A Red Flag:

The Collapse of the Urban Chinese Medical Care System since the Economic Reforms of the early 1980s

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Introduction

In recent years, China's economic power, political role and recent hosting of the 2008 Beijing Olympics have put it in the world spotlight as a rising force with which to be reckoned. Throughout the world other countries are looking to China, regarding it as a rising economic power on the world stage and decision-maker as a permanent member of the United Nations Security Council. Additionally, its vast human potential and the shifts it has undergone in the past 30 years to go from a tightly-controlled, closed Socialist economy to the largest market economy in the world have put it on the map as a country with which to ally or fear. But, one must ask, what happens to the people behind the rise in Chinese power?

Since the opening up of the huge Chinese market, Chinese citizens have flocked to the cities, caught up in the excitement of reform, seeking newfound prosperity and increasing living standards. The relatively recent acquisition of consumer goods and the potential of taking a place on the world arena have allowed some Chinese the opportunity to rapidly increase their wealth and status. However, the social services once so prized as an example of the kind Communist leadership in touch with the needs of the people have now become a growing block on the road to Chinese development. One glaring example of the decline of social services questions the fundamental approach of the government since the massive economic reforms just 30 years old, the healthcare system.

During the process of opening China to the wider world and spurring economic globalization in 1979, the government decided to abandon the Mao Era universal care system of medical delivery with the expectation that rising incomes and the entrance of Chinese and foreign industry into the new health care market would fill in the gaps.

However, the new market-based system saw the government taking a backseat with a focus on health care cost-effectiveness, an element that only served to produce problems to in the people's ability to access and get quality health care. In the urban areas in particular, a myriad of problems related to the role of the government and the collapse of the once-strong public hospital system demonstrate the struggles in the lives of urban Chinese citizens. The central government's radical shift in ideology toward the health care system brought about a crisis for the 1.3 billion Chinese dealing with their newly open country. Still, many reforms made in the economic changes in the late 1970s brought great wealth to portions of the population, improving conditions for millions of urban residents. This conflict begs the question, why did the health care reforms and system of medical care provision fail so miserably when so many other reforms succeeded in launching China to a power position? Why did the changing system lead to crisis even though a strong system remained from the Maoist Era? Additionally, why did none of the proposed shifts work in making the health care system accessible to those who could no longer afford services? These questions will be the focus of my research.

Context of the Health System's Decline

The historical background of and current developments in Chinese health care system will be explored in greater detail in the next two sections, but the current situation of the urban population is an important one to define before delving into my research questions. Over the course of reforms, sweeping ideological shifts have taken place within the government. As the economic reforms closed down the major providers of health care, the state-owned enterprises and work units who dispensed nearly all social services, the Chinese sought other ways to access care. Though they sought other options,

the government embraced the market coverage of the new system, taking a step back from its former controlling role. In this new position the government established policies which forced health care providers, such as hospitals, to become focused on what was cost-effective, rather than what would help the largest population access care.

In the mean time, China's new position on the world stage invited international companies of all different backgrounds to make use of China's strength in manpower for production purposes and urged companies to sell their goods to the Chinese populace. As the former beneficiaries of medical care, the government, reduced their monetary stake in the public hospital system and shifted policies to a *laissez-faire* approach to the medical care system, they invited foreign companies to openly market to the Chinese population, 'educating' them about consumer culture and creating markets in which to sell their products. In this way both Chinese and international insurance, pharmaceutical and medical technology companies attempted to expand into the world's newest, largest health care market in China's urban centers.

Currently, the government mandates that all urban residents who are employed must be provided with health insurance through their employer, as will be explored in a later section. Despite this insistence, very few options are provided with those who do not have the money to access the increasingly expensive medical services available. While the government has belatedly attempted to provide insurance systems for both its workers and other urban residents, the industries expected to help finance health care for their employees often lack the ability to do so. Thus the employed Chinese, who by all rights should have no problem accessing quality medical care, struggle. For unemployed or

vulnerable populations like children and elderly, even fewer aid options are available in accessing prohibitively expensive medical solutions.

Research Questions

To further explore these issues, several other questions need to be explored. In the early 1980s, China adopted a policy of economic liberalization and brought the health care system along with it. How did this change in economic philosophy shift the central government's perspective on making medical care accessible to the people? Additionally, how did the hospital system respond to a new economic, profit-based system? Though a population can easily give up consumer goods, medical care will always be needed in a population. Keeping this in mind, we must also investigate the actions taken by the Chinese government in the new economic context to either help or hinder popular access to the medical care system which gradually increased in both technology and skill.

The next topic is the core of my research: the conditions that led the Chinese medical care system to fail in providing adequate and affordable health care. Based on popular perception as well as Chinese government statements, it is an acknowledged fact that the health care system has not succeeded in providing adequate and affordable access that can be attained, in some form, by Chinese citizens in dire need ("Will patients…" [2009]). For the purposes of this thesis, I take 'adequate' to mean a base level of care that will enable an individual to live the longest life they are able excluding major medical problems. Further, 'affordable' shall suggest that the seeking of basic medical services including drugs and procedures will not leave the individual or the family in a state of severe economic distress or poverty as a result of the cost of those procedures. It should be assumed for the purpose for the purpose of this thesis that 'failure' refers to the

inability of China, up until the present (2009) to build a system that allows people access to life-saving services in the context of real emergency and access to certified medical health professionals in non-emergency situations. 'Failure' is also contingent on the fact that the cost-effective ideology used to govern the medical care system has led to the closings of many hospitals and clinics, with others forced to ramp up prices on certain services. This shift has resulted in a fall in affordable health care for the general population, with the care of remaining hospitals extremely expensive.

In investigating the reasons for the medical care system's failure, I will examine the role of the government and hospital system as possible reasons for this failure including governmental inefficiency, and economic instability in hospitals with an eye to the extent to which the cost-effective ideology has played a role. I will further examine the part of certain Chinese and international players as they have entered the Chinese health care market. I will then ask what changes have been proposed or implemented to fix the health care system and benefit disadvantaged populations in their attempt to access medical care. Naturally, this will lead to an examination of current measures put in place, specifically those regarding the medical care system's response to both chronic and infectious diseases, cancer and hepatitis. Through these questions, the evolution of the Chinese health care system can be understood within the context of economic reforms.

Literature Evaluation

The shift in the Chinese health care system has happened in just the past 25 to 30 years, so scholarly literature about the subject is just starting to broach all the different aspects of Chinese health care. There are, however, a few experts who have looked extensively into the reasons behind the switch in services.

As one of the leading economists evaluating transitional economies, Dr. Tim Ensor takes a look into the shift of many Central and East Asian countries from a Socialist economy to one that is market based. When all these countries, including Vietnam, China, and Kazakhstan, made sweeping economic reforms, their health care systems were left to the devices of a new, market-based economy, moving from publicly provided services to a privatized system. His primary argument is that each of these transferring countries decided to introduce health insurance as a means to fixing the problems of the new health care systems in terms of new funding. Additionally, he argues that since the Chinese people have been used to paying part of their salary to the government to control health insurance, they are suspicious that, if they buy health insurance, they will end up paying double for services that will not provide any more than their current coverage (Ensor [1999] 872). This argument adds much to the field of study in Chinese health care. It looks critically at the role of both the economic circumstances behind the shift to a market economy, as well as the role that social factors and stigma against the insurance system have on the system's inability to provide good coverage. Ensor does not, however, examine the role of government in this system or the implementation of 'buffer' policies to attempt to help the people, a theme I will elaborate on in my research.

Another group of scholars, Judith Ladinsky, Hoang Thuy Nguyen and Nancy Volk, also examined the switch of a former Socialist economy to one that was market based, with Vietnam as a case study. Many similarities exist between the two systems, making this study a basis of comparison to Chinese health care. To a great extent, Vietnam has created a similar insurance-based structure to deal with the decrease in

government investment. The authors main discussion point is that it is the lack of government control over the direction of money and resources that led to the downfall of affordability and increased the wealth gap in what average people can afford for health care (Ladinsky et al. [2000] 95). Thus, the rich seek out more private, specialized care, while the poor are left largely without provision. This is a very strong argument in terms of the wealth gap that exists in Chinese society and continues to grow due to economic circumstances. It also helps to explain why the government cannot take greater strides in reducing the inequities in the system. While the government withdraws monetary support, they have less and less ability to control the changes that the health care system is undergoing due to increasing hospital and clinic control of financing in a system based off of cost-effectiveness rather than equitable provision of services. With their new responsibility for providing money to keep the hospital running, health clinics and hospitals must seek their own course to make profit, a path that is increasingly separate from the government.

Another source of note is William Hsiao who has done extensive work in the field of Chinese health care. He has examined many different aspects of Chinese health care and concludes that the downfall of the Chinese health care system originates in the new pricing systems implemented in hospitals and clinics, and corresponding increases in the real and black pharmaceutical markets. He specifically looks at the government policy that makes most hospitals for-profit enterprises. He enumerates that since hospitals are forced to charge low prices for basic care they must charge patients a great deal for new technology and pharmaceutical products. Moreover, the government decided that instead of giving money directly to the hospital, they would provide discounted or free

technology as it was acquired from other countries. Accordingly, hospitals and health clinics were allowed to make lots of money off of technology that did not cost them very much, if anything. Hsiao explains that it is this pricing system that led to unsustainable provision of health care (Hsiao [1995] 1052).

Hsiao's argument is a very effective and widely recognized one in the field of Chinese health care scholarship in that it explains that hospitals continued to improve their services. Still, with those improvements came decreased equity in terms of who could afford what was offered. In addition, patients received prescriptions of medicines beyond what is necessary due to the hospital putting pressure on doctors to make money for the hospital. This argument is one that I will examine as part of my thesis. Its broad framework in looking at the situation of hospitals economically within an increasing market system questions the government's original decision to change health care over to a market-based system. Therefore Hsiao fits well into the arguments for economic instability causing the downfall of the health care system.

Finally, Maria Weber and Anna Stenbeck give an interesting take on the problems of the Chinese health care system in saying that the problems were in the conception of the system itself. Due to complex and fragmented structures in governmental bureaucracy, the control of the health care system is in fact in the hands of many different players. Their thesis centers around these inefficiencies and the inability of the government to make decisions due to the many players that can stop any significant government reform regarding health care reform from being made. They detail government inefficiency as well as the fractured relationships between the different levels of government, especially in urban area, as indicators of failure (Weber, Stenbeck [2004] 125). Their claim

underlines a fundamental point in Chinese society, the structure of governance. Many of their ideas focus on problems that are systemic in China due to massive government involvement through the Maoist Era that continues to play a large part in Chinese society. Thus, their argument suggests wider problems of Chinese government practices that I will specify in my thesis. Using this framework, I will ask if the problem of government inefficiency is localized and only affects small parts of the Chinese health care system, leading it to systemic failure. On the other hand, it might be a larger problem within society that only comes to the forefront in the midst of health care crisis.

After evaluating these different influences, there is clearly a great deal of evidence that points the failure of the health care system in different ways. By looking at representative scholars, it is possible to distinguish what might actually have impacted the health care system enough to push it towards failure. As a result, in my thesis I will break down each of the possible arguments, looking to see what individual factors might have contributed to the fall. My evaluation will center on the evaluation of three aspects: the political implications of government inefficiencies and bad decision-making, economic constraints of health care infrastructure within the larger transformation to a market-based economy, and also the implications that the change to a market system in health care has on the social level. Within this field, my paper will identify how each of these factors works within the context of globalization and ideology of cost-effective provision of care. My research will evaluate the new developments it the Chinese market, exploring the urban health care market as it has not yet been portrayed in scholarship.

Methods

In researching my thesis, I have employed several different resources, viewing a variety of opinions on the status of the Chinese health care system. I first examined Chinese newspapers for official Community party line in regards to health care. The stated purpose of newspapers such as the *China Daily* are to educate Chinese and foreign populations about the official Communist Party line. Thus, these newspapers revealed the image that the government wishes to portray in regards to its views on health care shifts and status.

I also looked at scholarly journals and books dedicated to the history and development of the Chinese health care system, as well as the role of international organizations in the post-economic opening period. Though Chinese health care has been declining over a period of 30 years, since the economic reform of the early 1980s, only within the past 10 to 15 years have scholars begun to describe what might have gone wrong. At this point, the government openly acknowledges the current health care system is failing. So, to get a perspective on the reason behind this failure, I read articles from economics and business journals, political commentary on government measures taken to control the situation, as well as critiques of the failure of health insurance and the health infrastructure to meet the needs of the population. Examination of these sources allowed me to fully understand what factors might have impacted the health care system to such an extent that it failed. The sources also were able to give me a perspective as to the damage that the failure of the health care system has had on the populace in their inability to access or afford treatment.

Additionally, I obtained statistics on Chinese urban medical care and provision from World Health Organization Reports as well as Chinese government surveys such as

the China Statistical Yearbook. Evidence from both these sources allows me to examine the effect that the health care reforms have had on the population in terms such as expenditure on health care as part of a family's income. A reason for using both the World Health Organization's statistics as well as official Chinese statistics is to get a fuller picture of the scope of Chinese urban medical care. Though withdrawing from the system, the Chinese government still has substantial control over the opening and closing of hospitals, as well as the numbers of medical care professionals. In contrast, the WHO statistics help fill in the holes in statistics drawn from the Chinese government. These two sources together give a more accurate picture of who is and is not receiving medical care as well as the money necessary to access certain medical services. The different sources will allow an evaluation of the health care system in multiple ways so as to facilitate fairness in judging the issue.

Summary

This thesis is meant to consider the reasons for the decline of the urban Chinese medical care system in the 30 years since market-based economic reforms of the late 1970s. By looking at the different aspects of government withdrawal from control of the medical care system as well as the examination of hospitals as the primary providers of medical care, a great deal can be learned about both the nature of the current Chinese health care system and reasons for its decline over time. The nature of urban medical care has changed drastically in the context of globalization as well as a shift in ideology. By understanding what made the medical care system fail, we can begin to understand what must be done to improve access to basic medical care for hundreds of millions of people constantly in need of care.

Section 1: Background

In China the role of the government and the mostly public, state-owned hospital system has gradually changed to keep pace with government reforms geared toward the new economic policies. Since the late 1970s and early 1980s, the approach toward the economy shifted from one of state control to greater openness and market-based economics and great changes took pace within the lives of the Chinese people. They were now able to decide between different varieties of consumer goods, even had the ability starting their own businesses. It was within these greater economic shifts that the medical care system also was revised. However, the new reforms did not take into account the necessity of medical care as opposed to consumer goods. While those without money can choose not to buy certain goods, or buy less food, people who are sick will always need care, whether they want to pay for it or not. In the context of the reforms, though, those without the money to access the new system were left behind, unable to access even basic care.

An evaluation of the reforms of the medical care system and their impact on modern Chinese society cannot be explored without acknowledging both the context in which the reforms took place, as well as the larger economic changes surrounding this shift. Thus, for this section, I will explore the background of medical care provision starting in the Maoist Era and continuing through the reforms of the late 1970s. In this section we must also understand what the medical reforms meant as part of the larger economic reforms of that time period, so they will also be examined.

Urban Medical Care in the Pre-Reform Era

Government Policy

Soon after the Communists took control of the government in 1949, they implemented policies to bridge the existing gaps in social services, making universal access to health care one of their primary goals. The structure of medical services had developed sporadically across China's history, lacking both guidelines and equity (Hillier, Jewell [2005]). Acknowledging the patchy available medical care, the Communist government sought to standardize and bring a sense of equality to health services while also enforcing their ideological and social perspectives on society. In the urban areas, the focus of this thesis, these changes were brought about in two major stages.

First Stage: Standardization (1949-1965)

The first stage focused on the need for consistency across all medical care facilities. The constant wars and battles between the Nationalist and Communist Parties as well as the Japanese occupation of large parts of China during World War II had weakened the already hole-filled health care system greatly. A fragmented system never quite covered the population in the pre-1949 era. Still, a majority of the structures that did exist were destroyed in the wake of war (Hillier, Jewell [2005]). Destruction of hospitals and lack of a standardized medical training program meant that urgently needed medical problems were going untreated or being handled by under-qualified practitioners in make-shift facilities. To remedy this issue, the government nationalized all health-care facilities, and, as part of a widespread initiative, made every provider or employee involved in the delivery of medical services a state employee (Dong, Phillips [2008] 1715). In response to the lack of training facilities, medical and nursing schools were set up in urban areas around the country, focusing on developing a strong core of trained professionals (Dong, Phillips [2008] 1715).

In recognition of the many disparities existing within urban society, the government developed a system of medical care delivery that could be accessed by all regardless of position or income. The central government not only took complete control of medical facilities, it provided funding and organization for each hospital and clinic, only asking urban residents to pay a minor 'registration fee' to access services (Ma, Sood [2008] 5). By providing the funding for the health care system, it fell entirely on the government to determine for what the money could be used and what departments received more or less money, giving power to the government to decide the direction of medical care provision. So, in the first stage of health care reform, the government asserted its authority by creating a heavily centralized system, focused on making medical care accessible and affordable to the people.

This stage was a success in terms of improving the health status of Chinese citizens. Such indicators as life expectancy and infant mortality improved greatly, with life expectancy rising from 35 years to 68 years, and infant mortality dropping from 200 to 34 per 1,000 live births (Blumenthal, Hsiao [2005] 1167). Additionally, the government was able to create policy that could be widely used as a standard for all medical institutions. The policy itself centered on a "three-tiered, bottom-up delivery system" (Ma, Sood [2008] 6). In urban areas, this system included basic preventative and a small amount of curative care at street clinics, with each clinic able to refer patients to the next level of health care, community health centers, if their resources did not cover the medical problem. Finally, the worst problems were treated in district hospitals which were developed in an extensive network throughout cities (Ma, Sood [2008] 6). In this way, the sickest patients could be treated with more specialized care at the higher levels

of the health care system, while minor illnesses could be taken care of earlier and without hassle to the large hospitals. The structure of the system also controlled the movement of illness within the city. To access higher hospital levels patients needed a referral from a doctor, meaning that floods of people did not appear at the highest level hospital for minor injuries (Ma, Sood [2008] 7). Instead the higher level hospitals could handle serious cases while the lower levels of hospitals could take doctors with less training to handle minor illnesses and injuries.

Second Stage: Politicization (1965-1977)

The politicization of the health care system began well before 1965 in gradual stages through the forced implementation of policy initiatives. For hospitals, the central government had the ability to control the finances of a hospital, not the hospital Finance Department itself. The hospital thus was required to submit to any policy changes or mass initiatives handed down by the government without complaint, or risk losing access to funding and necessary equipment (Henderson, Cohen [1982] 70).

However, with the start of the Cultural Revolution, the institutions that had held the most power were now subject to the harshest criticism. Mao Zedong and his "Gang of Four", led by his wife, Jiang Qing, determined that the intellectuals had grown too complacent and thus encouraged students to criticize their political activity. Thus, many hospitals and medical teaching facilities were shut down and their professionals censured, humiliated, and even tortured in some cases (Hesketh, Wei [1997] 1544). Many medical professionals, especially specialists, were 'sent-down' to the countryside where they faced 'thought-reform' through hard labor. Though the cities suffered from this lack of medical care, the rural areas stood to gain as many new 'barefoot' doctors, who will be

examined further in a look at the rural medical system, were trained with basic medical knowledge that was then spread throughout the countryside (Hesketh, Wei [1997] 1545).

