China’s accession to World Trade Organization impacts on the health system

Technical Report

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Executive summary

As the biggest developing country, China makes a key role in keeping world economic development and social security. That China joins the World Trade Organization (WTO) marks China’s deeper open to the world and speedier involved the progress of economic globalization, and great impacts of China’s WTO entry on economic development and social security, even on the world would be happened. The impacts would be deep and profound, and the opportunities and challenges imposed by WTO entry would not be allocated evenly between different fields. The impacts on health system are inevitable, and the reform is being in a key stage, the health service system reform, the drug distribution and pricing reform and the health insurance system reform are being pushed to a deeper degree. Facing drastic changed international and domestic environment, it is urgent and important for China to study the potential impacts of China’s WTO entry on health system, but unfortunately the systematical study is absent at present.

Objective

The general objective of this study is to anticipate and analyze the potential impacts of China’s accession to WTO on health system, identify the important problems need to be developed and strengthened and give proper policy recommendations. The specific objectives include: 1) to review WTO’s rules for identifying the regulations related to health system; 2) to document international experiences of the influence of WTO entry on health sector; 3) to predict the potential impact on government behavior, health care delivery, health insurance, pharmaceutical and high technology equipment. 4) to recommend policy options for meeting the challenges posed by China's accession to WTO.

Methods

The data came from three sources: reviewing of existing documents, key informant interview and structure-questionnaires survey. Existing data include policy documents, published and unpublished research articles. Those data are used for understanding the WTO’s rules, especially that of related to health, and for learning experiences of other countries on dealing with the impacts of WTO entry on health sector. Key informant interview and structure-questionnaires survey were conducted for predicting the potential impacts of China’s WTO entry on health system in terms of health services market, health insurance market, pharmaceutical market and high technology market. Two methods are applied in structure-questionnaires survey: post survey and Internet survey. The subject of key informant interview and investigation mainly included health policy makers from Ministry of Health (MoH), health experts from national universities and research institutions and hospital managers from some secondary and tertiary public hospital in Shandong province, China. All data were collected by the major investigators.

Results

- Experiences of other countries on dealing with the impact of WTO entry on health system. In most of WTO members, the open-up of health services market is gradual and limited to foreign investments. It is important for ensuring the people’s access to health care to maintain the dominant status of public health service system. The Agreement on Trade Related Aspects of Intellectual Property Right (TRIPS) has prevented the public from acquiring essential drugs in some
developing countries. Special measures WTO members could be taken for protecting the health of populations. In the process of opening up health insurance market to foreign insurers, more attention should be paid on the relationship between commercial health insurance and social health insurance. Government should contribute more energy on establishing an effective social health insurance system.

- **The transform of government behavior.** The greatest challenge arising from China’s WTO entry is the transform of Chinese government behavior. The former administration—controlling pattern would not adapt with the demand of WTO regulations. After China joins the WTO, the function of health administrative department should be concentrated on macro-administration and on services provision, such as establishing equal, ordered market competition system; setting up related regulations of market access; strengthening health supervision mechanism.

- **The knowledge of health policy makers, health experts and hospital managers on WTO regulations.** No matter health policy makers, health experts or hospital managers have a limited understanding on WTO’s rules, especially on some specific trade agreements such as GATS and TRIPS. The need of learning related WTO’s knowledge is emphasized by all interviewees.

- **The impacts on hospital competition and managerial conception.** The competition in health care delivery market would be more severe after China further open domestic health care market to foreign health providers. The impacts of the entering of foreign medical institutions on public hospitals would more embody on the managerial idea, operative pattern and service conception. The gap of managerial conception would be the key point to limit the further development of domestic public hospitals.

- **On the implementation of health sector reform.** The pressure arising from China joins the WTO would quicken up our understanding on market, property right and administration, and be benefit for breaking up the bottle-neck in the course of health reform. Some opportunities would be emerged for the shaping of competitive mechanism in health services market.

- **On human resource competition.** The competition on human resources would be more drastically after China joins the WTO. More excellent health personnel in public health sector would be absorbed into foreign medical institutions. The loss of people with ability in public hospitals would be severely.

- **On drug distribution and pricing.** It is believed that the amount of imported drug would be increased after China decreases the tariff of imported drug. However, as a whole the drug price would not fluctuate greatly. The establishment of modern drug distribution system would be beneficial to the shaping of reasonable drug price.

- **On patent and intellectual property protection.** The most important impacts of China’s WTO entry on pharmaceutical market would be the exploitation crisis of new product resulting from the protection of drug property right. Limited
comments were given by interviewees on the relationship between drug patent protection and access to essential drugs. Only one key informant indicated that there was no any impact of drug patent protection on people’s accession to drugs.

- **On health insurance market.** It was believed that the opening of insurance market to foreign investors would not have great impact on Chinese health insurance market, but would bring more opportunities for the development of domestic commercial health insurance market. Although there is a health insurance manager who pointed out that there would not exist any negative affect on social health insurance scheme, some health policy makers and health experts also emphasize to guard the impact of the development of commercial health insurance industries on social health insurance plan.

- **On high technology market.** The interviewees considered that the decrease of tariff rate of high-tech medical equipment would not result in the rapid increase of import product, not bring great impact on the health resource allocation after China joins the WTO. Hospital managers also stated that the decrease of tariff and the abolishment of approval authority would not stimulate hospital to purchase more imported high-tech medical equipment as a tool for increasing revenue and enhancing the competitive capability.

**Conclusion and policy recommendations**
The general conclusion is China’s accession to the World Trade Organization would not result in severe impacts on health system. But more attention should be given to the following aspects: 1) China’s WTO entry would require the health administrative department to transform idea, identify functions, develop related laws and regulations and strengthen to macro-manage and supervise for health service market; 2) It is essential for health administrative department and medical institutions to strengthen to study WTO trade rules. Especially that of related to health sector; 3) The competition for health professional would be more drastically. Personnel system should be reformed in terms of changing the idea of employment and establishing effective incentive mechanism; 4) Be cautious to open up health service market to foreign investments, the open-up should be gradual and limited. Related regulation on market access and supervision would be established quickly. The dominant status of public medical institutions in the provision of health care service should be maintained; 5) The study on the relationship between Intellectual Property Rights and public health should be emphasized, the focus would be put on studying the potential impacts of property rights protection on drug access; 6) China’s WTO entry brings greater opportunities for the development of domestic commercial health insurance. But the impacts of commercial health insurance on the development of social health insurance scheme should be studied carefully.
1. Introduction
At World Trade Organization’s Ministerial Conference in November 2001 in Doha, Qatar, the China’s WTO entry came to the reality after 15 years of hard negotiations. The decision of China’s accession to WTO was adopted. As the biggest developing country, China plays a key role in keeping world economic development and social security. Without China’s accession, WTO is not an integrated organization. WTO needs China and vice versa.

