowing to county-level public hospitals. In November 2013, Kangmei Pharmaceutical signed a contract with the local government of Meihekou City, Jilin Province, taking over three county-level public hospitals which are local Maternal and Child Care Centre, Friendship Hospital and Traditional Chinese Medical Hospital. Having taken over five public hospitals including Children's Hospital of Kunming City, Yunnan Province and 999 Brain Hospital, Guangdong Province and so on, China Resources Pharmaceutical Group Limited has been approached to take over Gaozhou Public Hospital, Guangdong Province through the year of 2013. Fang (Fang Pengqian, vice-president of Tongji Health Care Management School, Huazhong University of Science and Technology) shared his opinion that compared with private investment in health care scattered over the country ten years ago, there are three characteristics of current social investment in health care: the change of main body from grassroots to capital; the change of mode from mainly foundation to laying equal stress on both foundation and merger; the change of operation from chasing short-term profit to pursuing long-term profit. As the market is being activated by capital, with improvement of quality, professionality, effectiveness and efficiency, there is no doubt

that the drift of social investment in health care is capable to make up for insufficiency of total amount of China's health care resources (news.xinhuanet.com 2014). The development of county-level hospitals is considered as will have amazing results in relieving the pressure of big hospitals. As the invested hospital operates well, there will be high expectation for considerable return on investment, and then a virtuous cycle will be created. At the moment, there is still broad development space in this area and a growing number of local governments have voluntarily released information of local hospitals and look for investors.

During the recent three years, the initiative of social investment in health care has remarkably promoted. Besides the stimulation of policy of encouraging private hospitals, an important reason is that the reform, especially in public hospitals, has brought about three opportunities to encourage investment in county-level hospitals: firstly, the reform stimulates demand for health care while increasing channels of supplying health care services. Under the background of the reform, the county-level hospitals which were often ignored by investors in the past suddenly become attractive for the future profitability, taking Phoenix Healthcare Group trusting Hospital of Mentougou District for example, as shown in prospectus published by Phoenix Healthcare Group, it has invested CNY 75,000,000 in custody of the hospital, though annual management fee is only CNY 5,000,000, the profit from supply chain of drugs and instruments for the year of 2012 has exceeded CNY 6,000,000 and as the number of patients has been growing dramatically, the profit from supply chain for the first-half year of 2013 has almost reached CNY 6,000,000; secondly, the policy of that a patient of even some serious disease should be possible to be cured within the county he/she belongs to pushes local governments to carry out decentralization of hospitals since to achieve the goal it is impossible to depend on effort of only public hospitals and contracting a loan to develop is legally banned, which means that local officials have to give up considering public hospitals as 'their own yards' where they are powerful enough to arrange personnel and enjoy free health care since it is not difficult for the government to get loan from banks, objectively effectively offering

more opportunities for social investors to merge, trust and build county-level hospitals; thirdly, optimization of environment brings about sense of security for investors, an example is Xinli Hospital of Nayong County, Guizhou Province, which is a private hospital established less than eight years ago, the number of annual outpatients of which has exceeded 50,000, far more than that of local public hospitals. According to Huang (Huang Wenzhe, president of Xinli Hospital), as the reform is carried forward, local opinions on supporting and encouraging social investment in health care are gradually being merged in agreement. In standard application, staff title award and medical insurance qualification, the barriers to private hospitals are gradually surmounted. In 2011, when Xinli Hospital was applying for secondary hospital examination, the process was supposed to be long and hard for a private hospital, yet in fact it was fast and smooth. Thereafter Xinli Hospital has become the first private secondary hospital in the province. In competition with public hospitals, there is no doubt that the market pricing on health care services in non-public medical institutions supplies local non-public hospitals with more market-centered regulations (news.xinhuanet.com 2014). The examples above show how the three opportunities have motivated investors to favour county-level hospitals. In addition, the level of economic development of a county would also become a key factor for an investor to decide whether to invest in a hospital of the county.

3.3 New Way to Dispose of Medical Disputes

In medical dispute resolution, an organization has been founded as a third party for the purpose and relevant processes based on amount of compensation involved have been laid down for operation.