Though the tumult of the Cultural Revolution eventually ebbed reopening medical schools and repairing hospitals, the culture of deep politicization had already become part of the health care system. Prior to the death of Mao Zedong, health related fields were deeply politicized and mired in an intense political climate. New initiatives only allowed students who had a correct 'political attitude' and background to gain access to medical school. New courses also emphasized manual labor and Maoist thought along with medical knowledge (Hesketh, Wei [1997] 1545). Even course length remained variable, with length of medical schooling ranging from one to several years in the absence of a standardized length (Ma, Sood [2008] 7). Only following Mao's death in 1976 did the official end of the Cultural Revolution come. In 1977 schooling in receiving a medical degree in Western medicine again was standardized at a five year length. The standards and lengths of schooling for traditional Chinese medicine differ but were also standardized at the same time.

Work Unit Provision of Medical Care

During the Maoist Era, beginning soon after the Communist rise to power in 1949, urban areas were divided into separate administrative units so as to provide social services as well as facilitate government control of the people's movement, as well as their control over the lives of the citizens. Each administrative unit was called a *danwei* or work unit employing every working adult, based on their occupation. Each school, hospital, or factory was its own work unit, with all the workers, as well as their dependents, registered as part of this unit (Henderson, Cohen [1982] 7). Correspondingly,

as an individual administrative unit, work units did not inter-relate but instead were directly controlled by the governmental ministry or administrative supervisor that oversaw the work unit's area of expertise (Henderson, Cohen [1982] 7). Thus, hospitals were work units that obtained direction from the Ministry of Health, individual schools were under the guidance of the Ministry of Education and so on. It was in the context of these work units that medical care was provided.

In order that each of these units was truly independent from other units, they carried responsibilities beyond just employment. Each unit was responsible for providing all social services to its workers and their families as well as handing down new political doctrine (Henderson and Cohen [1982] 43). As the work units became an increasingly important aspect of the lives of workers, even matters that were previously private were dictated by a higher authority. These included such as determining when and to whom they could marry, when they could have their children[1], how many rationing coupons they would receive for food and other essentials as well as the work points they would earn to purchase other necessary items (Henderson and Cohen [1982] 43). Essentially, the danwei dominated the lives of workers by determining the welfare and social positions each individual received. Individuals were placed under a system of 'organized dependency', with each individual economically and personally dependent on those in power (Walder [1983] 52).

In this system of control, social services such as health care played a minor, yet essential, role. Due to the fact that private and public life were nearly interchangeable, decisions on health care provision and providence for a family were subject to approval

[1] The power of the work unit was also present in monitoring the reproductive cycles of women, ensuring they did not have additional children when the One Child Policy went into effect in 1979 (Hu [2002] "Family Planning…").

or rejection by the leading cadres. In that same vein, many individual work units had on-site clinics or partner hospitals, limiting their employees and corresponding families to basic medical services offered to everyone in the same work unit (Tang, Parish [2000] 39). In theory, the existence of these medical care facilities meant that no unfairness could occur between the base workers, and also supposedly ensured that no 'unnecessary' treatment was given. However, in many ways this system decreased efficiency of the hospitals in circumstances where physicians had to deal with excess demand, as people demanded more of the services for which they did not pay directly, and lower quality doctors who lacked sufficient training and facilities that lacked the monetary investment to improve (Tang, Parish [2000] 39). Upper level officials in each danwei were themselves responsible for seeing that proper medical care was available despite their lack of control over the health care sector. Hospital work units also had little control over their money practices due to government price controls as the primary payers for the system (as described above). Each hospital worker's salaries and hospital budget were established by the provincial government, a number decided on by the previous year's performance of the hospital (Henderson, Cohen [1982] 71). Yet this number was typically kept quite low due to the limited resources of the government. For example, the budget of a hospital examined by Gail Henderson and Myron Cohen in Wuhan, Hubei Province was approximately one fiftieth of the budget of a hospital of comparable size in the United States (Henderson, Cohen [1982] 71). As a consequence, hospitals and clinics had neither the funding, nor the physical resources to better what medical care was offered.

The provision of medical services was an integral part of the social services that the danwei gave to its workers. Provincial governments, by way of the different ministries, determined the amount of money given to clinics and hospitals outside of the work unit itself, meaning that workers did not need to be concerned about payment for their medical needs. However, this also meant that the work unit had no control over what was offered to and could be accessed by its workers (Henderson, Cohen [1982] 70). As an all-encompassing unit, the danwei attempted to ensure that the basic needs of workers were provided for, taking the power of choice out of the workers' hands, instead putting them squarely in control of the government.

Economic Shift in the Late 1970's

Government Policy Shift

Changes in Chinese politics came about under Deng Xiaoping in a sweeping revolution of economic reforms that sent a shock wave through the entire country. It was at the Third Plenum of the Eleventh Central Committee, held in December 1978, that Deng, with the help of economic leader Chen Yun, pushed through the idea that the Communist Party's leadership was necessary to keep the country successful, yet now "economic modernization was… central to all party work" (Saich [2004] 59). This involved the increasing presence of market forces in developing China's economy, first in the rural, then the urban sectors. Correspondingly, Chinese were now able to access overseas markets, creating partnerships that could extend beyond the state-owned bubble of industries. As Barry Naughton explains, a number of factors led to this idea but mostly the new economic policies were the result of political alignment under Deng Xiaoping in an attempt to move away from the disastrous Maoist policies of the Cultural Revolution

(Naughton [1996] 64). Though the reason for the change lies in many different problems facing the Chinese state, it is clear that the economic policies pushed the idea of greater openness for the agricultural, light industrial and consumption areas first, and gradually more and more openness in industry, both state-owned, and independent (Naugton [1996] 80).

The changing system led to a gradual withdrawal from the strict control the state had previously held over companies and the requirements that such a connection made. Focusing on the urban sector, industries were given the new responsibility to determine what output and products would be most profitable for the company as well as determining the amount that workers would be paid or rewarded for their work in different sectors (Saich [2004] 60). Worker bonuses increased and eventually became a major part of wages earned. The bonuses were used to induce employees to work harder, ramping up the level of competition within each business. Additionally, enterprises felt the need to invest more money in their own growth, self-investment coming to account for half of an enterprise's total investment money (Naughton [1996] 106). The trend continued to grow, ultimately culminating in the "full commercialization of state enterprises" (Naughton [1996] 108) where companies were allowed to keep any profits but also required to take on their own losses with state-imposed taxes becoming the only state take-away.

The autonomy gained from such a decision was pushed even further in 1984 when, in evaluating economic changes since 1978, the Third Plenary Session of the Twelfth Central Committee released the "Decision on Reform of the Economic Structure". This release by the government analyzed both the good and bad that had stemmed from greater

market involvement and ultimately came to the decision that not only should economic modernization be promoted, it should be expanded, especially in the cities ("Decision on Reform…" [1984]). The decision strongly encouraged a system of "Socialism with Chinese Characteristics". This asked companies to make companies more responsible in their business practices, and turn out profit, but at the same time, straddle the line between planned and market economy. Ultimately this phrase simply came to mean a market economy in China, with little of the remaining planned economy left. Largely due to the increase in the non-state sector, Premier Zhao Ziyang recognized the problems with the state planned economy and the inherent potential in loosening the power of the government in economic development of companies. One of his major reforms focused on a 'tax-for-profit' system, making all profit taxable, unlike the former system of selective taxation (Naughton [1996] 183). Thus more industry was able to keep their own profits, re-investing them in the firm for greater profits. Starting with this turning point, liberalization and economic openness both within China and into overseas markets progressed at an accelerated pace.

Decline of State Owned Enterprises

In this economic climate, companies began to take greater initiative to expand their market forces, using the money received from the government to invest and expand their production capabilities. However, the new system did not cause positive growth for all involved, the most severe result being the failing of enterprises. As one of the primary structures in urban planned economy, state-owned enterprises (SOE) were the primary providers of heavy industry as well as the main urban employer for millions of workers throughout the Maoist Era (Steinfeld [2000] 2). These SOEs were the backbone of all

Chinese industry, existing in every industrial sphere. They employed hundreds to thousands of workers, providing them with housing, medical care, representing the needs of all workers in one massive danwei that provided for every aspect of life. The goods that they made ranged from radio parts to hairbrushes to hospitals supplies and technologies. As the primary employer setting in urban areas, the SOE was the basis of life for millions of urban workers, often employing the sons and daughters of workers as they retired.

With the economic opening, the position of state-owned enterprises vastly changed, as they were expected to take on their own profit and losses to keep themselves financially stable. However, as the public sector became increasingly profitable without the influence of state control, SOEs received increasing government pressure to stay open and maintain their large workforces, though they were known to suffer from "habitual overstaffing, notoriously low productivity and ever-declining profit performance" (Steinfeld [2000] 2). Since they were often not allowed to shut down because of the potential of exacerbating the growing unemployment problem, they ended up requiring constant state bailouts to keep millions of workers at their positions. Additionally, state organizations themselves were resistant to restructuring due to too many people in positions of leadership unable to make decisions about the welfare of the company. That combined with a lack of an effective organizational structure, and the conspicuous absence of information that might help the organizations get more capital and make informed decisions about the direction of their companies, led to a steady decline in the productivity and usefulness of SOEs (Steinfeld [2000] 4).

On top of the lack of effective structuring, many of the currently operational SOEs produce goods with backward technology and an antique system of financing. A majority of the large state owned enterprises were built or expanded within the first 20 years of Communist rule and have not invested in new technology since that point, making their methods of production vastly out of date. Additionally, SOEs are dependent on a system of subsidies from local and provincial government where they can receive subsidized credit (Hughes [2002] 15). Therefore much of the technology that is being used is 30-50 years old and factories are unable to get the significant amount of financing needed to update their facilities.

In many urban areas, the financial circumstances of SOEs are quite dire and have been poorly handled, yet the government cannot easily close every non-profitable institution. Many cases show the interaction between banking firms and SOEs as highly undocumented and not subject to oversight (Hughes [2002] 40). The major governmental banks that are required to lend to SOEs often come with no audited statements and very lax regulation of money return. SOEs can get loans from certain state-owned banks without assurances that they can be repaid creating a situation where, by the mid-1990s, 1/5 of SOE loans could not be reimbursed (Hughes [2002] 40). Additionally, many enterprises are not efficient and only use up to 40% of their industrial capacity, meaning the assets of the firm cannot be used to create income. This in turn leads to an increase in non-performing loans (Hughes [2002] 40). Yet with all these problems, the government has been extremely reluctant to make changes to the system or allow the SOEs to fail. Not until 1988 was a law passed that allowed SOEs to declare bankruptcy; up until that point, the State Council simply approved write offs of every bad loan (Hughes [2002] 55).

Still, many companies did not declare bankruptcy for a long time due to reticence on the part of the government to allow greater unemployment, a theme that will be explored in greater depth later.

The reason behind reluctance of closing SOEs is partially due to government insistence that state planning, a key feature of Communist philosophy, can work to some extent within the market context. There has also been a growing recognition within central government leadership that the market system has brought about many additional problems to the majority of the population. The economic reforms allowed companies to release workers from their contracts, causing precipitous increases in the unemployment rate over the past 30 years. In a country where the urban workforce was approximately 190 million with 76 million employed by SOEs by the end of the 1990s, the closing of large SOEs would lead to huge increases in unemployment, calculated to be around 6.5% or approximately 81,250,000 people based on 1999 population estimates (Hughes [2002] 32). With lack of knowledge of the market, SOEs are unable to compete with non-state enterprises yet the government realizes that "closing down enterprises and putting workers on the street would simply create a far bigger problem for which there is not an immediate solution" (Hughes [2002] 194).

Danwei Structure Collapse Within the Reforms

With the fall of many state owned enterprises, and many people finding independent means of making money in new companies, what the Chinese call 'jumping into the sea', the danwei, or work unit, became an increasingly unstable aspect of Chinese life. It had existed as the means to bridging the work place, social services, and home life and was most important as part of the major, mostly industrial state owned enterprises in

cities. The question that emerged in the reforms was now what was going to happen to the danwei structure and the provision of social services with its decline?

The fall and lack of profit from many state-owned enterprises had a severe impact on the ability of the danwei to function. Since the government no longer provided direct funding to the danwei for things such as medical services, the workers at many urban SOEs found their benefits gradually reduced over time (Perry [1997] 50). Though workers still clung to their work units in order to provide social services such as education for their children, many of the outbreaks of urban popular protest throughout the 1980s and 1990s stemmed from worker discontent about the deficit of promised services from the danwei. Indeed, many industrial workers wished a return to the Maoist, state-controlled system due to the fact that "economic mismanagement and official duplicity" characterized the economic reforms of the Deng Xiaoping era (Perry [1997] 50).

The bankruptcy law introduced in 1988 allowed SOEs to claim bankruptcy and force their workers to find alternate employment, signaling the decline of the work unit and representing a benchmark in the shift of social services. Between 1988 and 1996, 12% of state workers, involving millions of Chinese, were downsized or fired from their jobs and received only a very basic form of unemployment insurance, if anything (Tang, Parish [2000] 133). Another group who received many of the negative outcomes of the new policies was the retired worker population. Many people had been part of their work units their entire lives, putting in time and energy their whole lives with the expectation that their needs would be taken care of during their retirement, as had been previously promised to them. After the reforms, and especially after the bankruptcy law was passed,

many saw a significant decline in their retirement pensions. Indeed, some retirees were forced to rely entirely on their families or even to work again if the SOE for which they had worked went bankrupt. The Chongqing Knitting Factory, for example, employed 3,000 workers before declaring bankruptcy in 1992, after which they closed their factory and reduced the stipends of retired workers from between 150 and 250 Yuan per month to only 50 Yuan per month (Perry [1997] 51). Thus those employed as part of the danwei, what had once been the most stable form of work and had guaranteed a secure position and social welfare for life, were now subject to constant fear of factory closings and the uncertainty of unemployment.

The Shift in Medical Care Provision

With the decline of the danwei system, the social services they had so ardently championed also waned. Work units existed in every SOE before the reforms but had played an especially integral role in heavy industry SOEs. Thus the impact of their downfall was much more severe on those benefiting from danwei social services (Weber, Stenbeck [2004] 124). As time went on, the SOEs were expected to make their own profits and assume their own losses, as previously described. For the many failing SOEs, though, the profit margin was quite small, if any, leaving the states to pick up the SOEs debt. However, with these failures, it was nearly impossible for the danwei to afford the social services previously given. The decreasing importance of work points as payment meant that there SOEs were less likely to pay for social services that had been provided (Steinfeld [2000] 66). To compound the problem, the vast majority of companies cut down on services that had been provided, to allow the company to remain solvent. In other situations, the firm might struggle to provide the medical care promised, but at the

price of eventual SOE failure. In some cases, government enforcement of SOE provision of social services led to poor financial performance in the competitive market (Steinfeld [2000] 66). As time progressed, more of the medical services directly provided by SOEs, such as attached hospitals or clinics had to either close or downsize for the SOE itself to stay active within the market. With this turn of events, however, medical provision also declined.

Consequently, the medical care system also felt its share of reforms, with substantial change paralleling the sweeping economic reforms of the 1980s and 1990s. In recognizing the major shifts that were occurring within the economic sphere, the government under Deng Xiaoping approached medical care in much the same way as any industry. Now "the responsibility for providing and financing social services including health care, was devolved to local governments at provincial and county level" (Weber, Stenbeck [2004] 124). The policy became one that expected those separate from the state-payment system or the self-employed to raise the money for medical expenses out-of-pocket without government assistance.

The Rural Health Care Sector

The above changes all describe patterns emerging before and after the Maoist Era in the urban areas. The conditions of rural areas, where the majority of the Chinese population lives, are quite different. Still, for the majority of this examination, I will be focusing on the urban sector. Since the rural and urban systems are so different, attempting to examine the collapse of the RCMS along with the urban care system would be an unmanageably large topic. By looking into the differences between rural and urban health care systems, more can be learned about the nature of Chinese policy-making as

they switched to more cost-effective methods of medical care provision, rather than the universal health care that existed previously.

Previous to the economic reforms of the late 1970s and early 1980s, the rural sector was the focus of development, especially in the health care sector. People were grouped into collective agricultural units, analogous to the danwei of the urban areas. In the most consolidated form of these brigades, each of which was comprised of many production units, people lived, worked, and ate together, making it the lowest level of social connection (Carrin et al. [1999] 962). These brigades were an administrative unit, with their own party branches, childcare units, and leaders. The health care system was a part of this consolidation with medical care part of the program. In the establishment of the Rural Cooperative Medical System (RCMS), the government encouraged a medical welfare program in each brigade. Farmers gave between 0.5 and 2% of their incomes into a common welfare pool, allowing each person to access primary health care (Carrin et al. [1999] 962). A wide network developed of make-shift physicians called 'barefoot doctors' who received basic training in medical issues then traveled between brigades collectives (the next administrative level up the chain of power) to dispense basic medical and preventive care to farmers and their families (Liu et al. [1995] 1086).

As brigade and commune structures came to take over more aspects of Chinese life, the RCMS came to play a very important role in the provision of health care in the rural area, at its height covering around 90% of all of rural China (Carrin et al. [1999] 962). This system was the base aspect of a three tiered system with barefoot doctors at the bottom that could refer patients with more severe illnesses to the next tier, the township hospitals that covered several brigades in the area. Finally, for the most serious

illnesses, patients were referred to the highest level available to rural citizens, county hospitals covering several communes (Liu et al. [1995] 1086). Each hospital was paid for by its respective level of government. If farmers had a medical need requiring higher levels of care beyond what the lower trained doctors could give, they were given money through their collective welfare system, made up of their individual contributions as well as the Collective Welfare Fund, contributed by the different members of the brigades, and finally with help from higher levels of government (Liu et al. [1995] 1086). In this way, rural medical provision was not necessarily advanced, but managed to cover the entire population.

With the economic reforms, however, medical provision for rural areas vastly changed. The biggest economic shift of the rural areas was the breakdown of the commune system in favor of 'household responsibility' where each household was responsible for its own welfare and production on state-owned land. With the breakdown of communes also came one of the brigade and production units, making the village the new form of community with the township above it (Liu et al. [1995] 1086). This shift drastically reduced the percentage of villages with medical insurance and a welfare pool from approximately 90-92% in 1976 to just 4.8% in 1986 (Dong [2003] 526). As the RCMS disappeared and village welfare funds dried up, the majority of farmers simply paid by the fee-for-service method, often using hard earned money for even the smallest amount of medicine. The high prices that evolved were mostly due to the breakdown of the rural three-tier system due to a lack of government support, the decrease in numbers of barefoot doctors from 1.8 to 1.3 million from 1978 to 1985, as well as the rise of private medicine (Liu et al. [1995] 1087). Additionally, as some farmers were able to

earn more money, they gained higher standards for the care they received, willing to pay more out-of-pocket at county levels rather then going to semi-trained professionals who were formerly barefoot doctors. Currently, 86% of the rural population pays out-of-pocket for all medical services and medications, revealing the extent of the decline of the RCMS (Dong [2003] 526).

In the RCMS, the government paid for the salaries of barefoot and other trained doctors, helping them to function in their capacities without fear of their or their family's welfare. However, in the shift of the economic system, public doctors only receive 60% of their salaries from government money, if that (Dong [2003] 526). Thus many more doctors have shifted into private practice. It has been shown that many of these private doctors tend to over-prescribe medications and might even offer fake medicine in order to make extra money (Liu et al. [1995] 1087). Thus the rural system does not even support doctors providing care for the 737 million rural workers (Lu [2007] "China's rural…").