1.1 The basic principles of the WTO and the major potential impacts of China’s WTO entry on the overall economical development.
Established in 1995, the WTO as a widest multinational economic organization is the most potent international organization on setting global rules of trade including goods trade, services trade and trade related to intellectual property. Meanwhile it also a forum for settling the international trade disputes of its member countries. Until China became a formal member of WTO, there were 143 full members, over three-quarters of them are developing or least-developed countries.

The principal objectives of the WTO include raising standards of living, ensuring full employment, expanding production and trade, and allowing optimal use of the world’s resources. The means of achieving these objectives is the same as that laid down in the GATT: “reciprocal and mutually advantageous arrangements directed to the substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international trade relations”. (Richard. 1999)

The agreements of WTO contain three basic principles. First, members are not allowed to discriminate between trading partners who are also members of the WTO, all of which are granted most-favored-nation status. Second, under the national treatment principle, members must treat foreign firms in an identical way to firms in their own country. National treatment effectively bans discriminatory or protectionist policies. And third, members are bound to eradicate uncompetitive practices such as export subsidies and dumping that give countries a comparative advantage that is not due to the efficiency of their industry.

China’s WTO entry marks China’s deeper open to the world and speedier involved the economic globalization. And that will make great influence on China’s economic development and social security. The ultimate meaning of China’s WTO entry is that WTO membership gives China a more stable access to attending international competition and cooperation. In the short run, China would face great challenges after she joins the WTO in terms of the transformation of Government behavior, the amendments to relevant laws and regulation and the changing of its economic administration patterns. Some industries and enterprises may be affected to various degree and suffer from certain negative impact (Shi, 2000). But in the long term, many opportunities resulting from China’s accession to the WTO would also emerge, which would speed the process of China’s marketing reform, further improve the legislation; and improve to allocate and utilize the resources more reasonable and efficient etc.

The impacts of China’s entry the WTO are deep and profound. And the opportunities and challenges imposed by WTO entry are not allocated evenly between different fields. We must seriously research the special situation among different industries
after China joins the WTO, adapting the demand of WTO entry, changing minds and facing the challenge.

1.2 The current situation of China’s health system
China’s health system could be divided into four sub-sectors: health care delivery, health insurance, drug, and high technology.

1.2.1 Health care delivery
Health care providers at present in China are dominated by public sector. About 95% of hospitals are owned and runned by government, the proportion of the joint venture and cooperative medical institutions to all medical institutions is about 0.1%. (Shi, Li. 2000) Competition in hospital sector is not effectively introduced. The efficiency of public hospital services is low and quality of health care is not satisfactory (Bian, Clas, Sun et al. 2001). The pricing system in hospitals with fee-for-service payment method resulted in a number of problems (Meng. 2000)

The health care system reform is being in progress for solving the above problems. The main activities include: to classify hospitals into not-for-profit and for-profit categories in order to introduce competition mechanism; to change the operating mechanism and increase autonomy of public hospitals to increase competitiveness of those hospitals; to increase efficiency in use of hospital resources through improving financial management in public hospitals and to establish incentive mechanism through changing hospital personnel policy. The ultimate aim of the reform is to introduce the competition mechanism in health care delivery market for guaranteeing patients’ access to quality health services at reasonable price.

1.2.2 Health insurance market
Comparing the history of foreign insurance industry with several hundreds years, the development of insurance industry in China is only about 50 years. (Yu, Zheng. 2000). In urban cities, Government Health Insurance (GHI) and Labor Health Insurance (LHI) established in middle1950s have played great roles on improving the health status of the public. But more and more problems have emerged in line with economic reform since early 1980s. Lots of health resources were wasted due to the poor performance of GHI and LHI system, and the increase rate of health expenditure went up drastically that has been beyond the increase rate of government revenue at the same period. And the socialization degree of the two systems was very low. (Zhou. 2001) Especially, only 35% of urban residents are covered by urban health insurance schemes at present. In the meantime, less than 2% of urban populations are covered by other health insurance plans. In rural areas, the Cooperative Medical system (CMS) established in 1960s took great contribution on guaranteeing Chinese farmers’ access to basic health care services and on improving the health status of them. However following the dissolution of rural cooperative economy, most of CMS collapsed at the beginning of 1980s (Bloom, Tang. 2002). Now Chinese government is taking measures on establishing new rural medical insurance schemes.

No matter the insurance density or insurance depth, the development of health insurance industry is being the original stage in China. (Wei.2001). Chinese government initiated health insurance reform from 1990s, and now employee-related health insurance plan organized and managed by government has been established in most urban area. Totally only 16% Chinese population was covered by this plan.
1.2.3 Pharmaceutical market
Pharmaceutical sector grows rapidly in recent years in China. But many severe problems exist in the field of drug product and distribution. The scale of domestic pharmaceutical enterprises is relative small compare to that of the international drug companies. The R&D capital is very low, some materials states that the average R&D expenditure only accounts for 1% of total revenue in Chinese pharmaceutical industries, but the perception is about 15-20% in foreign large pharmaceutical companies. And the domestic drug enterprises lack the capability of developing new drugs, mainly depending on copying foreign similar drugs. Very limited new drugs were produced, 97% of chemical drugs were the copied product. (Zhang, Sun. 2002)
The circulation and distribution of drugs are not runned under a normal pattern. Too much procedure exists in the process of purchase and sale of drugs. The competition in this sector is very strong but is distorted. Many problems in cost containment in health system are also related to this sector. The drug revenue as a major source of financing of hospitals accounts for about 50% of hospital incomes.

From 1997, Chinese government carried out a series of regulations in order to establish an ordered competitive environment of drug product and distribution, which include strengthening the structure adjustment of pharmaceutical industries, making strict standards to limit the drug enterprises’ access to market, and taking measures focusing on controlling the drug price

1.2.4 The market of high technologies
In China, medical institutions purchase high tech equipment as a tool for strengthening the capability of competition and increasing hospital revenue. At the end of 1996, the amount of CT in China is over 2000, and there are 13 t knives in 1995. It is believed that the amount has been keeping increase in the next several years (Lei. 2000). The income generated from CT and MRI in China is about 1.3 billion RMB at the earlier stage of 1990s, but the positive rate of utilization is only 50% and 34%, respectively (Sun, He. 1995). Now strict regulation on market access of high tech medical equipment has been issued and implemented by Ministry of Health. The equipment of those technologies must get the permission from government according to the regional health planning.

After China joins in the WTO, following China involving global economy more speed, the impacts on health system are inevitable. But there lacks systematical research on answering what impacts on health system would be happen, on which aspects would be influenced, and what strategies should be taken to reply the challenges and opportunities arising from China’s WTO entry. In this study with financial support from the Alliance for Health Policy and Systems Research, we try to answer the above questions.

2. Objectives:
The general objective of this study is to anticipate and analyze the potential impacts of China’s accession to WTO on health system, identify the important problems need to be developed and strengthened and give proper policy recommendations. The specific objectives include:
- To review WTO's rules for identifying the regulations related to health system;
To document international experiences of the influence of WTO entry on health sector;
To predict the potential impact on government behavior, health care delivery, health insurance, pharmaceutical and high technology equipment.
To recommend policy options for meeting the challenges posed by China's accession to WTO.