According to statistics from the MOH, the number of riots of medical dispute profiteering among China was 17,243 in 2010, about 7,000 more than that of five years ago. The number of violence against health care workers was 2,240 for eight months of 2013, increased by 20% compared with that of 1,865 for the whole year of 2012. Besides, according to investigations of Chinese Hospital Association, the

percentage of hospitals that had suffered from violent attacks against health care workers during 2012 has been up to 63.7%, and the average number of such attacks happen annually per hospital is 27 (news.sina.com.cn 2014). To break off limitations of traditional settlements, the Medical Dispute Mediation Committee (MDMC) has been founded. According to the investigation, 67.1% of hospitals indicated that they have resolved disputes through the MDMC and the percentage of dealing with disputes through the MDMC is high. The percentage of hospitals that have the percentage of dealing with disputes through the MDMC has been up to 30% and above is almost 70%, 16.9% of which have the percentage of dealing with disputes through the MDMC has even reached 90%. As supported by the data above, it is affirmed that the MDMC has positive significance in dealing with medical disputes and this mode is worth popularization. However, on the other hand, it is also pointed out that only 32.2% of hospitals take sides on the issue that the mediation of the MDMC is effective, which shows insufficient confidence in the mediation of the MDMC in medical disputes (Hu J 2014). Through disadvantages emerged, the experiment of MDMC has still proved its superiority in dealing with medical disputes. However, since there is a lack of information of the reasons why only less than one third of the number of hospitals considered the mediation of the MDMC as effective, further investigation may be required to analyze how improvement should be made in the work of MDMC.

In principle, in the case of the compensation is above CNY 20,000, the medical institution is obligated to inform the patient to submit application for mediation to the MDMC, and the MDMC should close the case in 30 business days since the date of acceptance of application. In the case of the compensation is CNY 20,000~100,000 and there is debate on medical liability between the physician and the patient, the MDMC should hold a consultation of experts and the liability between the two sides should be clarified in the submission written by the experts. In the case of the compensation is above CNY 100,000 and there is debate on medical liability between the physician and the patient, the MDMC should commission a medical association or

an institution holding the same qualification to go through technical appraisal process of medical malpractice or medical damage to clarify the liability (Huang H & Wen Y 2014). These standards have been set on the basis of present situation of China's health care that closely related to national conditions. Nevertheless, considering the diversity and complicacy of possible situations in practice, such roughly defined categories also reflect underlying disadvantages and risks due to sacrifice of accuracy and flexibility.

4. Empirical Analysis

A survey of hospital management as in the first part of appendix (6.1) based on the five proposals to *define the essential characteristics of institutional change* presented by North (1993) was carried out and replies from 4 hospitals have been collected. To ensure that replies can be effectively collected and the resource of information is rather reliable, all the hospitals selected are located in Changchun City, Jilin Province, China. To suit local situations, the questions sent out are in Chinese and are designed not complex or confusing and all of them are choice questions (some are true-false choice and some are multiple choice) directly related to running a hospital from an actual perspective. The names of people who took part in the survey and hospitals they belong to are listed as below; and all participators are in a position of management:

Name	**Hospital**
Liu Lili	No.1 Clinical Hospital of Chinese Medicine Academy, Jilin Province
Jia Chao	No.2 Bethune Hospital Attached to Jilin University
Xu Gongbin	General Hospital Attached to FAW（First Automobile Works）Group Corporation
Zhang Ling	China and Japan's Friendship Hospital Attached to Jilin University

Table 3: People and Hospitals Involved in the Survey

The answers from surveyed hospitals are exhibited in Table 4 in Chapter 6.2.

The answers to Question 1, Question 2, Question 3 and relevant additional questions

showed that all surveyed hospitals are public and tertiary hospitals, and most have experienced bottlenecks in grading. These questions are related to the first of North's (1993) five proposals of *the continuous interaction of institutions and organizations in the economic setting of scarcity and hence competition is the key to institutional change*, since it seems that on one side the existing institutions have squeezed hospitals' effort on the way to be identified as a tertiary hospital and to get in conformity with the construction of national healthcare insurance system, and on the other side the reality of that the title of tertiary hospital has been 'high in gold' is nurtured and sustained by the difficulty during the process of examination. The problem is that such interplay even worsens the situation mentioned in the following paragraph by manufacturing barriers for hospitals other than tertiary hospitals in competition due to prejudice in demanders' mind, for which reason there is essentiality for a new interaction to be created so as to surmount the barriers on an institutional perspective.

The answers to Question 4, Question 5, Question 6 and relevant additional questions indicated that there is still difficulty to keep the balance between supply and demand in public hospitals. These questions are related to the fourth of North's (1993) five proposals of *perceptions are derived from the mental constructs of the players*, since it is still the mainstream for patients or demanders to prefer tertiary hospitals in cities rather than clinics, community hospitals and rural hospitals. Thus it can be derived that to resolve the problem of supply-demand imbalance, it is of emergent significance to direct mental changeover of the great mass of average demanders.