This differs significantly from the provision of medical services in urban areas due to government attention. In urban areas, the three-tier system has been maintained, with a focus on individual insurance provided through companies. However, the central government has mostly abandoned the idea of providing rural Chinese with health care. Many rural citizens cannot seek medical care because they cannot pay the rates. A study showed that 41% of rural citizens who are referred to higher medical levels do not go because they are unable to pay, and 1/3 of farmers receive no medical treatment at all due to a shortage of doctors and the inability to pay (Brant et al. [2006]).

The only attempt to help the rural area came in an attempt in 2002 when then government announced its "Decision on Further Promoting the Countryside Health

Work" to create a new Rural Cooperative Medical System (Wang [2007] 70). It was funded based off of contributions from all participating members of 10 Yuan annually with different levels of government matching the villagers' contribution. The money is then collected and managed in a state-owned bank set aside for this purpose, managed by a special Rural Cooperative Medical Service Administrative Institution (Wang [2007] 68-9). However, this program, while beneficial for those with almost no money to pay for medical expenses, does not do much to help those who voluntarily participate. The small amount of the funds mean that for each person only 30 Yuan is available for hospital visits, around 1% of their yearly income (Wang [2007] 72). Additionally, the plan specifies that only a very small percentage of funds, around 1.7% on average, can be used to compensate those with serious illnesses while in-patient stays at hospitals, which can cost several thousand Yuan, are only compensated at around 25% (Wang [2007] 73). Thus, many rural residents, even if covered under this plan, do not receive very much help in health services.

The situation in rural areas is an important topic that has been explored by many scholars, especially as it relates to disparities between urban and rural areas. Thus I have chosen to focus on the less known urban medical care system and the complex interplay between government, hospital and consumer.

Analysis

A great deal has changed between the urban state-owned enterprise and danwei medical service provision in the Maoist Era, before the economic reforms, and the new era of medical provision. As hospitals turned from state-controlled vessels to money making, for-profit industries, the general populace struggled to deal with the implications

of collapsing enterprises and the decline of their security blanket, the danwei. As a structure which had formerly provided everything, the slow demise of the danwei became a symbol of changes in urban areas. Workers began to pay for medical services with money earned in their companies out-of-pocket, rather than trusting that their employer would provide all that was necessary, compensating for any illness. Along with these changes in the urban sector came the demise of the Rural Cooperative Medical System which had been part of the collectives during the Maoist areas. As the RCMS collapsed, rural citizens were left helpless, often unable to pay for needed medical care. These different elements reveal the beginnings of a trend that emerged during the economic reforms, that of government withdrawal from the health care system, trusting a policy of cost-effectiveness and market forces instead of those controlled by the government. These themes will be explored in following chapters as we follow the many problems emerging from an abandoned system.

Section 2: Newer Developments in Health Care

As state-owned enterprises continue to decline and workers attempt to find a job outside the state sector, increasing numbers of people do not have medical coverage from state jobs. Even for those employed, the provision for medical coverage is insufficient to cover even their most basic needs. Thus, the three-tier system of medical coverage described earlier is expected to provide medical services to the general population but not directly pay for them (Hsiao [1995] 1050). Thus costs fall directly on the shoulders of the ill or suffering. As hospitals try to navigate through their own financial troubles, many people are left questioning the best way to ensure that they can get access to adequate medical care if necessary. As more and more people leave or are fired from their old, state-controlled occupations few medical care payment options are available.

The medical care system has changed drastically, causing increasing numbers of people to search for ways to access necessary medical coverage. The biggest shift is ideological, implemented by the government in the midst of the economic changes. In the former system, the focus of the government was on providing universal coverage to everyone, no matter what their status. Because the entire country was divided up into danweis, every person had a place in the coverage system. However, the economic changes caused the government to drastically redefine their position towards the health care system. From universal coverage, the government switched to a policy of market based control, with a special focus on what was cost-effective, rather than what was equal (Hsiao [1995] 1050). By withdrawing funds and stepping back from the system, as will be explored in depth in the next section, the government urged the growth of new ways for Chinese to access the health care system. The two most widespread growths of this

system were the development of private practice as a means for the wealthy to get high quality service, and the rise of insurance as a system that could supposedly cover the remaining population.

Current Problems and Attempts at 'Quick Fixes'

This policy involved a sharp decrease in government spending on health care. In order to implement new policy, the central government put direct pressure on other areas of the health care system by decreasing the percentage of money allowed for public health care facilities. This was a move similar to the decreases in government funding in many areas of the economy, as will be explored later. Between 1978 and 1999, the central government cut national health care spending by more than half (Blumenthal, Hsiao [2005] 1166). Government spending on health care has continued to fall over time. Between 1990 and 2000, total government spending on health dropped from 70 billion Yuan to 47.4 billion Yuan, following a pattern of decreasing government assistance (Wang [2004]). The central government decentralized the payment system for hospitals, pushing maintenance of the medical care facilities onto provincial and local governments as well as the people themselves indirectly through increased service costs. According to a 2002 World Health Organization survey, privately paid health spending rose from 53.3% to 63.4% in a five year period from 1995 to 2000 alone (Tubilewicz [2006] 214). By urging local and provincial seats of power to use their own budgets, a policy move used in all areas of reform, the disparities between different areas of the country, especially between rural and urban areas, became much more pronounced. It also meant that already stretched local government budgets were subjected to even more pressure

from the different health departments. The decrease of government funding and its impact on the population is a theme that will be explored in depth in Section 3.

Responsibility to make up the funding formerly given by the government was pushed mostly on hospitals. The majority of hospitals, rather than being considered an integral part of the work unit system, were now expected to be solvent on their own, despite the fact that they were still state-owned. For the few that remained part of a work unit, the Health Ministry and Provincial Health Bureau's have little if any influence in policies and pricings, meaning they could raise their prices without fear of repercussion (Hsiao [1995] 1051). As a result of the shift of some hospitals to the private sector, communication between hospitals deteriorated leading to severe over-crowding in some and underutilization of resources in others. In order to compensate for the shift in health care that had occurred for people who now became independent of a state-owned enterprise, pricing of basic medical services was kept intentionally low so that all could afford basic examinations and simple procedures (Hsiao [1995] 1048). In each province, the Central Pricing Commission determines what the cap on each aspect of basic medical service is. From that, each hospital knows what rates it is allowed to charge, along with how much money is needed to fill the gap left from government cuts from a deteriorating state fund for medicine. Moreover, the Ministry of Health determines how many staff each hospital must have, limiting the ability of each public hospital to regulate its own budget (Weber, Stenbeck [2004] 129). The role of hospitals as they attempted to navigate this new system will be further explored in Section 4.

In order to attempt to hospitals in staying solvent, the central government created two schemes to be used by hospitals and clinics. First, the hospital is allowed to charge

for medicines that are sold in the hospital pharmacies. In order for them to make profit from this sale, the hospitals are allowed to charge up to 50% over bought price for Western medicines and 20-30% for herbal or traditional medicines (Henderson, Cohen [1984] 72). At the start of the reforms, many of the medicines were bought at reduced prices from the government. With the creation of newer and better medical technology, however, a great deal of hospitals chose instead to build their own pharmaceutical factories, producing more drugs at cheaper costs, allowing a greater profit margin. The result is that spending on pharmaceuticals was 50% of the national health care expenditure in 1993 and 70% in 1999, whereas more developed nations tend to spend an average of 40% of national health care expenditure on drugs and medicines (Henderson, Cohen [1984] 72). The second money-making venture that hospitals were able to use to keep their financial system intact was the use of advanced technologies. The government stipulated that hospitals and medical care facilities at the lower levels could charge much higher rates for any advanced testing or technology used on patients. This applied across the board, including such complex processes as Magnetic Resonance Imaging (MRI) tests or something as simple as a blood screen (Blumenthal, Hsiao [2005] 1168).

The system under which hospitals could prescribe medicines and technologies was intended to make up for the severe decrease in doctor pay from what had normally been compensated under the danwei system. When a doctor ordered advanced testing for his or her patients, a certain percentage of the money gained from that test went directly to the doctor. Similarly, a doctor's salary was enhanced based on the amount and prices of the medicines prescribed to the patients, another theme that will be explored in Section 4 (Hsiao [1995] 1051). Unfortunately these created an incentive for doctors to order more

testing or prescribe more medication for patients able to pay high medical bills in the hopes of adding to their reduced salary. Moreover, pharmaceutical companies separate from the hospitals are able to give doctors gifts or money in the hopes that their drugs will be the ones prescribed (Hesketh, Wei [1997]). The 'back door' payment system therefore puts an uncomfortable pressure on doctors, sometimes asking them to either choose what is best for the patient or best for themselves monetarily.

Development of Private Practice

The ability of doctors to go into private practice was legalized in the mid-1980s with the increasing realization that public hospitals were no longer sufficient to cover the majority population. Both doctors who chose to go into private practice and those who did not had their medical education mostly funded by the state, but the state invested less in each doctor, knowing that they might choose to work away from state structures. Paralleling the rise of the private sector, private practice was promoted as a way to raise the standard of medicine in China through public/private joint ventures (Weber, Stenbeck [2004] 129). There was also hope that private practice would increase the availability of higher quality medicine, especially by increasing the prevalence of Western technologies throughout China. It also served as a springboard to provide high quality, experimental technologies that might draw in money from international patients, as will be explored in the options for international cancer patients in Section 5.

The liberalization of private practice brought another unexpected side-effect in the economic climate of failing state owned enterprises. Several SOEs used hospitals and clinics separate from the state system as a money-making venture by creating hospitals under the name and registration of the SOE. The provincial pricing bureaus that dictated

the profits and policies of public hospitals did not extend to newly-created medical offices within SOEs (Weber, Stenbeck [2004] 129). Thus, many doctors chose to work for SOE-created hospitals, simply to have slightly more control over their own working conditions, apart from the main medical community. This medical care was then offered to the wider community, as opposed to the workers of SOEs themselves, in order for the SOE to receive an alternative source of financing its operations.[2] Regrettably, because these non-state private practices were separate from the monitoring and budget constraints of state hospitals, the regulation for doctors and services was often less strictly observed, allowing people without sufficient training to work in a supposedly 'professional' environment.

Insurance Schemes

Prior to the reforms, every person in a danwei and their dependents, that is to say every urban citizen, was covered for whatever illness or injury they might face. As previously stated, medical care came free except for an occasional flat fee for an inpatient stay lasting several days. Even then, the work unit would often reimburse a family whose member had higher than average hospital costs (Weber, Stenbeck [2004] 130). Thus, workers did not fear injuries or serious illnesses. Because they were bound to a work unit, the company would pay for their medical care even if they were no longer able to work. Since the reforms, however, the system of coverage was also put to the market. The government attempted to cover the urban population through two systems, each with questionable success.

[2] Hospitals were not the only source of alternative financing employed by SOEs. Realizing the lack of production capital, many SOEs bought or absorbed completely unrelated industries, mostly in the service industry, that helped them gain additional funding to run their main operations (Weber, Stenbeck [2004] 129). Many different organizations use this method of funding. For example, this is the way that much of the Chinese military gains its funding.

Government Insurance System

As increasing numbers of people found themselves without the means to raise the money for medical care needs, the government created a parachute program for its own employees. The Government Insurance System (GIS) was put in place to provide government employees with means to pay for their medical care coverage. The system itself is based on co-payments at government-approved hospitals. Thus each GIS covered individual is responsible for a percentage of medical expenses as determined by individual provincial governments (Grogan [1995] 1077). In the attempt to make coverage more equitable, the government compelled employees in richer provinces to pay a greater percentage of medical costs, with poorer provinces given more lenience in payment. However, due to the nature of the three-tier system, medical coverage in the urban areas and wealthier provinces naturally costs more. Since rural residents want the highest level of health care, however, the result of GIS is often that poorer state-employed rural residents must pay higher co-pays at hospitals not covered by GIS. For both rural and urban residents not employed by the state, however, GIS is not helpful at all. The nature of this state provided health insurance will be explored in greater depth in the next section.

Labor Insurance System

The Labor Insurance System (LIS) was created in an attempt to aid the remaining state owned enterprises in a blanket effort. A law in 1983 created a labor contracting system where enterprises could hire employees on a temporary or conditional basis, without any guarantees for the future. It also allowed the ability of individuals or families to start their own small companies (Grogan [1995] 1079). The LIS demanded that each

company offer health insurance, even for temporary and independent workers, unless previously stipulated in their contracts, by creating a common fund from the salaries of the workers. Therefore if a worker needed to access medical care, the costs could be reimbursed without severe impacts on the worker and his or her family's welfare (Dummer, Cook [2008] 601). To promote this system, the government sweetened the deal with tax incentives. State owned enterprises were subject to taxation based on the profits of the company since the reform of the SOE system began. The government implemented a policy with LIS that stated that any money allocated to the payment of medical or other social services for employees could be extracted from the total company profit that was ultimately the base line for taxation (Grogan [1995] 1080). This incentive drew many successful and growing enterprises to offer health insurance under the auspices of LIS so as to prevent their money from being taxed.

However, the law did not stipulate the limits of what the insurance should cover. With hundreds of millions of urban workers, follow-through also became difficult. Ensuring that every enterprise, even smaller, family owned businesses, provided necessary coverage was nearly impossible. Eventually companies recognized that a company's inability to pay for medical insurance along with other social services became a way to dodge the insurance law. As time progressed, it became clear that the extent of coverage and benefits of the Labor Insurance provided was directly dependent on a company's profit margin (Grogan [1995] 1079). Hence, a more profitable company with a productive work team would provide good benefits and a substantial safety net for medical problems while a less productive company or failing enterprise might provide little if any support.

Furthermore, with the above-mentioned tax incentive, successful businesses were given a break in paying their taxes, while businesses that did not have the money to pay for medical care were further punished with higher taxes (Grogan [1995] 1079). Another way to view this result is through the wealth of the employees. Often more successful enterprises rewarded their employees with higher bonuses and salaries, while failing enterprises cut salaries to improve profit margins. This situation led to wealthier workers in successful enterprises not only getting more money, but also getting more comprehensive benefits, while employees in failing enterprises saw not only their salaries slashed, but also the medical benefits that the company offered.

Problems with GIS and LIS

Even when offered, the GIS and LIS were far from perfect. The situation of financing within each system has, over time, become a critical concern. In the GIS, the government mandates that 7% of wage has to be set aside for the medical fund for all government employees (Hsiao [1995] 1050). Still, this money proved to be insufficient to fill the medical needs of even the shrinking government sector. Between 1985 and 1990 alone, health care costs per employee rose by 24.4%, a 9.5% greater increase than that of wages (Hsiao [1995] 1050). For those with medical problems that needed addressing, the situation became increasingly dire as the fund was squeezed tighter and tighter.

Another extremely serious issue is the lack of care for the families and dependents of workers. Before the reforms, the families of workers for the government in the form of SOEs and other state-controlled systems were considered naturally to be part of the enterprise. It was expected that, as they grew older, the youth would eventually contribute to the enterprise and thus earn back any medical expenses they had previously accrued.

With the changes, however, successful SOEs offering the most comprehensive care for employees only offered 50% reimbursement for dependents while the GIS promised 100% reimbursement for basic health services but offered no dependent care (Hsiao [1995] 1050). This left many families suffering and, in many cases, bankrupt when their child, spouse or parent needed medical attention at a hospital, even if not for the most dire of illnesses.

Other Forms of Coverage

In an attempt to bridge the gaps made by the two government-developed systems, the government used one more method, a new insurance system to cover the student population as well as those not covered by other types of insurance. The Basic Medical Insurance System was developed as a way to give minimum insurance to urban employees and the unemployed, and to create medical aid for urban areas ("China's basic medical insurance system…" [2009]). It was built to work through the creation of mandatory premiums where employers gave 6% of a worker's total wage bill, split between the employees individual earning and a social pool. Each worker was then asked to pay 2% of their wages, and then government sponsored social insurance agencies would take the premiums and give them to workers in reimbursement of payments to health care providers (Weber, Stenbeck [2004] 131).

However, there were several problems to this plan, the largest being that the money gained from workers could only be used to pay for medicines and services from government-stipulated health care providers. If the worker did not like these options, they were out of luck, unable to choose which doctors they might like to work with. The other major problem, which will be explored in greater depth in other chapters, is that often the

companies themselves could not afford to provide money for their workers as part of this fund. In the case of the many failing SOEs, the management could barely afford to keep paying their workers basic wages, so, even with continual government bailouts, their ability to provide medical insurance was woefully low.

Analysis

In the midst of an economic shift, there is bound to be an adjustment period where the population acclimates to the differences in the system. In China, however, the economic reforms have not only changed the way in which people access health care, they have fundamentally changed the perspective on how medical care is offered. In the shift from universal health care to one that is market based, the government chose to hope that the market would provide for the fledgling private practices and insurance companies. However, as hospitals and other medical care dispensaries sought to bridge the gap, the people could barely afford basic care, making nearly every trip to the doctor a struggle between money and health. It is in this context that the current health care system can be deemed a failure. People fear to access health care with the knowledge that their families will be forever burdened for their illness, making them less likely to seek out care, raising the number of ill in Chinese society. Additionally, the lack of a social welfare system besides the pilot BMIS leaves many Chinese lacking any sort of medical care. The Chinese medical care system is indeed facing a huge crisis, one that is failing the Chinese people for reasons that will be explored next.

Section 3: Political Influences on Medical Care

In evaluating what went wrong with the health care system, bringing about the failures described in previous sections, many different aspects must be evaluated. One of the primary players determining the course of the medical care system both before and after the economic reforms of the early 1980s was the Chinese central government. Though many changes have taken place in Chinese society over the past 30 years, the governmental structure in its intricacies has changed little. The many ministries controlling health, for example, have been around almost since the beginning of Communist rule. It provides structure to the entire country, playing an integral part in many sectors of Chinese economy. Its role in providing medical services to the population, however, has drastically shifted.

The central, provincial, and city levels of government make up a complex bureaucratic organism, originally put in place to limit the amounts of power that each level has and raise accountability (Pei [2002] 100). Even before the shift of China's economic system, however, the many levels of governance simply became a barrier to implementation of new laws, with redefinitions of policies from higher levels happening at each juncture. Additionally, the corruption in each level of government meant that decreased funding given by the central government was only siphoned off as it made its way to the local level, leaving little financing for the ground level doctors, hospitals, and medical programs (Oksenberg [1982]). These funding decreases served to radically shift the way that medical care was given, pushing China's expansive hospital system to a model of cost-effectiveness in approaching patient treatment.

However, before these funding decreases can be examined, it is important to understand the structures that have made the shift from a universal coverage system to one that is market-based, so difficult. After those are understood, the complex knot defining the government's role in the medical care system can be slowly unraveled. The most important aspects of the medical care system controlled by the government to be examined are: the difficulties faced in making changes to medical care due to the complexity of the governmental levels, the challenges faced by the medical care organizations themselves due to a decrease in government provided financing, and finally the role of the government as an insurer and controller of the health insurance system for both domestic and foreign companies in entering the market. These three focuses will be the base of my exploration in this section.