3. Methodology:
The data came from three sources: reviewing of existing documents, key informant interview and structure questionnaires survey.

3.1 Reviewing of existing documents
Existing data include policy documents, published and unpublished research articles, and health statistics. Through reviewing the existing documents, we can learn and understand WTO’s trade rules, identify the regulations related to health system, learn experiments and lessons of other countries on dealing with the impacts of WTO entry on health system, and see the impacts arising from WTO accession on China’s economic and social development.

3.2 Key Informant Interview
In this project, the researchers interviewed 26 key informants involving 6 health policy makers coming from MoH, 9 health experts from universities and research institutes, 8 hospital managers from provincial hospital, 3 health insurance managers coming from Jinan city, Shandong Province and Shanghai city. The major interviewed questions include: what are the major problems in the health care delivery, drug, health insurance and high tech medical equipment market? What changes would be happened in the four markets after China enters the WTO? How do you assess the TRIPS? What are the impacts of TRIPS on access to drug? What measures should be taken to reply the impacts of China’s WTO entry?

In the process of interview, the researchers used a semi-structured interview guide as a remainder. All the contents of interview were noted and coded. Some special information was recorded. Written notes and tapes were systematically reviewed by the researchers in order to get a comprehensive understanding to the information mentioned in interviews, and to distinguish the different attitudes, perception and understanding among interviewees to the interviewed questions.

3.3 Internet survey and post survey
In this study, the researchers developed a structured-questionnaire to investigate health policy makers, health experts and hospital managers using Internet Survey and Post Survey. The investigation consist of two parts: the first part is to understand the general knowledge of the key informants to WTO’s basic principles and regulations; and the second part is to anticipate the potential challenges and opportunities of China’s accession to the WTO on health system according to the perception and attitude of key informants. On this point, the researchers list 23 optional impacts of China entry to WTO on health system, then let the key informants make choice according to their understanding and perception. The main options include China’s accession to WTO would improve the transition of government function and management conception; competition among health care delivery market would be more drastically due to China’s entry to the WTO; competition between human
resources would be very keen, the flow of human resources would be more frequent, lots of person with ability would be lost from public health institutions; China’s entry to the WTO would improve the development of commercial health insurance system, but may take impacts on social basic health insurance; the reform of drug product and distribution system would get great benefit from China’s accession to WTO.

Internet survey. The researchers sent out 33 questionnaires through Internet to investigate 6 health policy makers, 27 health experts. All health policy makers are coming from MoH, and health experts who are the authority on the health policy and economic research are chosen from several Chinese universities and research institutions. Nearly one month later, there are total 10 interviewees made responses; the response rate is 30%. Among the 10 questionnaires, one of them did not answer most questions because the interviewee feels too difficult to fill in the questionnaires without enough understanding to WTO. Among the left 9 qualified questionnaires, only one response comes from health policy marker.

Post survey. Using the same questionnaires, the researchers investigated 40 hospital managers who come from the public hospital on and over the county level in Qindao city (an economic developed city in Shandong province). 28 questionnaires were finally received one month later. The response rate is 70%. For the first part of questionnaires, we sum the score of questions answered by key informants as the criterion for evaluating their understanding on the WTO, and we also carefully checked the each question they answered for identifying what kinds of knowledge they knew and what they did not know. For the second part of questionnaires, we generalized the choice of key informants for each question to understand what would be happened on health system after China joins the WTO.

4. Results

4.1 The relationship between WTO’s rules and health
Five specific WTO agreements have implications for health system. They are:
- The General Agreement on Tariffs and Trade (GATT);
- The Agreement on Trade Related Aspects of Intellectual Property Right (TRIPS);
- The agreement on the application of Sanitary and Phytosanitary measures (SPS);
- The agreement on Technical Barriers to Trade (TBT); and
- The General Agreement on Trade in Services (GATS).

Agreements negotiated at the World Trade Organization already have important implications for health and health policy. Agreements on trade-related aspects of intellectual property rights and trade in health services could benefit the multinational health care and pharmaceutical industries, but impact negatively on cost and equity. In the study we mainly explore the implications of GATS and TRIPS on health service, health insurance and drug.

GATS is a complex, difficult-to-master set of rules that apply to all 160 service industries including water, telecommunications, health, insurance and education. The World Trade Organization’s negotiations launched in 2000 to further liberalize trade in services under the General Agreement on Trade in Services (GATS) could increase the organization’s influence on financing and delivery of health care. The agreement of GATS regulates four main patterns of service trading, which are cross-border
supply, consumption abroad, commercial presence and the presence of natural persons. The latter two patterns would bring great impacts on health care delivery market and health insurance market after China joins the WTO. The meaning of commercial presence is that foreign health care providers can establish medical institutions in China to provide health care services. The presence of natural persons refers to the natural flow of medical personnel with professional technology, such as the migrations of doctors and nurses between countries.

Regulations related to drug mainly embodied in the TRIPS articles. TRIPS agreement requires WTO members to abide by the regulation on protection of patent drugs, any WTO members cannot copy patent drugs without the authorization of patent holders. Once any countries violate the TRIPS agreement, the pharmaceutical company that holds drug patent has right to take any retaliative measures for maintaining its benefit. Although several special articles in TRIPS points out patents can be ignored in a national health emergency and when the patent holder does not make the patented drug available at affordable prices by WTO members, especially by the developing and least-developed countries, both the multinational pharmaceuticals and the US fight for unconditional patent protection.

Ensuring access to basic health care and essential drugs as a primary right has been gotten consensus by almost every countries. On the one hand WTO member countries should abide by GATS and TRIPS, on the other hand, governments should seriously consider how to protect and develop national health system for guaranteeing the people, especially the poor to acquire basic health services. GATS and TRIPS should provide appropriate environment for improving the development of health system and for encouraging drug renovated and updated, not as a barrier to access to health care and drug.

4.2 experiences and lessons of other WTO members on opening health service and WTO entry
To understand experiences and lessons of other WTO members on how to deal with the relationship between opening health services and abiding by WTO’s rules would be very helpful for China to take proper measures reply the impacts on health system. The researchers summarized the findings of related studies through reviewing limited documents as follows:

? The degree of opening health care delivery market to foreign health providers in most countries is limited, including in many developed countries. Even these countries in which the health care delivery market has been opened to foreign countries also take many strategies protect and support the development of public medical institutions. The frequent method is used “commercial presence” to limit the foreign health providers’ access to health market and to limit theirs scope and contents of services provision;

? Further extending services trade liberalization called on by GATS negotiations took great impacts on the full development of health system of WTO members. Especially in some developing countries in which health care delivery market has been committed to open to foreign investors, the survival and development of public health institutions were threatened gravely in these countries, even tended to collapse due to the privatization of health care services more drastically, more
and more capital and elitists transferred from public sector to private sector.