The answers to Question 7, Question 8, Question 9 and a relevant additional question represented that high cost and inefficiency in treatment-payment process is still a problem. These questions are also related to the fourth of North's (1993) five proposals of *perceptions are derived from the mental constructs of the players*, based on suppliers' perspective hence to be distinguished from those based on demanders' perspective in the above paragraph; since there is a disregard for actual needs of patients or demanders shown by hospitals or suppliers. Accordingly, to deal with the

problem, it is suggested that suppliers should consider and optimize the user experience for demanders, and establish an effective motivation and reward system or self-supervision system.

The answers to Question 10, Question 11, Question 13, Question 14 and relevant additional questions stated that there is rather fierce competition in the market and the competition has stimulated evolution and innovation towards both technological and institutional dimensions. These questions are related to the second and third of North's (1993) five proposals of rivalry compels organizations to keep *investing in skills and knowledge to survive*, and the institutional structure directs the types of *skills and knowledge perceived to have the maximum pay-off*, since survival is the most fundamental objective for a for-profit organization and it has become common sense that science and technology are the primary productive forces. At this stage, most of status deserves affirmation since all surveyed hospitals have benefited from the government's support to national healthcare from the perspectives of operation, innovation and evolution at the practical level; except for that one of the surveyed hospitals has not been involved into the pilot programme, for which reason it seems that the link between involvement into the pilot programme and preservation of a dominant position in competition does not exist.

The answers to Question 12, Question 15 and relevant additional questions reflected that some stereotyped momentum has become the main constraint on some important normal execution for which rather strong operational hazard of hospitals underlies. These questions are related to the fifth of North's (1993) five proposals of the economies of range, complementation, and *network externalities of an institutional matrix make institutional change overwhelmingly incremental and path dependent*, since it seems that there are two major problems due to long-term path dependence. First, it is still a norm that the director of a hospital is not empowered to employ/dismiss a physician, which on a positive side somehow prevents the director from relevant misfeasance, yet on a negative side for a certainty impinges on autonomy of the hospital and also indirectly impedes the progress of national

generalization of multi-site licensing of physician. Second, although besides traditional ways of negotiation and legal approaches, it seems that mediation or arbitration by a qualified third party is gradually being recognized in the field of health care; on the other side the fact is that hospitals still commit themselves to resolving medical disputes, and the old situation that the hospital often becomes a victim in such settlement is not changed. Therefore to settle the problems, it requires institutional changes for anti-path dependence and the establishment of new executive order.

5. Conclusion

In conclusion, as shown from different perspectives, the NPM has made headway in China's health care reform in a manner. Through the processes of breaking bottlenecks, the NPM experiences its self-improvement as well under the background with Chinese characteristics. However, since the programme is suffering from a deficiency of an effective monitoring and evaluation system, there may be a lack of cost efficiency, and some confusion about how the reform is virtually going on and what the appropriate benchmarks should be. In the future, an advanced monitoring and evaluation system should be set up which will lead to effective regulation and standardization of the reform. Besides, more attention should be paid to participation of private capital and further marketization of public health services, since to bridge the gulf between supply and demand, a transition from bureaucratic administration to market-driven management and even market-driving management is imperative. Other than that, more openness and courage of the government to learn from successful experience from the private sector and to support the private sector with more policy preferences would be favourable in the long run.

The survey designed on the foundation of North's (1993) five proposals to *define the essential characteristics of institutional change* revealed some problems and therefore some relevant suggestion is offered for further solution to each problem. Even though the ongoing reform has achieved some concrete results, for example, public hospitals have developed their core competence in market competition and are making effort to maintain competitiveness; there are still maladies in public hospitals that of which some are generated from defective interactions, some appear to be aroused by stereotype and some can be ascribed to path-dependence. However, as for the reason that there is a lack of information from private and PPP hospitals, the situation of such hospitals remains unknown and may lead the study to inevitable partiality. So far, China has been in principle 'on the right track' to carry out institutional changes in the field of management and control of public health care. Nevertheless, compared with

other countries those have already established relatively advantaged institutions, China still has plenty to learn since the reform is an arduous task and the road is long.

6. Appendix

6.1 Survey Questions

1. Which situation is in accord with your hospital?

A. Public B. Private C. Public-private partnership

If your answer is A, will your hospital accept social investment in the future?

A. Yes B. No C. Not sure

2. Is your hospital a tertiary hospital?

A. Yes B. No

Has your hospital experienced any bottlenecks in grading?