Health Care Bureaucracy

As described in a previous section, before economic reforms the health care system was controlled through the central government who then made decisions about the needs of different areas and gave resources accordingly. Since the start of the reform era, however, monetary support of the medical care system was decentralized, putting the burden of medical care financing on the provincial and city governments. Thus the central government, though still possessing the authority to make policy changes, could no longer wield their authority as money-lenders in order to ensure policy enactment, creating an unclear role (Hsiao [1995]). The central government could no longer control the direct financing of initiatives, so its role shifted to that of an advisor to the system, making policies and laws that it deemed best for the welfare of the Chinese people.

Nonetheless, the bureaucratic structure that was so effective in implementing policies during the Maoist era has fallen prey to the inefficiencies and corruption that have become standard since the economic reforms. A significant amount of tax revenue passes through the hands of different levels of government, especially before tax reform in the mid-1990s. In the Maoist Era, the strict punishment for stealing from this fund deterred any from pocketing health care money (Potter, Sharpe [1994]). Since those times, the system has changed a great deal. The money that once easily passed down to lower levels of government, now is subject to a high level of corruption within the government structure, with each level of the bureaucracy siphoning off money for their own interests (Potter, Sharpe [1994]).

The other major problem with government is the lack of transparency by which laws and policies are made. Without transparency, government officials cannot be held to a standard when making policies, increasing the chances of internal corruption without an ability to keep those responsible away from their positions. A carry-over from the Maoist era, policies dictated by the central government are never open to public eyes. In rare cases the government might release an early copy of a policy to gauge the public's response, but only very rarely (Tanner [1994] 60). The rest of the time, the different levels of government block any view of laws or policies made to sectors of Chinese life, including decisions made regarding health care and medical care provision. Added to this opacity is the indecision about who has the 'final say' in making laws. While the 1982 Constitution gives the right to make laws to authority to both the National People's Congress as well as the corresponding organizations, like those that will be explored in the following section, there is still a "lack of delineation of legislative authority" (Tanner

[1994] 59). Essentially, each level of government has some power in making and implementing policies, leading to unclear standards and differing perspectives on how to carry out a single policy.

Central Government

From the beginning of the Communist Era of leadership over China, the health care system was set up with multiple levels of bureaucracy. The Ministry of Health, the 'leader' of all the health care initiatives, is not the only player in determining the course of medical and health care in China. Overall there are three different ministries under the State Council responsible for the handling of different aspects of the health care system: the Ministry of Health, the National Population and Family Planning Commission, and the National Development and Reform Commission. Each ministry holds some responsibility in the health policy making process, a situation that illuminates the complexity in making changes in regulations.

The Ministry of Health (MOH) has a mandate from the State Council which gives it the strongest position over other health-related legislation. In regards to urban health care, the MOH has the power to draft laws regarding health policy, promote and enforce regional health programs, "guide the reform of health institutions", while also coordinating efforts at developing national and international efforts to improve health in China ("Ministry of Health" China Government Portal). These efforts are controlled through a complex organization that functions under the blanket title of "Ministry of Health". Internally the MOH splits into 16 departments focusing on different aspects of the health care system. Each of these individual departments holds responsibilities that can be vastly different or intersect multiple times, including, for example, the Department

of Health Policy and Regulation, the Department of Medical Administration, and the Department of Maternal and Child Health Care and Community Health. Each can make individual policies that will eventually be implemented on the national scale ("Ministry of Health" China Government Portal). Any change or shift in policy must therefore pass through all relevant departments before being passed into regulation by the MOH. This means any changes in medical care provision policy are exceedingly difficult to implement in large part to the many structures any policy must go through in order to gain approval (Pei [2002]). If a measure to change aspects of the health care system must go through 16 different departments to make a change, with any shift in the wording requiring approval of each section, it might take years if a policy shift can be approved at all. It would seem that these mandates from the State Council would cover all the necessary parts of health care legislation and implementation. The other ministries, however, play similar and sometimes identical roles.

The National Population and Family Planning Commission (NPFPC) plays an important role in creating and monitoring health policy and initiatives, especially as regards reproductive and women's health. As established, the mandates of the NPFPC include the implementation of national programs to create policy for national family planning initiatives as well as implementing programs to train medical personnel, oversee international collaborations in regards to family planning while also improving reproductive health ("The Missions…" [2005] NPFPC Website). Though these might be overstated in terms of what can actually be accomplished by the NPFPC, each branch still holds a great deal of power. Though the NPFPC's goals are mainly to promote family planning and control population, many of the 'missions' echo the purposes expressed

above as part of the MOH. Both organizations are responsible for coordinating international projects and creating health-related policy ("The Missions…" [2005] NPFPC Website). Thus the stage is set for potential conflict over which ministry has more authority over health and medical care-related issues, no ministry wanting to appear uninvolved or give up a portion of its power to any other ministry.

Finally, the National Development and Reform Commission (NDRC) also holds a significant role in determining the policies to be implemented in health related fields. The NDRC was created as a sort of monitor by participating in the creation and implementation of laws in many different ministries under the State Council, including other ministries directly handling health care. Section 9 of the NDRC's "Main Functions" states that the NDRC should play an important role

> "To coordinate social development policies with national economic policies; to organize the formulation of strategies, overall plans and annual plans of social development; to participate in the formulation of development policies with regard to population and family planning…health and civil administration…to coordinate the solution of major issues and policies in the development and reform of social undertakings" ("Main Functions of the NDRC" NDRC Website).

The NDRC must take part in the creation of all policies attempting to develop the health care system. As an organization, they provide the part of the approval needed in order for programs to come into being and are thus able to reject policies if they do not give their consent. For example, each Five Year Plan that comes out of the central government, setting a precedent for the policy measures that the central government will support in the upcoming five years (or less, historically), is released through the NDRC (Home Page

NDRC Online). Without the support of the NDRC, policies related to the development of the Chinese health care system will not be approved for implementation. In essence, the NDRC has a hand in every change that happens to the health care system giving them a very powerful veto position for different laws or the power to shift legislation depending on the opinions of the NDRC leadership. Thus the NDRC emerges as just another ministry that has a level of control over the direction of health care policy, presenting another possible roadblock to change.

Finally, playing a less important but still noticeable role in the making of health policy decisions are two other ministries under the State Council. The Ministry of Labor and Social Security has a department devoted to medical insurance, which allows it to monitor and potentially rebuff any changes to the medical insurance system, a system presided over by the central government. Also, the Ministry of Civil Affairs is responsible for the welfare of the urban poor, including the provision of their medical care. In essence, they also have the ability to push an agenda which might shift medical care policy (Hu [2004]). The State Pricing Commission also decides on the prices that hospital and health care center are allowed to charge based on average income in different provinces. The importance of these pricing controls will be further explored in Section 4.

One might think that the law making powers of these individual branches might not follow their stated goals or have as much say as is stated, yet over time each has played an essential role in policy-making. In his examination of the creation of Chinese policy, Michel Oksenberg noted that there are often “inter-agency and inter-provincial disputes” (Oksenberg [1982] 176), all of which are filtered into the central government.

Her further points out that though there are many of these disputes, the structure of bureaucracy is not set up in a hierarchical manner with "line authority" to easily solve disagreements in policy-making. Thus any disagreement between ministries can lead to a halting of the bureaucratic process (Oksenberg [1982] 176).

Additionally, the role that each ministry plays is extremely difficult to measure due to the lack of transparency in decision-making. Still, it can be revealed in the emergence of policy on certain issues, released by different ministries at once. While the government slowly stepping back from its position of extreme power during the economic reforms, the "commissions, ministries, and think tanks under the State Council retain their dominance over the content of legislation" due to the strong connections they made in the Maoist Era (Tanner [1994] 58). Their prominence during the earlier part of the Communist leadership helped them develop a solid position in the line of legislation and policy creation. Though the individual goals each one carries out might potentially be exaggerated in their mission statements, they nevertheless have driven policy decisions such as the reformation of the one-child policy that was passed in 1979. Since its creation, exceptions have been drawn for groups such as minorities (Hu [2002] "Family Planning Law…"). All three ministries must approve changes to be directly applied on a grand scale, to the entire nation.

In the midst of these many different structures, all laws, including those related to health care, are made to the benefit or detriment of the Chinese people, yet the people themselves have little or no say. As each of these groups make the major policies which impact people, the inability to find even one example of the process or discussion behind different policies reveals the government as completely opaque to those people most

affected. Since the functions of the different offices overlap a great deal, one must assume that compromises and deals are made behind the doors of government, but often decisions are made with an eye to the status of the government, rather than the welfare of the people.

Provincial Government

With the decline of a centrally planned and implemented health service sector, the province became the highest level of government with direct control over service provision. Though the central government still played and continues to play an important role in determining the policies and laws put in place for the health care system, the pressure to provide payment for health services and administration of medical care plans was pushed solely on the shoulders of the provincial government. The provincial level is also the first level where centrally given money is drained off. Local officials tend to benefit from the money given by the central government by diverting it towards projects that reveal short term growth, getting approval from higher levels of office. They get the heightened reputation and possibility of career advancement even if the money given is not used towards its intended purpose; it might also easily end up in the officials' pockets (Pei [2002] 105). Thus even the programs that have central support in making changes to the medical care system can by stymied at the provincial level.

The structures who customarily make health related decisions and are able to take the money remain basically the same as the bureaucracy of the central government. For example, both Hebei, a province in Northern China bordering Beijing, and Shandong, a province in Eastern China which does extensive business with the international community, have Provincial Health Offices, a Province Population and Family Planning

Commission and a Provincial Reform and Development Commission (Hubei and Shandong Government Websites). As seen above, these different divisions serve the same purposes as their higher level counter parts whose job is to carry out dictates from above. These offices cover a much smaller population but have similar problems as the central government in implementing policies.

Due to the sudden decrease in central government support, which will be discussed a little later, these commissions play a slightly more involved role in the lives of constituents. The departments responsible for the health of citizens in the provinces are now directly responsible for not only making laws and passing policies that help the general population; they are also the sole decision-makers about the provision of services. Instead of receiving both directives and funding from the highest level of government, the provincial government now only receives the law from above, and is left to collect tax revenue in order to carry out changes and implementation of the medical care system (Hougaard et al. [8] 2008). Though very important in view of government action, financing of these structures and the government's input will be more fully explored in the next section. One of the described responsibilities of the Shandong Provincial Health Department is "To be responsible for health care and insurance of those defined by the Provincial Health Care Committee" ("Health Department of Shandong Province" Shandong Government Website). This mission puts the Health Department in direct control over medical services in Shandong Province, and also puts it in the position of responsibility for taking care of those chosen to be given care. While all of these different departments have power, there is no hierarchy of authority that would help set policy. No commission has any superior power or is able to force others to do what is necessary,

meaning that few policies are implemented the way that the central government might like (Oksenberg [1982] 179).

City Government

The city governments are most affected by the corruption from higher levels of government, as they report directly to their provincial seats of power. They are not immune to corruption themselves, though. Money can easily get taken at the city level to supplement the pockets of city bureaucrats instead of going to intended programs. Furthermore, city governments are another level of control in government bureaucracy that can interpret policies to their own ends and indeed, many city governments do create their own interpretation of laws handed down from above (Oksenberg [1982] 177). While this might be a benefit in terms of specializing laws to fit the populations of a given city, it can also mean a greater diversion of money from the intended source into 'off the books' destinations. All these cities cannot be evaluated for their individual circumstances, however. Along with the four large cities in China that constitute their own municipalities, Beijing, Tianjin, Shanghai, and Chongqing, there are hundreds of cities throughout China that claim millions of Chinese as residents, 50 with populations over 1,000,000 (China Statistical Yearbook 2008). These municipalities are not held accountable to any provincial governments. Instead, they are monitored directly by the central government. (Beijing Government Online). Though cities all over China are not the same in population and vary slightly in titles of government, for the purposes of simplicity, the city governments of Beijing and Guangzhou, capital of Southern China's Guangdong Province, will be evaluated as representative of major Chinese cities. Beijing is useful to use in this circumstance because, as China's capital, it is often held up as the

standard for developing cities. Guangzhou is also a good indicator of Chinese bureaucracy because it is a rapidly developing city but one that must report to a provincial government as part of the vertical power structure. It is also growing economic sphere where many international companies have factories and run operations.

As a directly-administered municipality, with an urban center and semi-urban counties, Beijing is not part of a province and thus serves the role of both provincial and city government. Guangzhou, on the other hand, is responsible for carrying out the dictates of central and provincial government, while also determining what is best for its people. Just like the central government, both cities have a Central Health Department, a Department of Population and Family Planning and a Reform and Development Commission. Unlike the central governments mandate to only make policy, the city governments must ensure that the systems handed down from above are actually implemented. One of the Guangzhou Bureau of Health's responsibilities is stated as "Implementing the policies, laws, rules and regulations pertaining to health work by the Central, Provincial and Municipal governments. Mapping out the health program for the locality and formulating relevant rules and regulations on the development of health service in the light of the actual conditions of the city" ("Main Responsibilities" [2005] Guangzhou Bureau of Health). This control ensures that the higher levels of governments have a stronger say in what needs to be done, but also puts the responsibility on the Guangzhou government (similar to government of other major cities) to solve any resulting problems. It is difficult to evaluate what exists in reality by what intended responsibilities are. Still, the intentions of Guangzhou's government must change to meet

the needs of the population, and thus hint at the reality of what is happening bureaucratically.

Still, implementation is not the only responsibility of the city governments. The government also must decide on the division of resources given by the government to medical care facilities such as large medical equipment given to medical facilities highly subsidized or, occasionally, free of charge ("Beijing Municipal Health Bureau" Beijing Government Online). These allocations were part of the deal of the government with hospitals to be explained in a later section. One of the biggest responsibilities of the city government has not been explored yet, that of determining the structure of health funding. Beijing's Health Bureau explains that one of the primary functions of the Beijing city government (and consequently all other city governments) is to:

> "Study, work out, establish and improve a compensation mechanism for health undertakings… Formulate and implement relevant policies concerning the reform of the health system, such as expanding fund-raising channels… Control the aggregate volume and adjust the structure of medical expenses. Study, set and manage the price for medical services" ("Beijing Municipal Health Bureau" Beijing Government Online)

The role of monetary surveyor puts the burden of problems onto the city government to figure out inconsistencies in pricing and provision of services while also following the mandates of central government control.

All of these responsibilities inevitably lead to problems of clashing directives when the time comes to actually provide medical care services. When a policy comes down from the central government level, it might be reinterpreted at both the provincial

and local levels before being completely or partially enacted (Lampton [1978] 515). A policy such as one that relates to the provision of health insurance might be successful for Beijing, but not work in Lanzhou, the capital of Gansu province to the West that historically is much poorer. Because a 'one size fits all' policy does not work for many areas, they struggle to meet the policies sent down by higher levels of government though these policies might potentially worsen the health care situation in China. While city governments are expected to tailor their policies to meet the needs of their citizens, different cities simply do not have the means or enforcement power to accomplish this objective. Unlike Beijing, Lanzhou companies probably are not able to provide their employees with any degree of medical insurance though the Labor Insurance Scheme (a system described below) details that they should. Because they do not have the funds, the province might be punished for not following policy, though really, it is the policy that does not fit the area in which it is supposed to be implemented. Increasing these burdens is the fact that city and other lower level governments have the responsibility for paying the largest percentage of health care costs. On average, provincial governments pay for approximately 12.9% of total government provided health care funding while cities make up the difference, providing an average of 87.1% of the total government health care financing (UNICEF [2008] 8). Unfortunately the resulting situation puts the burden of provision on the cities even if certain policies do not benefit the majority of people.

In addition, the financing itself is subject to high levels of corruption, dictating a severe shortage of money that could otherwise be used toward reformation of medical care provision. This corruption has grown to such an extent that in 1999, a look by the Chinese National Auditing Agency found "slush funds and illegal expenditures that

amounted to 10 percent of 1998's [central government] tax revenue" (Pei [2002] 106). The opacity of money-spending by government officials on medical care related projects, and the many complicated levels of bureaucracy through which central government-provided money must travel has resulted in decreased levels of money given to the local levels and places where the medical care system is weakest (Pei [2002] 107). Additionally, the general public is not allowed to understand what is happening behind the government's closed doors, and thus is unable to make changes regarding the medical system from their experiences. A lack of accountability to the general population only allows problems to compound to a breaking point, ensuring maximum frustration from the populace.

Government Financing

Sources of Financing

In the midst of new economic growth, the central government made a choice to withdraw financial support that had formerly been given to the medical care system. In its place, the central government looked to provincial and city governments to become the main financiers of the government section of hospital and clinical financing with the remaining money to be earned by the hospitals themselves. Thus the city and provincial governments were left to their own devices to get the money they would formerly have gotten directly from the government through budgetary allotments. While some money could be obtained from the central government for the purposes of small, individual projects, this money had to obtained through special request, on the basis of negotiation between the province and central government (Hougaard et al. [2008] 8). Otherwise, all government-provided financing was obtained through taxation at the provincial and city

levels, though each of these taxes must also be approved by central government pricing commissions. These taxes are then reallocated for the use of different sectors of health care, with 78.3% of the total 4,725.1 million Yuan going to hospitals, an insignificant amount when considering what hospitals need, as will be described in the next section (UNICEF [2006] 58).

Financing Cuts

As described in previous sections, in the pre-reform period, little to none of medical care costs were covered by patients. As part of a work unit or danwei, the costs were taken care of by the government in a multi-tiered system. Over time, however, it became clear that this system was unsustainable. The government gradually reduced its share in the health care system by decreasing the amount of money directly funneled into its financing. According to World Health Organization statistics of government financing, in the ten year period between 1995 and 2006, total government spending on health care as a percentage of total health care expenditure decreased on average by 0.77% per year (China National Health Accounts WHO).

In the new economic climate, the earning potential of individuals went up but so did health care expenses. Between 1990 and 2006, health care spending as a percentage of total income went from 1.7% to 5.3%, a significant increase, especially for those who already have difficulty affording increased housing and living expenses (China Statistical Yearbook 2008). In 2007, Chinese statistical data proved an even direr picture. Every household but the wealthiest 10% of the urban population spent at least than 6.7% of their income on health care costs much higher than the average for a developing country (China Statistical Yearbook 2008). Rising unemployment rates were made worse as more

and more citizens either 'jumped into the sea' in attempting to start their own enterprises, or were fired from their jobs so the 'floating population' could take their positions for less pay. Without a job, very few people can afford to get care. The nature of the Chinese hospital system is such that no person can receive treatment, medication or medical aid without first providing payment, as will be explored in the next section. Thus, many in need cannot gain access to care and are stuck waiting out their illnesses or strain to borrow money from friends. Thus in the cases of chronic or infectious diseases, those with no money have no access to care, a theme that will be explored in later sections. The government's declining willingness to provide social insurance for those who cannot provide for themselves damns the impoverished or disadvantaged in Chinese society to terrible conditions and a potentially shortened life-span.

Another problem in the provision of funds is the increased number of health care institutions looking for government funding, despite the fact that the money being given is less than before. Since the reform period, more health care institutions, including health clinics and hospitals at all levels of the system, were built to attempt to cover the needs of the people. Between 1978 and 2003, the number of total health care institutions in China increased from 169,732 to 291,323 (China National Bureau of Statistics 2004). This expansion was characterized by increased density of health clinics in general throughout China, not focused in specific provinces or areas. Therefore the city and provincial governments now split their decreased budget even greater to accommodate more clinics, leaving even less money for individual clinics or hospitals.