? Recently WTO member countries have paid great attention to the relation between strengthening protection of intellectual property rights of drug and promising drug access. Under the regulation of TRIPS, it is forbidden to copy the patent drug without authorization, which has resulted in unnecessary sickness and death due to unable to acquire essential patents in some developing countries. The public health in some developing and least-developed countries is under threat. WTO member should immediately agree to bolster public-health safeguards in the TRIPS agreement, including strengthening the right to manufacture or import cheap generic versions of vital drugs. The TRIPS Agreement does not in any way undermine the legitimate right of WTO Members to formulate their own public health policies and implement them by adopting measures to protect public health.

? Opening health insurance market to foreign investors has taken negative impacts on the development of public health insurance in some developing countries, there is evidence shows increased inequity and inequality for the population covered by public and social security health system in several WTO Members. Foreign health insurance companies for profit will compete insurance market with public health insurance sector by right of their advantage of management and technology. More insurance premium and professional with high quality would be floated from public sector to private or foreign insurance companies.

4.3 The commitments of China’s entry to the WTO related to health system
According to China’s commitment documents to WTO, the contents related to health system mainly focus on the following aspects:
? To strengthen protection of intellectual property right of drug, new patent law will be brought into effect on July 1, 2002;

? To decrease the tariff rate of imported drugs from 20% to 5.5-6%;

? The drug distribution service would be opened to foreign business in January 1, 2003. Foreign pharmaceutical distributors can engage in procurement, storage, transportation, ration, wholesale, retail and after-sales services;

? To decrease the import tariff rate of high technological medical equipment from 11% to 5-6%, and to abolished the approval authority for imported high-tech medical equipment in 2001;

? To gradually open health care delivery market to foreign health providers, allowing them to establish joint venture and cooperative medical institutions except the pattern of foreign single-invested institution. Most of employees working in these organizations should be Chinese citizen.

? To allow the foreign health professionals with the specialty certificate issued by their mother country to provide medical care service under the permission of MoH. The duration of operation is limit to half year, which will be prolonged one year if necessary;
To gradually open domestic health insurance market to foreign investment.

4.4 The perception and understanding of health policy makers, health experts, hospital managers on the WTO

4.4.1 Knowledge about WTO of health policy makers and health experts

Through analyzing the 9 questionnaires by Internet survey, it was found that no one could correctly answer all the 15 questions on WTO’s rules and the China’s WTO entry. Only 1 out of 9 interviewee gets the highest score of 19 (the full mark is 20 scores), there are 8 interviewees whose score are over 16. Then further analyzing each of questions answered indicates that the correct respondent rate of questions on the general knowledge of WTO is beyond 90%. But with regard to the questions on the specific WTO’s rules, such as the question of whether tariff is the main trade protection measures in WTO members (the correct rate is 33%), the correct rate is lower than the questions on the common knowledge of WTO. And no person can correctly answer the several questions on GATS, only 2 interviewees know the contents about TRIPS. (See table 1)

4.4.2 Knowledge about WTO of hospital managers

Nobody can answer all the questions correctly. The highest score is 19 with 3 out of 28 questionnaires, the lowest score is 8 with 2 questionnaires. There are 10 interviewees whose score is beyond 16, 13 persons between 12 to 16. Meanwhile the researchers also make a deeper analysis on each question. The result shows that 13 interviewees correctly answer the question of when WTO was founded, 18 interviewees give the right answer to the question of which is the top power authority. About the question of whether tariff is the main trade protection measures in WTO members, only 11 interviewees give the right choice. The questions on the GATS and TRIPS are also with the lowest correct rate. (See also table 1).

Similar findings were also obtained by the researchers during the key informant interview. Some health policy makers, health experts expressed their limited knowledge and perception on WTO. One official of MoH said it is a very interesting and important project for health sector, through which we could know what on earth would be happened in health system after China joins the WTO, and could acquire valuable information and suggestion to cope with the changes resulting from China’s accession to WTO. This opinion is also representing the reflection of most of hospital managers.

It could be summarized from the above results that no matter health policy makers, health experts or hospital managers have a limited understanding on WTO’s rules, especially on some specific trade agreements such as GATS and TRIPS. They really want to know what would be happened and what should be done in health system after China enters the WTO.

Table 1 the perception of health policy makers, hospital managers and health experts on the knowledge of WTO
The main questions

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<thead>
<tr>
<th>The amount of respondent coming from health policy makers and health experts</th>
<th>The amount of correct answered</th>
<th>The amount of respondent coming from hospital managers</th>
<th>The amount of correct answered</th>
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<tr>
<td>When WTO was founded</td>
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<td>Which is the top power authority of WTO</td>
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<td>What are the WTO’s basic principles</td>
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<td>What are the scopes regulated by WTO’s rules</td>
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<td>Whether tariff is the main trade protection measures in WTO members countries</td>
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<td>How to resolve the disputes occurred among WTO members</td>
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<td>8</td>
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<td>What are the primary pattern of services trade regulated by GATS</td>
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<td>When TRIPS agreement comes into force</td>
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<td>What are the basic regulations of TRIPS</td>
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4.5 The impacts of China’s WTO entry on government behavior

4.5.1 On administrative behavior

Chinese government should be faced with the biggest challenge arising from China’s WTO entry, all governmental activities must be in line with the requirement of WTO’s rules, which have been gotten consensus by health policy makers, health experts and hospital managers. In order to adapt to the demand of WTO’s rules, health administrative department must change its mind, identify the responsibility, and increase the transparency of decision. Governmental functions are being transformed at a higher speed with the sense of administration according to law built up and administrative efficiency raised. An key informant coming from MoH states that the role of department of health administration should be focused on strengthening the macro-administration and improving the development of regulations, for example, in health care delivery market, in order to suit with the changing situation after China joins the WTO, the department of health administration should take a further step to establish and improve the related regulations and laws in terms of health care delivery market access, qualificatory certification of physician, management of medical services quality and making the price of medical service, which would be helpful for standardizing the behavior of health care providers and monitoring the competition in health care market. All experts express the same opinion as that of health policy makers.

During the interview one key informant coming from MoH expressed her worry about
the changing of governmental functions, she said, “currently the department of health administration lacks enough understanding about the impact of China’s WTO entry on health system, some related knowledge to WTO’s rules is also unknown. The change of governmental conception and function affected by WTO entry would take long time

4.5.2 On legislations
The customary methods of administrating and supervising health activities with the characteristic of planning economy are not fit for the demand of WTO’s rules after China enters the WTO. The department of health administration should abolish or revise the health regulations that are not in line with the WTO’s rules, and many new regulations also need to be formulated in order to strengthen the administration of health care market and medical behavior, such as the regulation on market access to health care delivery, agreed by the interviewees. Many experts and policy makers consider that it is important for Chinese government to update and adjust legislative documents according to the changing contexts, and to administrate the health system with this sense.