A. Yes B. No

3. Is the national healthcare insurance card available in your hospital?

A. Yes, for all diseases B. Yes, for some diseases C. No

4. Does your hospital cooperate with other hospitals on DRG?

A. Yes B. No C. Not sure

5. Has your hospital suffered from tension of supply and demand between physicians and patients?

A. Yes B. No

If yes, what action will the hospital take?

A. To ensure that a patient can be treated in time, arrange another physician for a patient waiting in the queue with the patient's permission.

B. To ensure that a patient can keep his/her choice of physician, arrange another time for a patient waiting in the queue with the patient's permission.

C. Cooperate with other hospitals.

D. Remain standstill.

E. Otherwise (please amplify)

6. Is there an inpatient department in your hospital?

A. Yes B. No

If yes, has there been tension of supply and demand between the number of beds and the number of patients?

A. Yes B. No

7. Has your hospital carried out PPS as a method of payment?

A. Yes B. No C. Not sure

If yes, is it required for the patient who succeeds in making an appointment to hold the hospital's visit card?

A. Yes B. No C. Not sure

8. In your hospital, does the situation of 'patients giving up treatment due to incapacity of affording relevant costs' exist?

A. Yes B. No C. Not sure

9. In your hospital, which factors are effective on avoiding over-prescription and over-treatment?

A. The government's performance measurement of healthcare services.

B. The insurance companies' supervision.

C. Competition with new healthcare products.

D. Otherwise (please amplify)

10. Is your hospital in a fierce competition locally/among hospitals of the same kind nationwide?

A. Yes B. No

If yes, then which position is your hospital in?

A. Dominant B. Medium C. Inferior

11. Has your hospital been involved into the pilot programme of current health care reform?

A. Yes B. No

If yes, which of the following pilot activities has your hospital participated in?

A. Eradicate 'nourishing physicians with high medical charges' and build a scientific compensation system.

B. Cooperate with other hospitals to build a DRG system.

C. Control excessive and unreasonable growth of health care costs.

D. Otherwise (please amplify).

12. In your hospital, does the director have the power to employ/dismiss a physician?

A. Yes B. No

Does the director have the power to purchase expensive equipment?

A. Yes B. No

13. Is your hospital having profit or loss at the moment?

A. Profit B. Loss C. Balance

14. Has your hospital been benefited from the government's support to national healthcare from the perspectives of operation, innovation and evolution at the practical level?

A. Yes B. No

If yes, which of the following has strongest effect for your hospital at the practical level?

A. Financial support (including tax preferences).

B. Cooperation with other hospitals and relevant institutions for which the government acts as a go-between.

C. Introduction and allocation of talented human resource.

D. Introduction and allocation of new technology and equipment.

E. Improvement of the law to defend rights of both physicians and patients.

F. Otherwise (please amplify).

15. Has your hospital suffered from medical disputes?

A. Yes B. No

If yes, which of the following is the most common?

A. Perfectly resolved and both sides were satisfied.

B. Resolved based on sacrifice of the hospital's benefits.

C. Resolved based on sacrifice of the patient's benefits.

D. Not resolved. The conflict has been upgraded or further mediation is needed.

When a medical dispute occurs, which action will the hospital take commonly?

A. Negotiate with the patient to carry out mediation.

B. Ask a third party rather than a law department to carry out mediation or arbitration.

C. Ask the court to carry out mediation or judgment.

D. Otherwise (please amplify).

6.2 Survey Answers

Question	Hospital 1	Hospital 2	Hospital 3	Hospital 4
Q1	A	A (B)	A (A)	A (C)
Q2	A (A)	A (B)	A (A)	A (A)
Q3	A	A	A	A
Q4	A	A	B	C
Q5	A (B)	B (B)	A (E)	A (D)
Q6	A (A)	A (A)	A (A)	A (A)
Q7	B	A (A)	B	B
Q8	A	A	A	C
Q9	B	A	B	AC
Q10	A (A)	A (B)	A (B)	B
Q11	A (C)	A (A)	B	A (AC)

Q12	B (B)	A (B)	B (B)	B (B)
Q13	A	C	C	A
Q14	A (ADE)	A (ABCDE)	A (B)	A (ACDE)
Q15	A (ABC/A)	A (ABC/A)	A (AC/B)	A (ABC/B)

Table 4: Survey Answers from the 4 Hospitals Linked to Analysis in Chapter 4 (answers to any additional question fixed to each question are shown in brackets)

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