As the amount of money allocated for each hospital decreased, certain priorities of medical care were emphasized over others. With Chinese medical service provision,

prioritization of certain aspects of Chinese health care led to imbalances in what services were lucrative or even just affordable to access for patients in hospitals. Since the beginning of universal health care in China, the Communist government strove to provide medical supplies for hospitals. In the centrally planned economy all products, including medical, were created by state-owned enterprises, as described earlier. After the reform period state-owned enterprises continued to make these goods, expanding them to outside markets as well. For example, a well-known maker of oxygen cylinders for medical use is Yantai Kangbeier Medical Appliances Co., Ltd, a state-owned enterprise working out of Zhaoyuan, Shandong Province (" Yangtai Kangbeier…" TradeVV Company Profile). As a company, it exports to North America and Africa as well throughout destinations in China. As a state-owned company, the government can easily take some of the goods from this company and others like it and subsidize them for domestic use. As a result the consumer price index for health care appliances has decreased on average by 1.2% per year between 2001 and 2007 (China Statistical Yearbook [289] 2008). This means that health appliances and goods are given to hospitals and health care clinics at highly subsidized rates, making it easier for consumers to get them.

However, this prioritization has a very negative effect on other aspects of medical care. A population that loses out in the grand scheme of things is that of the doctors, nurses and other medical technicians who provide medical services. Goods are easier to obtain on the market and can help the hospital remain solvent by charging customers high rates to use certain technologies. On the other hand, though, the salaries of doctors are not supported by government funds, leading to an overall decrease that doctors themselves are expected make up through heightened rates or by shifting to private practice. As

fewer physicians see the benefit in remaining in the public sector, numbers of publicly employed doctors shrink, making those physicians with special skills remaining in high demand, with higher prices. In this system, a person with a serious illness has right to fear for their ability to pay for a hospital visit. With the economic reforms, many can afford more and better lifestyles, with the purchasing power of average urban households increasing on average by a consumer price index of 1.6% per year since 1994 (China Statistical Yearbook [285] 2008). This increase does not come close to meeting the huge increase in medical service expenditures which average an increase of 6.2% per year (China Statistical Yearbook [289] 2008). In essence, medical services, including in- and out-patient care, basic hospital testing, minor and major surgeries and much more, are increasing in price much faster than the average Chinese consumer can afford to pay.

As government spending on health care declines and remaining funds are increasingly prioritized to sector not directly helping the population, consumers are left with the brunt of medical care expenses. An example of the effects of these changes is the increase in individual spending on health care for the average urban resident. In 1990, individuals spent 2% of their income on health care, a much greater amount than previous to the reforms but not substantial. That percentage jumped to 6.4% of urban resident's income in just 10 years, by the turn of the millennium. In recent years it has leveled off at around 7%, a substantial amount for people who are generally healthy and only need medical care when severe problems arise (China Statistical Yearbook [316] 2008). The difficulty in such a large amount is not only in percentage of average income, it is also a problem of shifting the Chinese population into the consumer mindset, a topic that will be explored later. This reveals that even with increased disposable income and purchasing

power as consumers, the decrease in government funds towards health care took a toll on the average Chinese citizen who strove to continue to work.

Philosophy Behind the Cuts

The decline in government funding not only superficially influenced the ability of Chinese consumers to pay, it also reflected a fundamental shift in the idea behind provision of services. In the former universal care system, the guiding philosophy was one that emphasized the ability of every citizen to gain free or nearly free care at an equal level to other citizens (Azimi, Welch [1998] 665). By removing a great deal of funding from the old system, and reforming hospital structure to not be dependent on government financing, the government pushed a policy of 'cost-effectiveness' within the health sector. The model based on 'cost-effectiveness' means that for certain choices about medical practice, the health care organization makes decisions on what will be most cost effective for the organization, taking only a very small stake in what is best for the patients (Azimi, Welch [1998] 665). It is used in decision-making for many areas of medicine for example the staffing of certain hospitals, because certain better trained staff members are paid more and thus might be less cost efficient to the hospital's budget.

The direct result is a change in services given by the hospital which cause it to focus more on profit than on the needs and demands of the patients. The important role of hospitals as they struggled to provide services while raising funding is of extreme significant in reaction to the new 'cost-effectiveness' model of medicine and so will be explored in depth in a later section. This method of running a health care system has not, however, been shown to be equitable in the face of providing services (Weinstein, Manning [1996] 123). Many times the true needs of the patient can be ignored by

focusing on what is best for the hospital. Essentially, in choosing what is most cost-effective, the general health of the population is not considered. The person is not considered for their status as a person, but rather as a statistic within the larger population.

Insurance Provision

Economic reforming of health care provision brought about the development of another system, a shift strongly encouraged by the central government, the development of health insurance. Up until the reforms, the discussion of health insurance, state or privately provided was unnecessary due to the universal nature of coverage. During the reform, however, awareness arose in the government about the possibility of health insurance used to solve the gaps resulting from a market-based system. Thus insurance began to play a significant role in determining the future of Chinese health care.

Insurance Structures

As discussed earlier, two schemes were set up in the 1980s in an attempt to bridge the gaps in the health care financing system. Without the total coverage of the danweis the Government Insurance Scheme (GIS) and the Labor Insurance Scheme were intended to cover the entire working population in urban areas, as described in the previous section. The GIS was set up so that all those working in government positions would have a small percentage of their wage, plus tax money taken from them put toward a common fund into which the government also put money. This fund then helped pay for hospitals stays, medications and most minor surgeries (Hougaard [4] 2005). The same was true for the Labor Insurance Scheme which automatically took 2% of all employees wages and the enterprise contributed the equivalent of 6% of each worker's wages (Hougaard [4] 2005). This money all went into a common fund that is available for the use of patients in

outpatient circumstances created with 30% of the money given by enterprises (Hougaard [4] 2005). The other 70% of enterprise contribution goes into a social fund which reimburses certain inpatient procedures and services over a set deductible line. These services are supposedly guaranteed as set by the "Public Health Services Administration Act" of 1988, which sets standards for all government employees, the army, and workers in the public sector, along with university students living provisionally in cities. The other major piece of legislation was the "Decision of the State Council about Construction of Comprehensive Medical Care Scheme Among Urban Workers" of 1998, which said that coverage would be provided for all workers in enterprises in every urban area (China Government Website).

In the past three years, however, the government recognized that these schemes, supposedly covering the entire urban population, were not enough to provide the general population with basic medical care coverage without causing financial difficulty. The Basic Medical Insurance Scheme (BMIS) was created to cover the remaining populations left unaided by GIS and LIS and recognized that the most vulnerable populations were the elderly, infirm, and children not covered under the insurance plans of their parents. Starting as a trial in 79 cities, the BMIS supposedly covers 1.3 billion people (as stated by the Chinese Ministry of Health) through a fund pool where the participant formerly paid 10 Yuan per year with lower levels of government paying 40 Yuan per person. In recent years the fund pool has risen to a 20 Yuan contribution from citizens with 80 Yuan provided by various levels of government (Shan "China's Basic Medical Insurance System covers 1 billion people" 2007). Speaking through the mouthpiece of the newspaper, the *China Daily*, the Chinese government recognizes that there is low medical

insurance coverage which has "prompted the government to set up a nationwide safety net of minimal medical insurance, which currently includes… the basic medical insurance for urban employees and the unemployed as well as …for the poor" (Shan [2007] 1). At the very least this statement, in promising nothing for the future represents recognition that the BMIS is not aiming at an eventual return to universal coverage, but instead just provides basic coverage for urban residents. Still, many are not helped by the BMIS as they do not have money or, in the case of the 'floating population' are not even official residents of the city and thus not entitled to such benefits.

Private Domestic Insurance

Aside from the basic social funds set up for the purposes of basic coverage, many companies have sprung up in China to provide health and life insurance for those with enough money to ask for better coverage. Since the reforms, the rise of Chinese life insurance, with health insurance as a sub-part, has blossomed into a multi-billion Yuan industry comprised of many players in and outside the government as money making ventures. The first initiative of Chinese health insurance was created by the government under the name People's Insurance Company of China (PICC) which had a monopoly on China's insurance market almost instantly after the reforms began ("China Insurance Regulatory Commission" US-China Business Council). No other insurance company was allowed to develop during the early years of PICC. It was the PICC that began to develop the standards for different forms of insurance, including health insurance, for China.

In 1998, however, the new China Insurance Regulatory Commission (CIRC), a national office directly under the State Council took over control of insurance market regulation. The main functions of the CIRC are to create policy and develop strategies for

the entire insurance sector, create standards for employees and allow or reject the creation of both foreign and domestic insurance companies ("China Insurance Regulatory Commission" US-China Business Council). Thus the CIRC has become an important player in determining how the health insurance market develops and supposedly monitoring the quality of companies trying to enter the system. More often then not, however, the quality of companies' offerings is not monitored closely enough to weed out bad companies (Towns [2007] "Chinese Health Insurance…").

The PICC was eventually disbanded to create 3 different divisions, China Life Insurance, China Property Insurance (the new PICC) and China Reinsurance (an insurance system which protects other insurance agencies and companies in the case of major problems such as widespread sickness) with more opportunity for new companies to also gain CIRC-certified licenses which would allow the creation of more life insurance companies. The disbanding of the PICC came with new laws that life insurance companies, where health insurance is also offered, had to declare themselves separately from other forms of insurance (Towns [2007] "Chinese Health Insurance…"). Though the law was made in an attempt to monitor the domestic health insurance market, in reality it left regulations open to the insurance companys' interpretation. With this opening in the market 13 Chinese companies developed in order to provide options of different forms and levels of coverage in all areas of health insurance ("A-Z Index of China's Major Insurance Companies" [2006] Chinese Government's Official Web Portal). Of these, the largest market percentages are held by Ping An with 45% market share and China Life with 31% market share (Towns [2007] "Chinese Health Insurance…"). Other companies tend to remain popular regionally but not across China. Since these are not as

closely monitored anymore, though, quality control of insurance offered has not been emphasized by the government (Towns [2007] "Chinese Health Insurance…"), to the detriment of the population.

Internationally Provided Insurance

The other aspect to the health insurance market is the entry of foreign firms into the Chinese market, a difficult but potentially lucrative move that was made possible in 2001. Each foreign company that enters the Chinese health and life insurance sector has to go through a series of processes, many of which present an almost insurmountable barrier to entry. The key steps for a prospective insurer to enter the market are very important and yet very complicated. First, the company must be operating a representative office in China for at least two years though the office itself cannot do any business. Next, the company must have an international parent company with assets exceeding US$5 billion. The parent company must also have at least 30 years of experience in the insurance industry. Finally, the home country of the international agency must have a system of financial regulation and supervision in their home country ("China Insurance Companies" EconomyWatch). Adding to these official conditions, an unstated condition that often arises is the cultivation of a personal connection to important members at the CIRC which can help ease the approval process (Towns [2007] "Chinese Health Insurance…").

All of these barriers and guidelines have not deterred international players from the Chinese health insurance market, however. The first international insurer to enter the Chinese health market was American International Group (AIG) which held the largest foreign stake with 3% of the total Chinese health insurance market as of 2005 (Towns

[2007] “Chinese Health Insurance…”). One of the first international companies to receive a CIRC license, AIG was able to capitalize on the health market. AIG now provides a separate course of health and life insurance for businesses to buy for their employees on a wider scale, as well as Accident and Health Insurance for families in the case of injury of death including care for cancers and other critical illnesses as well as child accident and illness protection (“AIG General Insurance…” [2008]).

Another option available to companies are joint-ventures with Chinese firms, which ease the process of entering the market yet allow companies a degree of freedom and security within the political system. For example, Allianz created a partnership with a Chinese company CITIC Trust and Investment, Inc in order to bring legitimacy to their operations in China, despite the fact that CITIC was involved in any health insurance related business in China (“Allianz in China” 2006). Another example of indirect entrance is a well established insurance and re-insurance company, Swiss Re, who obtained a license from the CIRC to perform re-insurance in China in July of 2002 in order to capitalize on the annual growth rate of 10-13% in the Chinese health insurance market after building offices in Beijing and Shanghai in 1996 and 1997 (“Swiss Re Gets…” [2002]). Then in 2005, Swiss Re expanded its role by joining a joint-venture in the newly formed China Re Asset Management Company Limited (CRAMC) where Swiss Re held 10% of the assets with all others held by Chinese insurance groups, the largest shareholder being the China Re Group (“China licenses first…” [2005]). Swiss Re’s expanding role in the health insurance market as well as the wider health insurance market represents the potential growth for international companies within China.

These companies are able to work throughout China but often do not appeal to the vast majority of the Chinese population. Without connections to health care providers, they often hold an uncertain role in the health care market though they are constantly trying access the vast Chinese market. To the average Chinese consumer, they are not necessary or appealing (Ensor [1999] 872). As will be discussed later, a consumer gap has emerged in the Chinese population. Since health insurance is something a person might pay for years and yet never see a result, it does not seem appealing to a saving-based society. Additionally, as Tim Ensor suggested, Chinese might suspect paying double if they are supposed to be covered under Government Insurance Scheme, Labor Insurance Scheme or Basic Medical Insurance System and yet are also paying for their own medical insurance (Ensor [1999] 872). Medical insurance companies continue to enter the Chinese health care market in the attempt to change the financing of medical care towards an insurance based market.

Analysis

A number of problems stem from the political system, making it nearly impossible for progress to be made to help the average Chinese citizen gain affordable access to health care. The first aspect of the government that gets in the way of positive change is simply the complicated layering of multiple offices across the central, provincial and city levels. Each of these bureaus has overlapping interests in making health care policy, and each must agree on what is handed down to lower levels. Since the decision-making processes of these different stages is completely opaque, however, it is easy for policies to become out of touch with the medical needs of the people, needs that can only be determined by the people themselves and medical professionals. The

system lacks accountability since there is a lack of public knowledge blocking popular commentary on considered policies. A final problem of this complicated bureaucracy is the siphoning off of money from the central government's coffers. Though severely decreased from previous times, the still substantial government budgets pass through many different departments at varying levels of power, with each level holding a degree of control over that money. Thus, much ends up in the hands of corrupt officials who either take the money, or funnel it towards projects in which they have a personal interest, or might advance their careers. The lack of governmental changes to the system also aid in exacerbating already dire illnesses, both chronic and infectious, as will be explored in a later section.

The next problem stemming from political decision-making is the decreased funding itself. As hospitals and medical care centers struggle to stay financially viable while still providing care, decreased government funds only exacerbate the difficulties faced. Furthermore, as the country and medical system, shift from a philosophy of universal care to one of cost-effectiveness, the needs of the ill are not met or are ignored for more cost-effective alternatives. The greater division of funds between an increased number of medical care institutions has driven up prices of medical services, with little help for average Chinese. Adding to the burden of the Chinese consumer are the rising costs of care due to new hospital pricing structures. These specific barriers will be more clearly explored in the next section.

Finally, the presence of government provided insurance has done little to aid populations seeking out assistance. The earlier systems, the Government Insurance Scheme and Labor Insurance Scheme, only served to point out what deficiencies still

existed in the system, and the Basic Medical Insurance System, which was built to cover the remain populations, has done little in the way of lessening extremely high medical prices or helping out the majority populations. Though other domestic and international companies have stepped in to attempt to cover the populations, a lack of government oversight has led to varying quality of programs that might simply take from the consumer without giving them anything in return. Moreover, the idea of customers buying an insurance plan without visible results defies cultural barriers against unnecessary spending. Many Chinese do not find the need to buy insurance if they are without a serious condition, yet are left in a terrible situation if just such an illness or condition arises. The issue of Chinese reticence to buying insurance or providing for future problems is one that will be explored further in sections about the system's response to specific illnesses. All in all, the government plays a very significant role in its inability to make changes that will help the populace, creating results that harm a huge percentage of Chinese society.

Section 4: Chinese Hospital System

As the most integral structural system within China's entire medical care system, the examination of hospitals represents a case study of the new cost-effective based policies implemented by the government with the reforms of the early 1980s. As the central government withdrew from their role as primary financiers, putting the onus on lower levels of government, they also completely redefined the roles of hospitals within the new health care market. What had been a completely public system was now forced into the market under a strict set of regulations about pricing of services. The new market structure was not realistic for hospitals with outdated hierarchies and little real business knowledge. These shifts not only created the internal fear of hospital insolvency, but also fear about the livelihoods of doctors, nurses and other health care practitioners who worked for a pay that came with none of the perks of previous eras, and many new responsibilities. The resulting situation brought about a rise in health care charges for the average citizen and forced doctors into a moral dilemma about their relationship with pharmaceutical companies and their care-giving abilities to patients.

Structure of the Hospital System

Before examining the effects of the reform, we must first hospitals' integral place in the health care system. As mentioned in a previous section, the hospital scheme set up during the Maoist Era was a three-tiered system, built in order to reach everyone in the country. In the cities, this three tiered system centered around three major groups of hospitals. The first, the specialist hospital, is maintained for training research, medicine and surgery with university-trained doctors and attached medical schools. These specialist hospitals are the highest level of treatment, with patients normally needing a

reference from other doctors to gain access (Hillier [1983] 139).The municipal or provincial hospital was the other high level hospital which served a larger population of around 1 million people for populations that did not need specialists. If resources or services could not be provided at lower levels, the municipal hospital could care for those in its area. The mid-level district hospital serves a smaller population of around 200,000 and performs general medicine and simple surgeries but often does not have specialists (Hillier [1983] 139). Finally, the factory or neighborhood hospital serves a population of 10-20,000 and, unlike the higher level hospitals which had been city or state funded, was funded by the local citizens or SOE factories (Hillier [1983] 139). This lowest level of hospitals might have university trained doctors but mostly likely had relatively untrained doctors, along with pharmacists, family planning centers and stations for preventative inoculations.

The hospital structure is, in many ways, a barrier to itself through problems in organization, administration, and price-structuring. The structural and bureaucratic aspects of hospitals that the Western world takes for granted simply do not exist in most Chinese hospitals. For example, most hospitals do not have a board of directors, mission statement, strategic planning board or other organizational bodies to plan the future of the hospital (Wood [2005] 3). The hospital president has almost never been trained in business models and normally and, as an active physician him or herself, must deal both with patients as well as the administrative aspects of running the hospital. Though he or she holds the highest position in the hospital, often he or she was appointed to the position by the Communist Party branch of the hospital for reasons of political background rather then for reasons of competency. Indeed, graduate courses on hospital

management are generally a foreign concept to the Chinese with only a few, very new programs being offered for the training of hospital administrative staff (Wood [2005] 3).

From the top level, the organizational structure only becomes more confused. There is little to no organizational setup for finances as no cost-centering is done to identify the available finances for different sectors of the hospital. Middle managers often do not have sole authority or control over the budgets of their specialty of the hospital. Instead the authority to allocate money is ambiguous with managerial functions spread across a variety of different positions (Wu [1997] 268). Other basic problems exist like: lack of collaboration between hospitals, the absence of a bureaucratic financing structure or human resources to address work inefficiencies, or task assignment issues and reviews of staffers (Wood [2005] 3). Among the biggest concerns of patients are the lack of cleanliness of hospitals, mistakes made by doctors and the low efficiency and negligible levels of patient service. Essentially, many of the problems that patients have are a direct result of an absent infrastructure geared toward patient treatment (Zhang, Wood [2004]). Thus the basic structure of the hospital stands in its own way for efficiency in the system described below.