4.6 The impact of China’s WTO entry on health care delivery market

4.6.1 On hospital competition and managerial conception
Most of the interviewees thought that private health providers would compete the limited health care market with public hospitals for holding certain market share after China joins the WTO. This would make the competition in health care delivery market more vehemently, and the survival and development of public hospitals would be in danger. However, by force of the competitive pressure, public hospitals would have to introduce new technology, update medical equipment, and carry out more new service items for meeting the health service demand of different income groups. But most of experts interviewed said that the competition in technology and equipment would not take great impact on the development of public hospitals, especially for the bigger public hospitals that is being the status of monopoly in local health care market, because they possess lots of excellent medical professionals, relative steady source of patients. Moreover it would take a certain time for local residents to be accustomed to other health care providers. So the impact of the emergence of foreign medical institutions on public hospitals would not great in the short term, according to the comments from the interviewees.

But all the interviewees recognized that in the long term the variations in administrative skills and delivering patterns between private and public health providers would make public hospitals more difficult to survive in a more competitive market. The study results dedicate that many public hospital managers have a feeling of the competitive pressure from the joint venture and cooperative medical institutions, they said the operative pattern, managerial idea in public hospitals is not advanced and still exists great gap comparing to that of foreign institutions. And we must break away from the managerial mode shaped in Planning Economy, set up advanced idea of health service in which the core issue is that patients are the center of service.

In sum, the competition in health care delivery market would be more severe after China further open domestic health care market to foreign health providers, the
impacts of the enter of foreign medical institutions on public hospitals would more embody on the managerial idea, operative pattern and service conception. No matter what ownership the medical institutions are, if only they master advanced managerial mode and modern operative pattern, in deed establish the service idea of being patients as the center, they could absorb more patients and increase revenue.

4.6.2 On implementation of current health sector reforms
At present, the performance of Chinese public hospitals lacks of vigor, the efficiency of the utilization of health resource is low. And hospital managers are short of decision rights on the administration and personnel of hospital. After China joins the WTO, the competition in health care market would be more drastically, which would force us to seriously think about how to develop an efficient administrative and operative mechanism of public hospital for strengthening the capability to compete with foreign health care providers. In MoH One official states that it is good to open health care market to foreign investors, which is benefit for the shaping of competitive mechanism in China. He even made figure speeches that if a tiger was put in a group of sheep that are relaxing; any sheep has to exert the utmost strength for survive. The same situation also exists in the opened health care market. In the key informant interview, some experts and health policy makers pointed out that the pressure arising from China joins the WTO would quicken up our understanding on market, property right and administration, and be benefit for breaking up the bottle-neck in the course of health reform. Great chance for establishing modern hospital administrative mechanism would come into being. Hospital managers gave the same opinion to the issue.

Public hospitals themselves should fully use the opportunity of China’s WTO entry to further change mind, learn the advanced managerial experience of foreign medical institutions, strengthen the conception of services, conception of cost and emphasize economic management of medical institutions, as well as further improving the medical technology.

4.6.3 On human resource competition
During the course of survey, almost all interviewees expressed their worries about the competition for human resource facing the public hospitals after the WTO entry. The floating of persons with ability would be more frequently than before, plentiful of health technologic personnel, especially the key human resource would be absorbed into foreign medical institution or pharmaceutical company from public sector. Some experts pointed out the ultimate competition would be the competition for human resource after China joins the WTO. When the foreign health care providers come into China, they to a certainly make employee localized, they will absorb the excellent health personnel from public hospitals and pay them according to the international tradition depending on their advanced technology and favorable welfare conditions. But he also stated that it would promote the reform of personnel system. Chinese government should establish new personnel system for shaping efficient promoting mechanism, reinforce the construction of “human project”.

4.7 The impacts of China’s WTO entry on pharmaceutical market

4.7.1 On patent and intellectual property protection
The most important impacts of China’s WTO entry on pharmaceutical market would be the exploitation crisis of new product resulting from the protection of drug property
right, and the potential increase of imported drug due to the decrease of tariff. Although some experts pointed out that while there was not great influence on the existing drug product, the industries that are copying the foreign drug under the protection of patent would be face with great risk, some of them would be closed up or bankrupted. The time of depending on copy in Chinese pharmaceutical industries would never exist. In the other hand, that would accelerate the technologic innovation of national pharmaceutical industries, and quicken the adjustment of industrial structure and research of new drug.

Meanwhile we must pay more attention to the relationship between drug patent protection and people’s access to essential drugs. But in the investigation, most of interviewees gave little comments on this issue when the researchers asked whether the protection of drug property right would be the obstacle to access to essential drugs. Only one experts coming from Research Center of State Department considered that there was no any impact of drug patent protection on people’s accession to drugs in China because most of the drugs needed by Chinese people can be acquired in the domestic pharmaceutical market, unless the emergence of revolutionary drugs.

4.7.2 On drug distribution and prices
In the short term, the tariff of imported drug decreasing from 20% to 5.5-6.5% would lead to increase in imported drugs to Chinese pharmaceutical market. But some experts anticipated that although the amount of imported drug would be increased, as a whole the drug price would not fluctuate greatly with the limitation of the prescribing habit of doctors, people’s acceptability to drug and prescriptive drugs listed in basic health insurance scheme. Moreover, some experts pointed out that the impacts of opening up drug distribution system on drug pricing would be great. The advanced drug distribution strategy and selling planning of foreign pharmaceutical companies would be in favor of the control of drug price by means of efficiently standardizing the trading behavior of pharmaceutical dealers and eliminating the exchange cost in drug circulation, which would finally make drug price relative reasonable in Chinese pharmaceutical market.

4.7.3 On development of Chinese Traditional Medicine (CTM) and herbs
China’s WTO entry would boost the development of CTM. According to the principle of equal market access, the open of Chinese health care market to foreign investors simultaneously means the foreign health care market open to China. Following the more welcome of international market to nature medication, CTM could establish medical institutions and provide health services in other WTO members depending on the advantage of the relative less investment needed to business medical services. Meanwhile, the Chinese herb and its products could equally enter the other countries’ market with the cancel of the tariff obstacle and other non-tariff limits after China joins the WTO. Because Chinese herb and its product possess the resource advantage, the price is cheap, and the cost of labor is low, they have stronger competitive capability comparing to other countries in international market; furthermore, the international nature medication and herb markets that are a non-ploughed virgin soil in many regions exist big space for market exploitation, which would bring lots of opportunities for the export of Chinese herb and its products.

However, the challenges still exist. One expert coming from Beijing University
pointed out that Chinese traditional medicine is facing the great challenge from other countries, such as South Korea and Japan. So we must reinforce technologic innovation and improve the modernization of Chinese Traditional Medicine for fully exerting the advantage of CTM in the international market. At the same time it is very important for us to study how to protect the property right of CTM, we must build up a series of regulations on the protection of CTM patent rights that should be as a international criterion accepted by all WTO members.