The 'For-Profit' Shift

Low Costs for Basic Services

This structure was put to the test with the economic shifts of the early 1980s. In following with the reforms of the time and the new 'cost-based' model of health care, laws were created making hospitals responsible for their own growth and finances, though still owned and managed by the government (Hesketh [1997] 1617). This meant that a hospital might receive a small percentage of its needed income from the

government in forms explored a bit later, but otherwise hospital administrators were responsible for ensuring hospital solvency. In 1982, the new medical care system included a sweeping change in the way that hospital services were priced. Basic health care services including consultation, inpatient stay, and basic operations were assigned prices much below market price (Hesketh [1997] 1617). As mentioned earlier, these prices were set by the State Price Commission within the National Development and Reform Commission on a province-by-province basis. The system was meant to ensure that diverse income levels across the different provinces were accounted for in determining pricing for different services.

Hypothetically, the new pricing of certain services would create an environment where all Chinese citizens could go the hospital and receive necessary care for lower pricing. The majority of urban Chinese citizens do not go to a physician unless they feel something is wrong physically. Therefore, a law to limit the pricing of certain basic services was hoped to have the effect of weeding out patients with minor problems at lower costs so the average, healthy citizen would not be greatly impacted by health care costs. Yet, as early as 1997, patients were paying close to 30% of their annual household income to pay for an average hospital admission (Hesketh [1997] 1617). The question that then arises is what is the source of these additional charges?

Necessary Markups

Setting services below market price did not allow hospitals to achieve the necessary level of financing to keep the institution afloat. The government therefore allowed the creation of certain mechanisms to aid hospitals in making up the difference between what is currently being earned through government support and minimal service

fees and the substantial dearth in funding remaining. In changing the pricing structure, the government stipulated that money could be earned by hospitals in two ways, mark-up of pharmaceutical prices, and high pricing on advanced technologies.

The mark-up of drugs within the hospital system was one of the most significant shifts in creating more hospital income. It worked through percentage raises in wholesale prices of medications that the hospital had bought in bulk. A vast majority of pharmaceutical companies began as state-owned enterprises which, prior to the reforms, distributed state-approved drugs across the country under state supervision (Hsiao [1995] 1050). So, to aid the hospitals, the state continued to allow low pricing and easy distribution for many companies. Additionally, the relationships that hospitals formed with drug companies became profitable to hospitals as well as doctors, though at a moral expense, which will be explored a bit later. In order to ensure solvency in the new economic climate, the government now allowed hospitals to sell the drugs bought at wholesale prices, for up to 25% over their bought value (Hsiao [1995] 1051). Now that foreign companies could also enter the market, a greater number of foreign-made drugs were also imported and bought by hospitals. Often these drugs were significantly more expensive for the hospitals but even they could be marked up 13-15% above their wholesale purchased price.

There was an extremely strong reaction from hospitals to the new ability to mark-up drug prices. Suddenly more pharmaceuticals were being sold than ever before. The profit margin for these drugs was a significant factor in the budgets of certain hospitals. Larger profit margins could arise when a plethora of drugs were prescribed to patients. A study of a hospital in Wuhan said that up to 50% of all Western pharmaceutical sales

were turned into profit for the institution while 20-30% profit could be made on traditional herbs and Chinese Traditional Medicine (Henderson [1984] 72). As a direct result of the profit to be gained from pharmaceutical sales, many hospitals started developing their own pharmaceutical factories or partnering with existing factories in order to receive even lower wholesale prices that could then be marked up above market value. Doctors played a key role in encouraging the sales of pharmaceuticals, and, some argue, became so wrapped up in the market that they began to over-prescribe medication. The implications this has on doctors as the key promoters of the pharmaceutical market is a very important issue in this change and will be addressed a little later.

The other money-making endeavor was in raised prices on 'new and advanced' technology used for scans and tests to determine illness. While 'high-technology' equipment such as CT scanners and MRI machines are extremely expensive, a hospital can still obtain these diagnostic test machines with government and bank loans. In some cases, the local and provincial governments will even pay for hospitals to get high technology machines from Chinese medical supply-making SOEs if a hospital claims that their technology is too outdated (Wang [2004] 16). Average urban public hospitals are now expected to have these machines and be able to operate them, necessitating a substantial technical staff separate from doctors and nurses to keep them running well. The nation-wide number of technical staff, excluding trained doctors and nurses, has increased over 1.8 million people or approximately 73% between 1978 and 2002 (National Bureau of Statistics [2003] 805). As a result of the added effort needed to buy and staff these new technologies, the prices for their use have increased rapidly.

The ability to charge over market price for advanced technology has brought a great deal of money to Chinese hospitals. Because no specific rules exist for the amount over market price that can be charged, not only are those who pay out-of-pocket expected to pay prices beyond market price, but those with insurance are charged multiple times beyond market value. As early as 1988, at market price a CT scan in Shanghai cost 156 Yuan with fixed and variable costs taken into account. Yet, for an average uninsured patient, the out-of-pocket expense was around 181 Yuan and for those with insurance, the average charge was 362 Yuan ("Financing Health Care" World Bank 43). Often, even those who were insured ended up spending money to pay for these scans because insurance companies, recognizing the mark-ups, refused to reimburse fully for the services. While the hospitals could make high profits, however, they continued over-charging, sometimes pressuring doctors to order more tests than necessary in order to bring more money to the hospital. On the other side, many times patients are not given necessary tests if they cannot pay the high prices ("Financing Health Care" World Bank 42).

The 'New' Role of Doctors

As the pricing mechanisms changed, so too did the role of doctors as enforcers of this new system. The stability of the danwei in which doctors worked disintegrated with the change of the economic circumstances of hospitals. Doctors and nurses still received a certain base salary, but with the rising costs of living, being a doctor was not the high status position it had previously been. However many different options arose for doctors to make extra money in addition to their salary off of the new system, mostly 'through the back door'. Thus, doctors were placed solidly in the middle of a moral dilemma. As

discussed previously, there was also a great deal of pressure on doctors within hospitals to help the hospital succeed, sometimes at the literal expense of the patients. Conversely, the reason that many young students become doctors is to help patients, making their lives easier. So where is the balance?

Doctor Satisfaction

Approximately 1.9 million certified and assistant doctors are licensed and work within China, including all who have gone through the certified medical licensing practice in Western and Traditional Chinese Medicine (National Bureau of Statistics [2004] 860). Yet for many, life is not how they might have envisioned. Previously, the danwei of the hospital had ensured a stable salary, living space and relatively comfortable life during the fifth year of medical school when medical school students were assigned to a hospital as resident physicians (Henderson [1984] 57). After passing the state promotion examination, residents became physicians and expected to be promoted based on experience. This set a consistent pattern in the life of doctors and in a life of work but no worries about the future.

All that security was questioned with the new reforms. In 1980, the Ministry of Health came out with a "Report on the Granting of Permission for Individual Private Medical Practice" which eventually brought about the 1985 legalization of private practice for physicians (Lim et al. [2004] 330). Eventually, in 1989, the Ministry of Health also allowed doctors who practiced medicine in the public sector to offer private medical services part-time ("Regulation concerning part-time…" [1989]). In many ways this presented an opportunity to doctors, allowing them to earn money in a different way, potentially work at their own pace, and, if specialized, seek a wealthier clientele.

The hospitals had a response to the new regulations, however. Since doctors could now earn money away from the public sector through part-time private practice, many public hospitals decided to lower the salary rates of their doctors, expecting that they earn excess money off of other sectors (Lim et al. [2004] 330). Gradually, with the downfall of the danwei, all the other secure elements in the lives of doctors that had existed in the Maoist Era were withdrawn. Many hospitals stopped providing housing and other benefits that were part of the old system. It became harder to stretch the decreased income given by hospitals to all the different aspects of life that were now important including new consumer goods, food and even the education of a doctor's child, a perk that had been provided by the danwei but no longer existed for free.

The direct result of the change in doctors' roles was a decline in the satisfaction of doctors with their new positions. The opinion of doctors was unknown until illuminated in a 2004 study of doctors in both urban and rural areas in Guangdong, Sichuan and Shanxi Provinces. Asked through a Chinese questionnaire, there are inherent possibilities of error, yet the consistency of the answers revealed common trends. For those working in urban areas, only 30.9% were satisfied with their jobs and only 10.5% were satisfied with their income. For those in the public sector, only 3.3% were happy with their income (Lim et al. [2004] 333). This number can be compared to a survey of the general population across all different professions. In one survey, up to 81.9% of respondents were satisfied with their professions (Nielsen, Smyth [2006] 21). Among seven indicators, the only category that showed doctors greatly satisfied was their relationship with patients with 62.3% of all doctors in urban areas happy (Lim et al. [2004] 333).

From this data, a trend emerges reflecting the needs of doctors. The income that these doctors are paid for their labor is much below what they have come to expect from the system. Many might think that they are not compensated for the level of work that they do, while a majority are dissatisfied with the nature of their position in the world. This example serves to point out that these doctors have been driven to the end of their resources, wanting to keep their jobs but watching the advantages their jobs once gave disappear. These results, from provinces with vastly different qualities, reveal that the medical profession no longer provides the stability and comfort that doctors have come to expect. Thus, many doctors are stuck in hospitals which do not pay them enough money and do not provide them with necessary comforts.

Physician view of the private medical system itself was also shown to be quite negative. Though more potentially lucrative, the private sector carried both stigma and uncertainty since medical students are expected to take their assigned position from the government. Medical students are provided with the opportunity to take a single job that is made available by the government. For those that do not want the assigned job, however, it might mean the government blacklists the physician from ever practicing medicine in the public sector. As a result, a tough decision is put in place. In the same study as above, only 32% of doctors believed that the existing health care system was good, yet 52% said that it was too difficult to start up a private practice (Lim et al. [2004] 333). Therefore the benefits of taking a job that might ultimately make more money and help the doctor and his or her family to live a better life, are often outweighed by the costs of dealing with punishing government bureaucracy and potential failure.

To make matters worse, there is a possibility that the difficulty of a doctor's life has become a barrier to doing their job passionately and well. Since no extra money can be made from additional work hours or responsibilities except in rare cases, there is very little incentive for doctors to work hard. Working in an unproductive system with fear of taking the only way out leaves many doctors in a difficult position of needing job stability for themselves and their families, yet realizing that the health care system as it stands is failing those who work for it the hardest.

The 'Other' Form of Doctor Payment

In order to make up for the low compensation rates of doctors, many have found ways of receiving 'under-the-table' payments which help supplement their average salaries. Though officially denounced by the government, doctor incentives became an enormous section of the world of medicine, especially in hospitals. The form and source of these incentives varied between two major sources, patients hoping to get better or prioritized care, and pharmaceutical companies hoping for an insider to sell and promote their wares.

Hong Bao Bribes for Doctors

'Back door' doctor compensation came from patients to try to ensure better medical care in a system still struggling to meet the needs of a huge population while keeping the hospital afloat. The primary way of doing this holds a long established place in Chinese history, the exchange of *hong bao* or 'red packages' that contain money. In China, the giving of *hong bao* is traditionally done on Chinese New Year or other major holidays to symbolize good luck and good will between the giver and recipient (Chiu et al. [2007] 522). In the context of the hospital, doctors were presented with *hong bao* for

many different reasons. Normally the patient and their family hope that a doctor will prioritize their case. However it also might represent the wish of uninsured patients that their doctor will go directly against hospital wishes by avoiding the most expensive tests, procedures or medicines (Bloom et al. [2001] 30). In some cases 'red packages' were even given to hospital managers or technicians to get their tests and cases examined first (Bloom et al. [2001] 29).

While a doctor has a right to refuse money or favors so they will not be held to the expectations of the patient or the patient's family, many see it as an alternative source of pay that contributes greatly to their average salary. Depending on the seniority of the physician, the reputation of the hospital, as well as the extent to which the patient wants priority, *hong bao* 'gifts' can range from 140 Yuan to over 400 Yuan (approximately US$20-58) (Bloom et al. [2001] 30). This number might not seem too significant until the actual salaries of doctors are examined. For a starting doctor just out of medical school, monthly salary in prosperous cities normally comes to only 700 Yuan, barely enough money on which to live (Wu [2008] "Gifts from patients…"). Even for a doctor working in Beijing with 20 years of experience, average monthly income might only come to 9000 Yuan (approximately US$1300) which is still a relatively small number yet lower than the payment of doctors in many other developing and developed countries (Wu [2008] "Gifts from patients…"). For the most high paid, even a one-time gift represents a more than 4% increase in salary. Often these gifts are continual, though, persisting at regular intervals as long as the patient needs care.

With time, however, the giving of *hong bao* has almost become an expectation with many doctors feeling that their low level of compensation justifies the acceptance of

'gifts' from patients ("China's bid to end…" [2008]). Doctors even at the largest, most sophisticated hospitals such as a surgeon with the surname Wu complained of a 2000 monthly income including bonuses and a compensation of only 3 Yuan (approximately US 50 cents) for a complex procedures such as an appendectomy ("China's bid to end…" [2008]). Therefore, in order to keep their doctors happy and show their patients the highest level of care, many physicians expect to receive these types of payments. One study showed that in Shenyang, an urban center with high level medical facilities, 50% of inpatients paid *hong bao* averaging about 260 Yuan (Feng, Feng [1994] 13) and 74% of inpatients in a sample of urban areas had made some form of informal payments (Li, Huang [1995] 17)

This system of 'gifting' has become nearly institutional throughout China, actually bringing down the effectiveness of the hospital system. Now that patients feel that they must give extra payments to doctors, the existing procedures for seeing and treating patients in hospitals breaks down. Due to a low level of structural organization, individual doctors can take their own reins, giving priority to those that have paid them most, ensuring the highest level of care for those able to pay higher fees, and less attentive care for those unwilling or unable to pay extra doctor fees (Wood [2005] 5). Additionally, for those without insurance, the process of bribing doctors to give them less expensive care creates a conflict of interest between loyalty to their hospital, and obligations to their patients. Since all patients must pay for procedures before the procedure is given, patients without means must try to convince the doctor to find other methods of treatment, so they will not need to pre-pay (Wood [2005] 5). On one hand, a certain level of hospital loyalty exists and doctors are expected to emphasize more

expensive procedures in order to keep the hospital solvent and productive, but on the other hand, patients without insurance or less money hope to get the basic treatment they need, perhaps even avoiding necessary tests and treatment, so they will not be impoverished by a single trip to the hospital.

The Pharmaceutical and Technology Company's 'Inside Men'

The other players offering gifts in an indirect way of gaining the support of doctors are the pharmaceuticals and medical technology companies who are constantly looking for 'inside men' to promote their products. Many doctors see these payments or favors done by the drug companies as a natural part of the business relationship, despite recent government efforts to attempt to limit their spread. Since pharmaceutical and technology companies allow greater influx of hospital income, the fostering of good relationships between a hospital's doctors and the companies is seen as very natural and almost expected. Morally, however, the exchange between hospital and profit-based company is questionable. This situation would not have been as sudden and all-encompassing without the shift to a model of cost-effectiveness within the hospital system. The main focus of hospitals and subsequently doctors is no longer the welfare of the patients they see. Instead, pharmaceuticals have capitalized on the unfilled budgets of hospitals, and low incomes of doctors to find people who are willing to take money from drug companies. In return the drug companies receive an 'inside man' who will give them the highest level of access to patients in promoting their goods.

In October of 2007, Zhao Mingzhong, a senior cardiovascular expert and the director of several departments of a Shanghai hospital, was brought to trial for accepting a bribe of 430,000 Yuan or approximately US$57,470 from one of his hospital's medical

appliance suppliers ("Six years jail…" [2007]). The company, Shanghai Kaichuang Medical Appliances, had paid for the down payment for Zhao's apartment in 2005. Such a case shows the intricate relationship between doctor and company. Since Zhao was a senior level manager, he was responsible for ordering the supplies and ensuring their delivery. The bribe helped ensure that Shanghai Kaichuang's products would be the first considered in ordering such devices. Though this seems like a winning policy for those involved, a number of different problems arise in the relationship between doctor and supplier. Doctors are legally allowed to receive up to 5% discounts on supplier products, with the provision that all transactions are recorded. Nevertheless, most transactions are far beyond these small monetary amounts ranging from the acceptance of telephones or banquets to vacations, and even cars (Bloom et al. [2001] 30). These 'gifts' are seen as a way to build the relationship between the hospital and a company, often through the use of a doctor as an 'inside man'. That doctor can then ensure that the supplies a company sells, or the drugs made by a pharmaceutical manufacturer are the first ones offered to patients and available throughout the hospital.

The concept of creating a personal relationship between company and individual is not something new; in fact it is a process that permeates much of Chinese culture. This relationship, or 'guanxi', has been used throughout Chinese society to gain favors and advance the positions of those involved. In the modern era it is used in every walk of society in the process of "obtaining passports and exit permits to leave the country, finding job opportunities… linking up with relatives overseas…locating sources of loans to finance a new economic venture or purchase a home" (Yang [2002] 463) among many other reasons. Traditionally, no business relationship can be formed without a personal

connection already formed between people. Once trust is established on both sides, a business transaction can occur. Thus, in using a traditional method of exchange in the connection between doctors and pharmaceuticals, little suspicion was aroused about the nature of the relationship.

Pharmaceutical companies have been able to exploit the element of personal partnering within a business relationship to gain direct access to patients through their partnered doctors. As in many countries, the building of a 'gift-based' relationship between doctors and pharmaceuticals is morally questionable, yet tends to be profitable for doctor and company. Without a personal connection to doctors within a hospital, very few doctors will sell a company's drug because of the lack of trust. However, with this relationship, doctors often feel a responsibility to give back to the companies sponsoring them, influencing the prescribing practices of doctors. An international study examined the role of doctors that dispense medicine within their hospital. It found that doctors may claim that they can remain objective but the gifting by pharmaceuticals tends to have a substantial effect on the prescribing tendencies of doctors (Lim et al. [2009] 4-5). One example even cited an increase of three times the amount of certain pharmaceuticals that a physician prescribed after accepting free services from the company (Marco et al. [2006] 517). Even if physicians do not recognize it, the money or 'gifts' accepted from drug companies play a large role in the medicine that physicians practice.

Chinese and international pharmaceutical companies have thus poured money into the relationship, hoping to expand their hold over the market. It has become such a part of the doctor-company relationship that a recent self-audit of 117,714 pharmaceutical companies revealed doctor kick-backs over 1.74 billion Yuan over just four years (Bloom

et al. [2001] 30). In reality, the number could even be much higher in undocumented sources. Additionally, doctors and hospitals have become reliant on this relationship to keep their hospitals going. Li Ling, a Professor at Beijing University, explained that "since doctors and hospitals rely more on profits, they have come to rely on medicine sales for the bulk of their revenues" ("China's bid to end…" [2008]). Thus, as a side-effect of the cost-effectiveness model, hospitals have become dependent on contributions, possibly even pressuring their doctors to maintain good relationships with the companies in order to help the hospital maintain solvency.

Patients are the ones most impacted by these new relationships, however. Many different negative side effects come out of the personal relationships cultivated between doctor and company that directly impact patients. With pressure from companies that give money or favors to them, doctors might over-prescribe patients with certain drugs that are more than they need or might want. Studies have also shown that often these relationships cause doctors to bypass the normal checks of certain drugs, possibly allowing unsafe drugs of unmonitored quality to be prescribed for the sole purpose of profit on all sides, the doctor, the hospital, and the company (Bloom et al. [2001] 30). As a result, patients end up paying a great deal more for certain 'prioritized' pharmaceuticals than they can afford or is necessary. This might even cause a conflict of interest for the doctor who might be taking both *hong bao* from his patients as well as pressure to prescribe certain tests or pharmaceuticals from the companies.

Government Response

The government has tried in recent years to respond through policy change, but often these efforts are one-sided, only punishing those who accept gifts and practice

medicine with an eye to profit, not the companies giving the bribes. In 2006, the government attempted to create policy outlawing the acceptance of bribes in the medical field from pharmaceuticals (Wu [2008] "Gifts from patients…"). However, this action did and continues to do nothing to punish the pharmaceuticals working throughout the industry or alleviate the pressure that hospitals are putting on its workers. One example of this is in the case of Zhao Mingzhong, the cardiovascular specialist described earlier. Though he was sentenced to six years in prison for accepting a bribe, no punishment was reported to be given to the manager of the company, Dong Disheng, or the company itself for giving the bribe in the first place ("Six years jail…" [2007]). Instead doctors are simply placed in an even more difficult position, wanting and needing to receive extra money beyond their salary, but bound by a double standard that does nothing to punish those responsible, the drug companies. As a result, many ignore the ruling and maintained the same illegal pre-existing relationships.

Without the standards in place to punish those who place bribes, however, no real progress can be made in stopping bribery. The Chinese government courts have the ability to reject any court case they do not want to hear, often refusing to hear any controversial cases. Since they do not want a proliferation of court cases, the description of an 'anaconda in the chandelier' is used (Link [2002] "China: The Anaconda…"). In normal circumstances the snake, a symbol of the Chinese government, stays still over the heads of those below. However, if it deems that there is too much corruption or a large problem, it will severely strike out at those involved, mainly as an example to those left below. Thus every case of corruption is not rooted out; only the largest are selected, allowing other doctors and hospitals to go unimpeded.

In 2008, the Supreme People's Court, the main court body in China, defined any money or products given by drug or pharmaceutical companies as 'bribes', meaning the large-scale 'gifting' that had occurred must stop (Wu [2008] "Gifts from patients…"). Still, despite the ruling of the court the giving of 'red packages' by patients was not addressed in the law and remains today a common occurrence throughout the medical community. Many in medical practice continue to express that their low salaries are not enough compensation for the many years of training and effort within the hospitals. Today it remains a highly controversial ethical and economic question.

Analysis

As one of the most important elements in the health care system, the hospital represents, in microcosm, all the problems inherent in the health care system as a whole. Its bureaucracy, though well set up in society from the remaining three-tier system of the Maoist Era, is mired in inconsistencies and inefficiencies. Not only do most hospitals have no clear sense of administration, the lack of managerial and business training has led to increased incidences of confusion, mistakes and job shortages. The central government no longer gives money to the hospitals, yet the Communist Party still assigns the role of hospital president. This has led to a strained internal bureaucracy with no system of accountability besides the president who must balance his or her administrative duties with seeing patients. The lack of pricing centers has led to shortages in certain areas and surpluses in others, with no organizational structure to understand the flow of money.

Additionally, hospitals are now forced to fend for themselves, with externally imposed price limitation on basic goods leaving many doctors with extremely low

reimbursement rates. Many different systems have arisen for both the hospital and the doctor to find sources of funding. The hospital has adopted certain legal means including raising the prices for use of 'upper-level' technology and raised high prices for medicines in order to benefit doctors. As a result, many patients are either left without vital services due to their inability to pay, or overcharged for procedures and medications that might not be necessary. On the physician side, the pressure from the hospital to prescribe more medications and order more testing has placed these already strained doctors into a sort of moral dilemma. Furthermore, their low pay has caused the budding of relationships designed to bring the doctors more money from both the patients, and external drug and medical supplies companies. It seems that they are forced into this position through low wages that place even the highest trained doctors in the middle class and give newly graduated students less than enough to live on. Even their hospitals put pressure on them to sell more products and services to patients, though they do not provide support if a doctor is tried for doing those actions. Though morally this system is far from ideal, the lucrative nature of these illegal relationships has become deeply engrained as part of Chinese medical culture. Thus, the hospital system represents a thoroughly broken organizational structure with no positive encouragement or support for improvement from external or internal sources.

Section 5: Health Care Systemic Response to Diseases

After exploring the different aspects of the Chinese health care system leading to its decline, the next step is to examine what this decline meant for the health of the people directly impacted, the average urban citizen. To fully understand how the failures of the system impacted those at hand, I have chosen two examples within China's society. Both represent challenges to the health care system but from different perspectives. Still, they reveal similar themes that point to the problems faced by the Chinese population.

The first example is of a chronic illness that is now the leading cause of death in urban China, cancer. The population impacted by cancer is non-discriminatory, impacting those across socio-economic barriers in many different guises and caused by many different sources. Despite the scope of the problem, however, very little has been done to address the needs of the many cancer patients throughout China's cities or provide treatment to those in need, even if the cause of the cancer was directly or indirectly linked to the central government.

The other example, viral hepatitis, reveals aspects of government inaction despite wide-spread infection in the Chinese population. Hepatitis B is a disease endemic within the population, though hepatitis A also poses a severe threat to the population. As hepatitis spread at high levels, there were ample opportunities for the government to intervene or even just educate the population about the nature of the disease. However, it was only with international pressure and influence that the Chinese government started to recognize the extent of the hepatitis problem, taking belated efforts to ally with international groups to both educate and serve the population. Still, many remain unable

to receive treatment due to high pricing and broken medical structures that do not protect the infected individuals from either the spread of the disease or discrimination they face.

Part A: Cancer

Many chronic diseases have risen along with the increase in living conditions for urban Chinese. The most serious of these is a trend showing an increase in cancer throughout the urban Chinese population over the past 30 years. An increase in life expectancy and changes in lifestyle have created significant increases in the presence of cancer in Chinese society. Despite the increases in cancer throughout urban China, however, the Chinese medical care system has not shifted to meet the demands of this swelling population. Though several entrepreneurial Chinese and international pharmaceutical companies have made an effort to reach rich clientele, neither the government nor public have met the rising needs for cancer treatment. While private hospitals have the means to treat the population, they are often out of reach monetarily for Chinese cancer patients.

Growing Cancer Problems

Cancer has been on the rise throughout China's urban areas. A joint study done by the Chinese Ministry of Health and the Ministry of Science and Technology found that, in the 30 years since economic reform, China's national cancer rate has risen 80%, making it around 136 per 100,000 citizens, an increase from 74 of 100,000 in the mid-1970s and 108 of 100,000 in 1990 (Li [2008] "Cancer's Dark Cloak…"). The incidence of cancer is growing rapidly within the population in short amounts of time. In just two years, between 2005 and 2007, cancer rates increased 19%, with the majority of cancers commonly found in the lungs, liver, and stomach ("Cancer most lethal…" [2007]). The

death toll from cancer affects men just slightly more than women, with 2003 showing 23.83% of total male deaths and 16.53% of total female deaths classified as resulting from malignant tumors (China Statistical Yearbook [2003] 811). These rates reveal that cancer is an extremely serious problem in China, with both incidence and mortality at extremely high rates in Chinese population. In urban areas, cancer has been the most lethal disease for over 3 years ("Cancer most lethal…" [2007]). The reasons behind this rise are multifarious, as they are due not only to personal lifestyle changes, but also issues stemming from environmental problems for which the government is directly or indirectly responsible, a theme that will be explored later in the section.

The severe rises in smoking and drinking tendencies are key examples of lifestyle changes which have encouraged the growth of cancer within the Chinese population. Between 1981 and 1996 alone, the volume of cigarettes sold in China doubled from approximately 8 trillion to 16 trillion (Yang et al. [1999] 1248 JAMA). China is the world's leading manufacturer and consumer of tobacco. Cigarettes are widely available to all consumers with more than 1000 different brands available, as well as extremely inexpensive for a population with increasing amounts of disposable income (Yang et al. [1999] 1247). As a result of the ease of access and cultural norms, huge percentages of the Chinese population smoke. In just the college student population, for example, over 53% of participants in one study smoked (Mao et al. [2009] 105). In the whole country, 303 million adults smoke, a number that represents 1/3 of the world total number (Yang [2008] 1697).

Tobacco has an established link to certain types of cancers especially esophageal and lung cancer (Langevin et al. [2009] 73), both of which have been revealed as some of

China's most prevalent and deadly cancers. Additionally, the rise of alcohol as a relatively inexpensive product has contributed to the rise of cancer in society. Major linkages have been drawn between deadly forms of cancer and alcohol consumption patterns (Langevin et al [2009] 73-4). Since alcohol is now more readily and cheaply available many more Chinese at risk then they had been previous to the economic reforms. Both alcohol and tobacco consumption are highly linked to the concept of building 'guanxi' explored in the doctor/patient and doctor/pharmaceutical relationships, as well. This makes their presence in society even more common and problematic in society.

Many other cancer causing agents exist in China beyond smoking or drinking, habits that can be seen as a lifestyle choice. In the wake of greater openness in economic policy, industries have expanded and greater production has occurred. The downside of this progress, however, is the air and water pollution that can contribute to the development of cancer for millions of Chinese. A very famous city to which people from around the world and throughout China travel, Xi'an was featured in a study about the effects of industry on the body. It explained that the coal and petroleum fueled industry that was centered heavily in the area of Xi'an could potentially cause many different kinds of lung and esophageal cancers (Han et al. [2009] 2464). These chemicals can also get into the soil of farmers nearby the factory area, meaning that food grown carries traces of carcinogens that then are eaten by people throughout the area, helping spur on the incidence of cancer within the Chinese population. The Chinese citizens that live in the area of Xi'an cannot be faulted for their presence in the area; it is the companies that

are not given nearly enough monitoring that exacerbate the cancer problem without being held accountable for their actions.

Patient Experience

The rise in cancer has led to serious problems for diagnosed patients and their families. In diagnosis, cultural norms have the potential to come into direct conflict with the medical interests of the patients. For patients who are educated or have a good prognosis, the doctors often have no problems describing the extent of the illness directly to the person. However, if the prognosis is not positive, the doctor might tell the family instead of the patient or even might tell the employer first (Li & Chou [2006] 245). This process is to insure that treatment will be affordable for the patient and also in the hope that, in thinking the disease is less serious than it actually is, positive thinking by the patient will decrease the effects of the disease (Li & Chou [2006] 245). The problem is that if the employer deems the disease more expensive than their company or insurance plan can afford, the patient is left virtually without options except to attempt to borrow money from friends and family.

After diagnosis, treatment can present insurmountable financial problems to the patient and families impacted. The treatments and necessary surgeries are often far beyond the available resources of families. Surgeries that might be necessary to stop the spread of the cancer or even save the patient's life are often far beyond the ability of the family to pay. For example, to save the life of a 16 year old girl, Chen Jianhong, from Lanzhou, the capital of Gansu province, who was diagnosed with bone cancer, her family was asked to prepay 40,000 Yuan, several years' worth of income for an average family in this relatively poor province ("Students Band Together…" [2008]). Without the money

necessary for the operation, Chen was left without treatment while her family attempted to raise whatever money they could from friends and family. This harkens back to problems inherent in the hospital system. Even if Chen's family was able to raise the money, it might be too late for her to undergo surgery to a high degree of effectiveness. Thus, the element of her case that deals with pre-paying for service potentially risks a life that could be saved.

Inpatient stays for sick patients might also create huge monetary problems for their families left behind. An extreme example is that of Weng Wenhui, a 75 year old man in Harbin who died despite extensive cancer treatment, leaving his family with a 5.4 million Yuan bill from the hospital in which he stayed (Xiao [2005] 3). His 76-day long hospital stay was much more expensive than that normally experienced by cancer patients, yet the cost of inpatient stay was much the same. Each day, hospital charges for Weng's family averaged to about 2,600 Yuan, a typical monthly income for a middle class family. Additionally, his total medication bills reached costs of about four million Yuan alone (Xiao [2005] 3). These kind of extreme charges often cause patient to suffer more than necessary or turn away from necessary medical treatment in order to save their families money in the long run. Also, some cancer patients might seek out 'alterative' forms of medicine which are not certified or safe in order to save money on treatment in hospitals.

Paying for the necessary care can be the least of a patient's problems, however. There are only a few hospitals in urban China equipped to deal with the increases of cancer patients throughout Chinese society. Oncology is not a recognized subspecialty, which means that cancer of certain areas of the body are treated by those subspecialties, without a continuum of care (Li & Chou [2006] 244). Thus if a cancer patient needs to

undergo radiation or chemotherapy after surgery, they are bounced between specialties and potentially put in more danger through inconsistent care. The problems above are faced by many different patients as they attempt to get care, confirming a key weakness in the hospital system. Patients unable to pay or find good care immediately might die when their lives could easily have been saved if not for the hole-filled hospital structure.

Problems with the System's Response to Cancer

The issues facing the Chinese population as cancer rates rise come from a number of different sources. First was the clear lack of governmental commitment to changing the medical care system in order to treat cancer patients. As cancer treatment is handled mostly in the hospitals, the government's refusal to create a set of standards that would allow patients access to care left many without life-saving treatment. Only a very basic social insurance structure exists, yet often those without money are still condemned to suffering and ultimately death in the wake of a case of potentially preventable or treatable cancer. A majority of insurers provided through the workplace would not pay for many procedures, however, and a worker might even be fired from their job if they were diagnosed with cancer. The fear generated from even admitting a case of cancer or another serious disease for risk of losing their job stems directly from the government's refusal to create a security net for the poor and disadvantaged.

Institutionally, the hospitals themselves are not equipped to handle the rising problem. As previously mentioned, hospitals rarely have separate oncology centers and might not admit patients in advanced stages of cancer due to a shortage of beds (Li & Chou [2006] 247). In fact, the non-admittance of terminal patients is a common practice in Chinese hospital in order to spare resources. As a result, many patients and their

families either resort to home care or place their relatives in hospices that have no specifically cancer-oriented care (Li & Chou [2007] 247).

To exacerbate the situation, doctors trained in cancer treatments have many opportunities to leave public hospitals in order to work in private practice where they can treat just those patients that can pay for treatment, causing an even bigger drain on the system. As described in the section on the hospital system, doctors can leave public hospitals in order to be part of their own, more profitable, private practices. In this situation, then, they might become part of a specialized hospital above like those at Cancer Therapy China in order to earn several times their former income. As a consequence, only a few highly sought after professionals are left at public hospitals, and many cancer patients are left behind without care.

The increase in cancer in Chinese society can be limited if strong societal steps were taken to limit the causes of the disease. One potential measure to curb cancer growth rates that has been used by other governments, such as the United States, is the imposition of a tax on tobacco and cigarettes so they become less affordable and harder to obtain. Thus, many people do not start smoking and are alleviated from some of the carcinogens. In China, however, though farmers are heavily taxed for tobacco production, prices are extremely low, making cigarettes very affordable for urban residents (Li [2008] "Cancer's Dark Cloak…"). Other known factors that correlate with cancer such as bad dietary habits with increased fat consumption, and air and water pollution are also neglected by the government. The only education that has occurred in China about the adverse affects of smoking and other such factors started in 2003, and even then, only in schools since approximately 25% of all smokers in China are under the age of 18 ("Anti-

Smoking Campaign…" [2007]). It has only been in the last two years that any comprehensive educational campaign has been done in regards to cancer-causing agents, and even then, only with internationally supplied money ("Anti-Smoking Campaign [2007]).

In terms of the pollution problem the government also seems to feel no responsibility for the people who are affected except as it affects the world's perspective of it. As China took a more prominent position on the world stage, it just recently started monitoring the pollution of hundreds of thousands of production facilities in 2008 (Xiao [2009] "Polluters told…"). Previously, little had been done to limit factory pollution or even measure its effect on the population or environment. Many of the large factories are even state-owned, but do not recognize the millions of people harmed by the dirty fumes. The concept of 'biological citizenship' where the population can come together to demand rights for the problems they are facing cannot exist, as the government does not listen or set limitations on the industries involved, all in the name of economic growth. As a result, cancer rates rise and people are unable to get help in paying for their medical problems.

Existence of High Quality Care

Despite the difficulties that an average Chinese cancer patient might face, China has become known as one of the frontiers of advanced cancer treatment options, especially those that have not been approved in other countries. In many places, it is seen as a 'last resort' option when all other forms of treatment have failed. This care, however, remains inaccessible to the hundreds of thousands of Chinese diagnosed with cancer every year. One treatment, called Gendicine, has become available in China which

supposedly uses gene therapy to attack and kill tumor cells ("A Cancer Treatment…" [2006]). It is so expensive, however, at US$20,000 per two month dose, that almost no Chinese cancer patients would be able to access it. Other procedures such as cryoblation, internal freezing of tumor tissue, and Cytokine-induced Killer cells, which seek and destroy cancer causing agents, have all been touted as advanced technology available only in China with a few inroads being made into other nations, though they are all perceived as beyond the price range of the average Chinese consumer (Cancer Therapy China [2007]).

The reason that Gendicine and other treatments are extremely expensive in proportion to the wages of an average Chinese customer is that the treatment is not intended for all but the wealthy Chinese. Special hospitals touting these treatments focus on the international population as the new frontier of care. As specialized hospitals develop these treatments on the frontier of Chinese medicine, they try their best to reach out beyond the Chinese population who, for the most part, do not have comprehensive insurance that will cover these test procedures. Websites such as Cancer Therapy China are set up in order to customize visits for wealthy foreign clients looking for alternatives. It boasts a staff that will literally pick a customer up at the airport and provide for the translation and care, including specialized food, for people of tens of different countries, so as to cater to the international population (Cancer Therapy China [2007]). In essence, the Chinese government is encouraging the growth of alternative medicines in order to bring in outside money while ignoring the problem at home for those who cannot afford new kinds of care.

Though ultimately presenting potential for finding new treatments for cancer, these alternative treatments come with serious side effects which affect the Chinese medical care system and patients. In the testing of these medicines, cancer patients unable to afford treatment without the necessary insurance or money, sign up for trials for all sorts of experimental cancer trials. Since many poor patients, including those with cancer, do not have the ability to pay for treatments they sign up for the approximately 800 new drugs and medical devices tested each year on human applicants (Shan [2008] "Service to mankind…"). Though some have helped many patients in their quest for treatment, others have led to mortality rates, questioning the ethics of allowing human testing that might harm patients, even if approved by China's State Food and Drug Administration. The fact is that even the Chinese FDA is fueled by the potential for foreign money to be part of the Chinese market, a byproduct of globalization. The use of gene therapy, for example, was widely criticized in the United States as unsafe, raising questions as to whether the drugs and treatments being tested are safe enough to use on human subjects, especially vulnerable populations such as the poor and ill.

Since the cost to conduct these trials is approximately one tenth the cost of such a study in Western countries and a willing pool of applicants exist who would not otherwise be able to access care, many foreign companies have taken advantage of the situation and poured research and development money into China (Shan [2008] "Service to mankind…"). The government, seeing an opportunity to attract capital, also played a role in pushing announced a national boost in research and development spending up to 2.5% of the country's GDP in order to keep enhancing the biotech industry ("A Cancer

Treatment…" [2006]). Clearly, the priorities of the Chinese government are based in the potential to bring in capital, even at the expense of the larger Chinese population.