4.8 WTO impact on health insurance market

It was believed that the opening of insurance market to foreign investors would not have great impact on Chinese health insurance market, but would bring more opportunities for the development of national commercial health insurance market in terms of introducing advanced technology, learning modern administration experiences and absorbing more foreign investment to domestic market. Furthermore, in foreign insurance companies the perception of health insurance to all insurance categories is low, and owing to the complexity of health insurance, the understanding of Chinese residents to the insurance and its economic affordability, so opening health insurance market would not take great impact on the development of national commercial health insurance market. But some experts pointed out that because the development of national health insurance is just on the primary stage, and its managerial and operating pattern did not completely accord with the international tradition, therefore the emergence of foreign famous insurance companies with advanced managerial pattern and technology will promote the development of Chinese commercial health insurance market.

One official who is responsible for the administration of social health insurance planning in Shanghai talked about the impact of opening insurance market on urban employee basic medical insurance scheme. He said there would not exist any negative affect on this scheme, the reason is that government should take great responsibility on establishing social health insurance system. But he also stated that we can learn the experience and advanced technology of foreign health insurance companies to improve the development of social health insurance. Some health policy makers and health experts also emphasize to guard the impact of the development of commercial health insurance industries on social health insurance plan.

Some experts and hospital managers also spoke of another potential influence. They considered the opening of national health insurance market would quicken the reform of payment mechanism of health care service, changing the unsuitable pay-for-service pattern, exploring the effective payment mechanism.

4.9 The impact of China’s entry to the WTO on high technology market.

Chinese government commits to decreasing the import tariff rate of high-tech medical equipment from 11% to 5-6% and abolishing the approval authority for imported high-tech medical equipment in 2001, which would bring huge effect on domestic medical equipment industries. Some of them with poor competitive capability could be forced into quitting the stage.

Another important question is whether decrease in tariff would bring about more unreasonable allocation of health resource. Through interview, health policy markers and experts both considered that the decrease of tariff rate of high-tech medical
equipment would not result in the rapid increase of import product, not bring great impact on the health resource allocation after China joins the WTO. Whereas that would promote reasonably reallocating high-tech medical equipments as long as government could strengthen the implementing of Regional Health Planning, improve the admittance regulation of high-tech medical equipments and make reasonable price. At the same time hospital managers also stated that the decrease of tariff and the abolishment of approval authority would not stimulate hospital to purchase more imported high-tech medical equipment as a tool for increasing revenue and enhancing the competitive capability. They expressed that is not an effective method to promote the development of hospital after China joins the WTO. Reinforcing comprehensive competitive capability of hospital is the key impetus for the development.
5. Discussion

5.1 The function of health administrative department would be transformed to meet the demand of the WTO’s rules.

Recently how to transform government functions after China joins the WTO has been a hot issue in theoretical circles. The common view is China’s WTO entry means Chinese government enters the WTO firstly. Objectively China’s WTO entry requires government to standardize its behavior, and improve the efficiency and transparency of administration (Liu, Zhang. 2000). Government should identify its responsibility, and transform the administrative pattern from “administration—controlling ” to “regulation—servicing ” (Chi, Quan. 2001). Just as Premier Zhu Rongji pointed out that three works Chinese government must do it well after China joins the WTO, these are to manager all activities under the sense of legislation, to reinforce the supervision to all business, and to provide service for the public.

In China, following the wider open of health system to foreign investors, the operation mechanism and the property right system of medical institutions would be reformed accordingly; the reform of health care pricing system is also urgently; the economic and administrative policies government used to manage medical institutions would be adjustment as the joint venture and cooperative medical institutions emerge. The above adjustment of various social and economic relationship demands health administrative department to transform idea, and to change the administrative pattern that is not in line with the requirement of WTO’s rules. The function of government should be concentrated on macro-administration, such as standardizing health care and pharmaceutical markets for creating well market environment; establishing equal, ordered market competition system; setting up related regulations of market access; strengthening health supervision mechanism (Lei, Wu, Liu et al. 2002; Ren. 2000).

For truly transforming idea and changing function, it is essential to learn and understand the WTO’s rules. However the study results indicate that no matter health policy makers, health experts or hospital mangers have limited understanding on WTO’s rules. Although health policy makers and experts get better knowledge than hospital managers, all of them lack of systematic understanding on the regulations related to health services, health insurance and patent right protection of drugs. So it is urgently for health sector to train personnel to master the WTO’s rules and related trade knowledge, especially the rules related to health sector, and to research the changes of China’s WTO entry combing with the specific health problems in China. Chinese government had called for the study of WTO knowledge on all levels of government department (Government Work Report in the fifth conference of the ninth National People’s Congress. 2002). The deepest meaning of this kind of learning is to help Chinese people to change accustomed thinking pattern, consequently shaping new work model based on rules.

5.2 The impact of further opening up of health care market on the reform of health service market

Despite establishing medical institutions by foreign single investment is not permitted in China, which is in line with the international traditions, comparing with other developing countries, the time china committed its health services market to foreign investment is earlier, and the step is broader. And in 1997, the Ministry of Health
combining with MOFTEC has issued the “Temporary administrative method on establishing Joint Venture and Cooperative medical institutions” for guiding the behavior of foreign investment. Some data showed that there were more than 300,000 medical institutions by the end of 1999, including over 200 joint venture and cooperative institutions in China (Shi, Li. 2000).

It is important to note that by the end of 1999, few of the WTO's then 135 member states had committed their health and social services to foreign investment through GATS (Allyson. 2000; David. 2000). Up to now only about 60 countries opened health services market, but not giving up existing national health policies (Debra, 2001). The U.K. did not privatize its health service market and education market according to the contents of GATS negotiation in 2000. Including in America and Japan, they only opened their hospital services (Rudolf, Antonia. 2001). Even if they have made such commitments, however, such countries can still limit foreign suppliers’ market access and specify which ways of supplying the service are open to competition. The highest number of restrictions in ways of supplying health services is in “commercial presence”. For example, in France, Italy, Luxembourg, the Netherlands, and Spain, hospital expansion is limited by a health-services plan, and Sweden limits the number of private medical-service practices that may be subsidized out of public funds (UNCTAD-WHO. 1998). Service suppliers are assigned a public interest role that limits their choice of what they will provide, in what way, to whom, and at what price. Furthermore, levels of supply are fixed. Market access to final customers is therefore highly regulated.

Some of the proposals under negotiation regarding GATS indicate that developing countries will be asked to open up health service markets to foreign competition. In some cases this could improve the efficiency and quality of health services. But Opening up the health services markets may take some negative impacts, may worsen health equity for the poor, and may let government lost the control on drug cost. Many countries paid great attention on this issue (Debra. 2001; Bettcher, Yach, Guindon. 2000; Berlinguer. 1999). Experience in middle-income countries indicates that foreign competition in health service markets tends to worsen equity in financing and reduce access to care for the poor. Even when competition between public and private health providers raises quality, it primarily benefits the well off and concentrates on high-end care, which has higher profit margins (Kirchheimer. 2001). In India, under the influence of World Bank reforms, medical care has been handed over to the private sector without mechanisms to ensure the quality and standards of treatment. Infectious disease control program run by the state have been disrupted by being deprived of funds. Similar results have occurred in Sub-Saharan Africa. (Price, Pollock, Shaoul. 1996)

Agreements negotiated at the World Trade Organization already have important implications for health and health policy (Koivusalo, Rowson. 2000). They impact on the ability of governments to regulate trade in the interests of health; on national and international governance and public health standards. Following China enters the WTO wholly, Chinese health system would straightly involve the competition from the entire world. Great challenge Chinese government would be faced with on how to establish new health policies that would both protect our own benefits and not violate the WTO’s rules, such as how to establish new public health standard, how to supervise and administrate all kinds of medical institutions. Firstly government should
set up the criterion of health services market access in terms of personnel, equipments, service contents, and technologic standards. Secondly transparent and reasonable process of qualification examination to medical institutions should be established in order to allocate health resources reasonably. Thirdly government should implement and develop classical management of medical institutions, administrating medical institutions with different ownership according to their characteristic (for-profit or not-for-profit), neither considering the capital invested by foreign health providers or national investors, nor considering their status of national public medical. Moreover, different tax and price policies should be implemented to medical institutions based on their characteristic, social function and roles. In addition, we must learn other countries’ experience on opening up health services market to prevent the poor from acquiring health service because of the emergence of foreign investment and private medical institutions (Collins, Lear.1995; Harrington, Pollock. 1998). In the process of opening up health services market to foreign investment, Chinese government should take gradual and limited open-up policies, guaranteeing the dominant status of non-profit-medical institutions in health services market, which would take great roles on ensuring and protecting national people’s health.

5.3 The management pattern and service idea of public hospitals would be changed severely
By means of advanced administrative idea, high-class medical technology, foreign health providers would enter Chinese health service market with the form of establishing new or reconstructing existed medical institutions, which must make the competition more drastically in health services market. The survival and development of public hospitals are being under serious challenges. Public hospitals should transform their management pattern and service idea radically, as well as they are indeed endowed with independent management right, personnel right and allocation right by government.

Firstly, the management patterns of public hospitals should be change thoroughly from by medical experts to by professional. Hospital management should be separated from the services related to health in order to realize the management specification and industrialization, which is also consistent with international traditions (Adlung, Carzaniga. 2001). Chinese public hospitals should learn the international experience of hospital management, pursuing efficiency, paying attention to services. Currently some pubic hospitals have known the necessity and importance of transforming management pattern (Cai. 2002), and also gotten the benefits arising from the transform of management pattern. One hospital manager from the public hospital that has been taken over by hospital managerial company in Beijing said it was the management industrialization that changed the hospital’s appearance and put new vigor.

Secondly, the changing of service idea is also important. Service idea of hospitals must adapt to the transform of medical model. Under the guide of modern medical model, people’s health demand has made the responsibility of hospital far beyond the traditional “cure the sickness to save the patient”. Public hospital should further transform its service idea from “service focused on the patient” to “service focused on the human”. In 2002, the first Joint Venture hospital for profit named “Harmony Hospital (Hemu hospital)” in Shanghai was established and starts to run. Its service
objectives are to embody the spirit of caring for the human, to emphasize the emotion communion between doctor and patient (Shanghai News. 2002), which would bring some new notion to public hospitals on future development.

5.4 The flow of health professionals would be more frequently; the reform of personnel system is urgent
It is certain that foreign medical institutions would implement the strategy of employee localization after they enter Chinese health service market. They would attract excellent domestic health professionals from national public hospitals by means of their modern administrative pattern, advanced medical technology and higher salary, which would cause the loss of health professionals in the public hospitals, and take negative impact on the equity and access to health care for the population. Some evidence from Thailand and Chile has proved it (Collins, Lear. 1995; Sithi, Somrongthong, Jangaroen. 2001; World Bank, 1997). In Thailand, the entry of foreign owned private health providers has lured physicians away from the public sector, increasing shortages of staff and unequal access to care by different socioeconomic groups.

Therefore, following the gradual development of social security system, it is urgently for public health sector to reform the employment system through introducing competition mechanism in order to further adjust the structure of health professional and prompt the reasonable flow of them. The strategy of open inviting applications for a job to health professional for choosing the excellent person with ability should be implemented, the interior allocation system for shaping well incentive mechanism and sufficiently exerting each health professional’s action should also be established.

5.5 Decreasing of drug tariff and opening drug distribution system would improve the control of drug price.
Great impact on domestic pharmaceutical industries being absolute competitive inferior position would be taken owing to the decrease of drug tariff and the protection of drug patent rights, but which also brings opportunities for them to accelerate the reconstruct of industries and realize scale development. But in this project more attention would be paid on the changing of drug price.

At present, the market share occupied by imported drug and joint venture drug is as same as that occupied by domestic drug in China. After China joins the WTO, on the one hand the decrease of drug tariff would stimulate to import more drugs, but on the other hand because the behavior of copying patent drugs would not be permitted, the patent drug needed by hospitals mainly depends on the import from other countries, and the utilization of such drugs also was limited by social basic health insurance scheme. So the fluctuation of drug price in domestic market would not significant (Wang. 2000), which supports the result of this study.

Chinese government commits opening drug distribution services including purchase, store, transport, retail and after-sales services to foreign investment at the latest of January, 1,2003. Opening up drug distribution system would benefit for shaping ordered drug circulation system in line with the WTO’s rules, and be helpful for decreasing the bargaining cost in the circulating process of drug, which could effectively prevent the price of drug from overcharging.
Considering the drug pricing method, it is the first clarified thing that the objective of controlling drug price by government is to protect market competition, create reasonable, legal and fair competitive environment. So it is important for price managerial department to study the general methods on the management of drug price in the WTO members (Wang. 2000). Traditional drug pricing principle would be reformed by means of implementing health economic evaluation methods, studying pharmaceutical economic theory and combing the clinic effect of drug with cost in comparing the price of same species drugs.

5.6 The relationship between the drug patent protection and access to drugs
The WTO TRIPS Agreement that came into force in January 1996 extends monopoly rights for patent holders. As soon as the Agreement comes into force in a country, all unauthorized copies of patented drugs are prohibited, and countries that break the rule face trade sanctions authorized by the WTO. Without reforms, the TRIPS Agreement will increase the price of drugs by preventing countries from producing cheaper local equivalents until the patent period ends after 20 years. Locally produced generic drugs can often be produced more cheaply. Fluconazole, a treatment for AIDS-related meningitis, costs US$20 a day in Kenya but only US$0.70 a day in Thailand, where it is produced locally (Oxfam GB Briefing Note. 1999). Moreover, tighter patent protection reduces developing countries’ capabilities to conduct research and development (R&D) into locally adapted processes to produce generic drugs. There are also concerns that the local pharmaceutical industries will decline, contributing to unemployment and poverty.

Great attentions on the relationship between the drug patent protection and access to drug have been paid by almost WTO members, especially by most of developing countries. One study (Velasquez, Boulet. 1999) indicates that recent global developments in the regulation of trade and intellectual property rights threaten to hinder the access of populations in developing countries to essential drugs. One of the study of Oxfam conducted in Brazilian found that higher prices for medicines will cause unnecessary sickness and death among the sixty million Brazilians living in poverty, and calls on the US government and the companies to stop putting pressure on Brazil to change its health policies (the Policy Department of Oxfam Great Britain. 2001). HIV/AIDS is a case in point. It is a major killer in sub-Saharan Africa, yet even the basic medicines necessary for treating resulting infections are not affordable (Oxfam Policy Papers - Oxfam GB Briefing Note, 1999).

The Declaration on the TRIPS Agreement and Public Health adopted by one hundred and forty two countries gathered at the 4th WTO Ministerial Conference in Doha clearly affirmed that governments are free to take all necessary measures to protect public health, and gave primacy to public health over private intellectual property? The TRIPS agreement does not and should not prevent members from taking measures to protect public health, the Declaration states, adding that it should be interpreted and implemented in a manner supportive of WTO members’ right to protect public health and, in particular, to promote access to medicines for all.

However in this study interviewees did not give many valuable suggestions on this issue, and even one expert said at present the drug patent protection would not hinder the access of people to essential drugs in China. But the researchers think it is a wrong thing for China if we do not pay great much attention on studying the relationship
between them. As we know, drugs are also a big part of the public health budget, so high prices can limit the ability of hard-pressed governments to provide health services. For example, at present there are over 500,000 AIDS patients in China, and the amount would increase to 10 millions or beyond it by the end of 2010 if no effective preventive programs were to be adopted (Zheng, Anderson, Dong. 2001), which has become a severe social and health problem. So the demand on drugs used to treat AIDS would be more and more greater, which makes us to seriously think about whether committing to the protection of drug patent rights would impact the access of the special group to this kind of drugs. We must study the relationship between patent protection and public health for ensuring the access of population to essential drugs and health care.

5.7 The impacts of China’s WTO entry on health insurance market
The degree of open-up of insurance market is different in different countries. According to the agreements on WTO finance service trade negotiation in 1997, America and the EU will wholly open up their insurance market to foreign investment with very few limited conditions, Japan also will open up its insurance market more wider than before. But in most of developing countries, such as in Malaysia, Thailand, Mexico and Philippines, the insurance markets were being relative puerile stage, insurance services were behindhand and the competition was lacking. Therefore most of developing countries adopted conditional market access and partial national treatment principle when they open up their insurance market, in practical operation, the most adoptive method is limiting the stocks held by foreign investors in cooperative companies (Yu, Zheng. 2000). The same situation also exists in Chinese insurance market. Once China open up its insurance market to foreign investments completely, a series of challenge would appear in Chinese insurance market in the short term, the difficulty of supervision for it would be increased, the loss of excellent professional would severe.

Due to the restriction of the complexity of health insurance and the level of social and economic development, foreign insurer would not invest mass fund to health insurance market at the early stage after China joins the WTO, in the short term there are not great impacts on domestic health insurance market. But we should fully make use of the temporary interim to learn other countries’ experience on opening and developing health insurance, to train special person with ability, to develop corresponding laws and regulations for promoting the development of domestic health insurance industries. Establishing supervision mechanism matched with the practical situation of Chinese health insurance industries and introducing foreign insurance companies by using go-shares or joint-stock mode are the major countermeasures (Ling. 1998).

Meanwhile one more important task Chinese government should do is to study the impact of commercial health insurance on the development of social health insurance scheme. Although in this study health experts pointed out that the development of commercial health insurance would not affect the performance of social health insurance, there also literatures indicated that Private health insurers in Latin America, including those that are foreign invested, compete by selecting the healthiest people and dumping high cost patients on to the public sector. (World Health Organization. 2000; Collins, Lear. 1995). As part of its negotiations to join the World Trade Organization, China agreed to open up its market to foreign health insurers without
assessing the impact on efforts to broaden social health insurance coverage. So for making commercial health insurance exert more effect on extending the coverage of health insurance and providing multi-levels health insurance services for population, Chinese government should strengthen to supervise and standardize its behavior through setting effective laws and regulations at the same time that social health insurance are being gotten further development.

5.8 The impact of decreasing tariff of imported high-tech medical equipment and canceling the approval authority on the allocation of health resources
At present, the main imported high-tech medical equipments include color B Supersonic, CT, MRI, t knife. The average tariff of them is about 12%. After China joins the WTO, most of tariff would be decreased to 5-6%, and non-tariff limitations would be prohibited, which would be propitious to the import of foreign products.

For health sector, more choice for the high-tech medical equipments would emerge after China enters the WTO, which could take potential negative impact on the allocation of health resources. It is necessary for health administrative department to take measures to guarantee the introduction of foreign high-tech medical equipments reasonable. The researchers acquired a protocol on regulating high-tech medical equipment market from MoH. In the protocol, the Ministry of Health has planned to establish the regulation on the market access of high-tech medical equipments based on learning other countries’ experience, and regulated that medical institutions should not introduce high-tech medical equipments unless the allocation of them is according with the requirement of Regional Health Planning. MoH should take responsibility on allocating health resources reasonable, consequently ensuring the quality of high-tech medical equipment introduced, decreasing the medical service cost and improving the utilized efficiency.

6. Conclusion and policy recommendations
In this study, the general conclusion is China’s accession to the World Trade Organization would not result in severe impacts on health system. But more attention should be given to the following aspects:

1) China’s WTO entry means government should first involve in the international organization, which require health administrative department to transform idea, identify functions, develop related laws and regulations and strengthen to macro-manage and supervise for health service market and its behavior;

2) Although health policy makers, health experts and hospital managers understood the general knowledge of WTO, but were short of systematic understanding and mastery of WTO’s trade principle and agreements, especially the services trade agreements on health service and the agreement on intellectual property rights. It is essential for health administrative department and medical institutions to strengthen to study WTO trade rules and related agreements;

3) The competition for health professional would be more drastically. To prevent excellent health professional from losing in public medical institutions, personnel system should be reformed in terms of changing the idea of employment and establishing effective incentive mechanism;
4) Be cautious to open up health service market to foreign investments, the open-up should be gradual and limited. Chinese government should improve the regulation on market access of foreign investments to health service market, strengthen the supervision of medical institutions with different ownership and ensure the dominant status of public medical institutions in the provision of health care service;

5) The study on the relationship between Intellectual Property Rights and public health should be emphasized, the focus would be put on studying the potential impacts of property rights protection on drug access. The agreement of TRIPS should not be as a barrier to obtain essential drugs for the population, especially for the poor;

6) China’s WTO entry brings greater opportunities for the development of domestic commercial health insurance. But the impacts of commercial health insurance on the development of social health insurance scheme should be studied carefully. In order to play the supplementary role to social health insurance, related laws and regulations should be developed for standardizing its behavior.
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