The final question about high quality care comes into play with hospitals. With the increasing possibility of international clients coming to China to take part in alternative care, hospitals have begun to re-allocate their resources or even change their entire hospitals over to care for international and wealthy Chinese patients. Associations such as Cancer Therapy China help international and wealthy Chinese patients find the best level of care through an association of hospitals with advanced technology and English-speaking doctors (Cancer Therapy China [2007]). Other hospitals, such as the Beijing-Haidian Hospital, started as public hospitals serving all, but shifted their focus to high technology, experimental treatment sites, so that less public health services are available in general, and especially in highly specialized fields such as oncology.

The 'New' Consumer

Another problem that has become clear as illustrated by the inability of many patients to pay for cancer care, an issue that stemmed not only from high pricing of services, but also a new phenomenon in China, the difficulty many Chinese have in handling a medical consumer culture. Previous to the reforms, an important tenet of Maoist philosophy was the provision of health care for all. Through deep entrenchment in the danwei system, health care was available, and free, to all who needed it. With the shifts in medical care provision, many Chinese were left confronting their new role as empowered consumers with little to educate them on the options available to them or explaining their new role.

In some ways, the consumer market came to the Chinese very easily. Chinese quickly began to consume electronics and telecom, making them the second largest electronics market in the world in 2004 (Roach [2006] "Understanding…"). However, the mindset behind the consumer market as it applied to medicine did not come so easily. A Gallup poll done in 2004 stated that although 82% of urban dwellers owned a mobile phone in 2004, only 47% had any form of medical insurance (Wu & Crabtree [2007] Gallup Poll). Even more to the point, however, is the fact that, of those who are uninsured or do not receive a care plan from their employer, only 8% of urban citizens and only 5% of those over 50 years old said they were planning on buying insurance (Wu & Crabtree [2007] Gallup Poll).

The lack of interest in buying insurance is not superficial, it is rooted in a mindset that values saving instead of spending. Urban workers spend about 10% of their wages on basic living expenses, revealing a higher percentage of disposable income, but still, in 2004, 68% of urban families were unhappy with the amount of money they were able to save (Roach [2006] "Understanding…"). Much of this unhappiness stems from the lack of a welfare system. Families believe that money must be saved in order to prepare for 'leaner' times without trusting the central government to not take the money away due to constantly changing economic norms. Thus, instead of buying insurance that would provide for just such times, many families save money, spending it only on the larger things in life such as cars or apartments. The loan and lending system in China is not strong, with few people even owning credit cards or taking out loans. Without this culture pre-existing, most people will not buy unnecessary things until they have enough money to spend. Therefore, many Chinese might think it wasteful to spend money on health

insurance or some sort of provision for poor health if it is not being utilized the majority of the time (Roach [2006] "Understanding…"). Still, this attitude can lead to severe problems if a person faces a serious illness.

Analysis

Cancer is a problem that has risen steadily within the Chinese population as life expectancies have lengthened, and more people have taken up smoking and been exposed to the results of economic growth. Despite the growth of cancer within Chinese society, the system is unequipped to deal with the problems facing many cancer patients. Though widely publicized, advanced technology solutions to cancer are available in China, they are, by and large, only accessible to the international populations seeking a last resort to cure their disease. For the rest of the population, a drain of resources from the public to the private sector has led to high demand for specialized doctors with extremely high cost, often including the under-the-table 'red packages' described in the above section. Even gaining access to hospitals that are equipped to handle cancer patients are few and far between. Some desperate cancer patients might even resort to being research subjects for treatments that have not been fully approved or determined successful in other trials.

The Chinese government also plays a role in the inability of cancer patients to get care by not recognizing that its citizens need education about the ills of smoking as a cancer-causing agent. Even when the policies to limit smoking or pollution are in place, enforcement of these policies is near impossible with systematic corruption, and pressure put on local governments to reveal production. Thus, factories that pollute but also create economic growth are allowed to continue with an eye to economic progress over health, despite their potential contribution to the rise of cancer in nearby towns and cities. Still,

the government is not only responsible for economic growth, they must also play a role in protecting their citizens from agents causing harm to the population's health, and aid them in understanding the changes in the nature of health care provision. Currently consumers face difficult decisions with no guide, unable to discover the best forms of health insurance that will help them, and no welfare system on which to fall back. Cancer in China presents a case of continual failure in the medical care and governmental systems.

Part B: Viral Hepatitis

Though significant, chronic disease is not the only medical problem burdening Chinese society. Many infectious diseases run rampant throughout China, presenting a significant challenge to the world of medical care provision and pressure on the government to contain such problems. Some of the most significant diseases have become endemic in the population, with little hope of decrease due to lack of government commitment, a broken medical system and popular misunderstanding of issues due to lack of education. One infectious disease presents a hugely widespread problem for many in Chinese society yet is poorly handled, the strand of viruses known generally as viral hepatitis. Viral hepatitis is used to describe many strands of the disease but the ones that will be explored in depth throughout this section are hepatitis A and B, with some reference to the emergence of hepatitis C.

Though many developing countries have managed to control the spread of hepatitis, it has been a problem in China far before the economic reforms. However, with new resources available as China began to open up to the international arena, the country was finally presented with an opportunity to make a significant difference in the lives of

those with the disease and those who might become infected. Additionally, with new openness to foreign companies and an eye to the world's perspective on the handling of social issues in China, disease control became very important. Despite this scrutiny and the availability of Western solutions, no medical care became monetarily accessible for that majority of hepatitis infected patients. Instead the government has not made a strong commitment to prevent the rise of hepatitis, allowing disease rates to slowly and steadily rise until international pressure, as well as China's accession into the World Trade Organization, brought about the intervention of outside sources. With a system unequipped to handle the problem, no protection for those infected, and a lack of an education program to help the average Chinese population understand the problem, little progress has been made toward treatment of both chronic and acute hepatitis in China.

Nature of the Problem

As a disease, viral hepatitis presents an interesting dilemma. Since it is a condition involving the inflammation of the liver but is not often lethal, many health organizations view it as a minor concern. As a relatively low profile disease, very few alliances or international development groups focus on hepatitis as a disease that needs curing. In certain countries, especially those in the developed world, vaccinations and easy methods of treatment reveal the illness as one of low priority. In China, however, hepatitis presents a much more difficult and widespread challenge.

Though seen as a very preventable disease, hepatitis can be a very serious health hazard. Around six strands of viral hepatitis exist in the world, but, as of now, only hepatitis strands A (HAV), B (HBV), and C (HCV) are considered serious threats, with the others linked to hepatitis and liver disease but only able to develop in the presence of

the other strands ("Viral Hepatitis" CDC). These strands are passed through several different means, all focused on bodily fluid transmission such as infected blood and body fluids or through contact with contaminated food or drink or fecal matter. It is also possible to transmit certain strands, such as HBV from mother to child while a woman is pregnant ("Viral Hepatitis" CDC). Thus, unclean habits and lack of knowledge can cause the disease to spread rapidly. Worldwide, around 400 million people have the most wide-spread strands, HBV. This might not seem like a significant number in the world's over 6 billion population, until it is known that strands of hepatitis cause 82% of the world's cases of liver cancer, an extremely fatal disease (Lai et al. [2003] 2089). In the cases of hepatitis-caused liver cancer, 59.6% are associated with HBV and 40.4% are associated with HCV, a disease with no known vaccine (Lai et al. [2003] 2089).

China holds the world's largest population of hepatitis-infected people, both treatable and less treatable. Of the 400 million people infected with HBV, 120 million are in China, nearly 1/3 the world number. Of those, 30 million are chronically infected, meaning that at some point in their lives, they will probably suffer liver problems with varying degrees of severity and little hope of recovery (Liu [2007] 1582). Hepatitis A also presents a serious problem. It is estimated that 110 to 300 of every 100,000 people in China has HAV, or around approximately 1.43 to 3.9 million people (based on a population of 1.3 billion people), but the number could actually be four or five times that amount due to under-diagnosis and infected patients' reticence to report cases, a trend that will be explored later (Mausezahl et al. [1996] 1271).

On its own, these large numbers of people might be cause for concern, but most cases could be considered treatable. However, China is also the only country in the world

where viral hepatitis B is classified as ‘endemic’. ‘Endemic’ in this circumstance is taken to mean that the population of hepatitis-infected individuals is neither significantly increasing nor decreasing; it is staying relatively constant with a slight rise. A survey in 2002 put the number of HBV infected Chinese at around 9% of the population, though numbers have since gone up slightly (Liu, Fan [2007] 1582). Though some of the hepatitis-infected population might die from liver disease, an endemic description of the disease means that the population will still stay constant, with new cases developing constantly. Thus, China has been presented with a difficult health problem, a problem that has been known for several years. Still, little has been done to stop its spread, such as treatment efforts in dispersing medications to aid those infected or increase prevention efforts described below. This has caused a slow increase of some strands, as well as terrible side effects for those with the disease.

Prevention and Treatment

In the context of the spread of hepatitis and its threat to the population, it might be expected that the government is doing a great deal to stop the imminent threat including prevention efforts and treatment for the problem. This, however, is not the case. A few treatment regimens do exist, but in limited supply and those that are available are typically very expensive to the average Chinese patient.

In the Western world, several treatments exist to treat acute hepatitis. Acute hepatitis is more likely to attack the liver quickly than chronic hepatitis and can become chronic hepatitis if in the system for a long enough period of time. Acute strands are, however, much more treatable than chronic strands of the disease. The United States has approved five therapies for the most wide-spread form of the disease, HBV, including

interferon alfa-2b, lamivudine, adefovir, entecavir and interferon alfa 2a (Suk-Fong Lok [2005] 2743). These drugs require continued treatment for at least three months before the disease can be fully purged from the body and oftentimes for much longer. Some resistance to certain drugs might emerge if treated for years, but often these drugs work relatively well in stopping liver problems. Co-infection can provide a complication in treating acute HBV, but, in the majority of cases, these five treatment plans work well in patients with high levels of HBV in their DNA (Suk-Fong Lok [2005] 2746).

In cases of chronic HBV, no treatment will eradicate the disease while it exists dormant in the body. The majority of chronic cases in China come from mother-to-child transmission as well as the use of infected needles (Fan [2007] 15). One of the worst examples of this type of spread that was completely preventable was the mass vaccination programs for tuberculosis, tetanus and encephalitis between the 1970s and 1990s. A majority of the needles were not cleaned properly, meaning that one person who received the vaccine gave chronic hepatitis to huge numbers of people, a failure that will be explored in more depth later (Fan [2007] 15). Despite the large-scale infection of many citizens, chronic hepatitis does not necessarily attack the liver, but if it does, medications can be taken to help prevent some of the liver damage.

The treatments that can be extremely successful do have a flip-side, the cost. A typical HBV treatment regimen in China uses the same medications and treatments as in the Western world. These include antiviral elements, such as lamivudine, chemicals that bolster the immune system such as interferon 2a, and specific protectors against hepatitis which are not used in the US like glucurolactone (Liu, Fan [2007] 1583). These treatments altogether cost a total of 900 billion Yuan each year (Liu, Fan [2007] 1583).

That number means hundreds of thousands of Yuan per patient for a comprehensive treatment regimen that could last several years in particularly potent strands of the disease. Obviously this is an insurmountable amount of money for all but the wealthiest in China. Patient can choose to only use one method of treatment, but even that can cost tens of thousands of Yuan for a year long regimen in addition to the loss of income resulting from the time an afflicted patient is not receiving income.

Alternatives have been envisioned as part of the Chinese health care system, yet not ones that are nearly as effective as Western medicine. Many hepatitis-infected patients choose the less expensive option of Traditional Chinese Medicine based on herbs and natural compounds. Chinese plants such as kushenin and other prescriptions work as anti-virals to help protect the liver from degradation and improve functioning, but the ways in which these work and their efficacy have not been scientifically proven and still do not cure an individual of the disease (Liu, Fan [2007] 1583). So, though treatment does exist in China, it is at great cost to those who have the money to pay for the system, and great risk to those who do not.

Failures of the System

In spite of the treatment regimens available to treat the disease, hepatitis continues to spread throughout China. A question one might ask is why is more not being done to stop the spread? This question boils down to a few factors correlating to issues referred to earlier including a low level of government commitment in creating treatment programs, weak medical structures that have little information privacy, and a new factor, discrimination against hepatitis-infected Chinese through lack of knowledge about the nature of hepatitis.

The lowered level of government commitment in solving the widespread problems resulting from hepatitis infection has only worsened the options available to hepatitis-infected individuals. The depleted investments follow along the pattern described in Section 3, with the government stepping back from playing a more committed role in health care situations and potential changes that the government wished to make struggling and failing in the complex bureaucracy of China. Ultimately, it was not until international groups offered money and put pressure on the Chinese government that anything was done in the way of progress.

Attempted Actions

The first recommendation, to use newborn vaccination as a means to stop the spread of HBV came in 1992, when the problem was substantial but whose spread could have been halted before it rose to current levels ("Progress in Hepatitis B..." [2007]). A program such as this would involve mobilizing resources in order to give neonates a vaccination within the first 24 hours of life, then again giving immunization shots at six months and one year of age. Using neonatal vaccination has shown to provide a very good chance that the child will not develop an active form of hepatitis, even if the mother is infected and breast feeds. Though these vaccines became available in China, however, prices were extremely high. So, many Chinese did not vaccinate their children, probably not seeing the need to prevent a disease the only had a possibility of developing with a vaccination that would cost substantial amounts of money. Only very few, wealthy families made the choice to seek hepatitis vaccinations for their newborn children. This is partially due to unwillingness or inability for families to pay for pregnant women to give

birth in a hospital, evidence of the effects that a dysfunctional pricing structure in hospitals.

It was only in 2002 that the Chinese government finally made a move to attempt to aid its people in battling hepatitis. This move came just after China's accession into the World Trade Organization in December 2001. Along with a slew of other efforts, China attempted to improve the world's image of the formerly closed country by making all hepatitis vaccinations part of China's National Immunization Program or Expanded Program on Immunization. This move put the hepatitis vaccine on the list of suggested and necessary precautions for all Chinese citizens (MMWR "Progress in Hepatitis B Prevention…" [2007]). Additionally, it ensured that the Chinese people were aware of the hepatitis dilemmas that existed in China, though it still did nothing to provide affordable access to vaccinations by reducing hospital co-pays or vaccine costs. To a large extent, this move also have the impact of increasing fear about the nature of the disease among the populace without any education about its methods of transmission or warning signs of people infected.

Though minor, even this change in action was a significant one, urged on by powers beyond China's borders. While China grew accustomed to taking part in the affairs of the wider world, other countries also began to put pressure on China's public and medical health sectors to improve its approach to the disease. An international group, the Global Alliance for Vaccines and Immunization (GAVI) created a deal with the Chinese government to expand the services given to Chinese children in the hope of stemming the spread of hepatitis. GAVI, an alliance committed to increasing the presence of vaccines throughout the world by combining public and private resources, sought to

make progress toward vaccinating all Chinese children over a five year period between 2002 and 2007. The plan involved a fund of $75 million, half provided by GAVI and half by the central and provincial governments, which would bring immunization resources to infants throughout China (UNICEF Press Release "GAVI and the Vaccine Fund provide a major…"). The two sides split the country in order to reach these goals with GAVI's resources mainly focused on the poorer, Western rural counties and the Chinese government responsible for meeting the needs of the Eastern, urban areas.

The GAVI-covered provinces achieved a high rate of success in their implementation of the vaccination program. In all they achieved approximately a 90% coverage rate on one vaccine and a 71% coverage rate on another vaccine ("China GAVI Hepatitis PowerPoint"). This helped to cover about 36% of Chinese children (MMWR "Progress in Hepatitis B Prevention…" [2007]) The Chinese government, however, did not take a strong stance on hepatitis prevention immediately, contributing money to the GAVI side of the project, but leaving many urban residents still unable to pay for high vaccine prices due to co-pays left in place in most medical institutions.

Finally, in 2005, the Chinese government belatedly announced its "Regulations for Management of Vaccine Circulation and Preventative Vaccination" which made hepatitis B vaccinations free to all citizens ("China GAVI Hepatitis Project" PowerPoint). The Chinese Ministry of Health finally declared that hepatitis B along with AIDS, TB, and schistosomiasis were the most serious infectious disease in China, creating the "2006-2010 China Hepatitis B Prevention Plan" (PowerPoint). The plan aimed to give the families of all infants access to vaccinations for their children for free in a safe and healthy environment. It does not, however, provide any kind of support for vaccination of

other virulent, but not as common, strands of hepatitis like HAV and HCV. Additionally it does not address the millions of people already infected with the disease, or provide any support for those families that cannot afford co-pays that still exist in many hospitals and health clinics.

Problems with the Programs

One of the fundamental flaws in many developing countries is their deep concentration on preventive methods of stopping disease spread rather than treatment of the problem at hand. Though treatment solutions might not be the most cost-effective method of stopping the spread of the disease, treatment regimens "cannot be regarded as solely the province of wealthy countries" (Farmer [2001] xxiii). In its recent efforts to take action against hepatitis, there are no provisions for the millions of Chinese infected that are forced to suffer potential liver damage and death if they are unable to pay the high rates of treatment. Since many of the drugs are not very expensive to produce, the government has the ability to try to negotiate down prices, yet makes no attempt to do so, possibly for fear of scaring of pharmaceutical companies that wish to work in China and can bring highly desired capital into the country.

The hospital system also presents a key difficulty in the attempt by many to get care for HBV. As discussed in Section 4, public hospitals lack an internal organization that would aid the process of treating millions of patients looking for vaccinations and treatment for the problem. Prioritization and inefficiencies plague these structures which have become so dependent on money coming in from sources that provide more funding than that given by cases of hepatitis. Still, this is not the worst element of the hepatitis treatment system. A complete lack of privacy of medical information exists throughout

the hospital network, a problem that will be further explained below. Presently there is no law that ensures the privacy of medical records for patients seeking diagnosis or medical treatment for any health problems let alone hepatitis (Chen [2008] "Need for medical privacy"). While this is consistent with the norms set in the danwei era, the security net of universal coverage that supported ill patients as they sought treatment for sickness no longer exists.

Societal Discrimination

The lack of medical record security is an issue in many countries but especially problematic for those with hepatitis in China. A strong stigma against hepatitis-infected people is present throughout Chinese society. China's ramping up of policies and laws referring to hepatitis as a significant and threatening disease, coupled with a lack of education about the true nature and spread of the disease has led to terrible discrimination within Chinese society directed at those with the disease. A Beijing middle school student was expelled from her high school for being a hepatitis-B carrier, even though she did not have the active form of the disease. Her school then spread the information to other schools, making it virtually impossible for her to enter into another school in the absence of a public school system (Chen [2008] "Need for Medical Privacy"). No law exists to protect school children against discrimination, even for conditions that will most likely not harm their fellow students. Since the government provides no education about the nature of hepatitis, schools can feel justified in the expulsion of students as 'health risks' to other students. Even young children are not exempt, as seen in the case of a 3-year-old kindergartener who was not allowed into a local school. They stated that she posed a threat to the other children as a carrier of the disease though, as Duan Zhongping, a

member of the Chinese Society of Hepatology, pointed out " 'none of the [methods of transmitting HBV] happen in kindergartens'" (Tan [2008] "101 moms call for end…"). Though this is not the only medical ailment with which infected individuals face discrimination, it remains a serious problem for the millions with the disease.

The problem of medical privacy can not only harm school children, however. Hepatitis-carrying individuals attempting to find a job face substantial barriers due to a lack of knowledge about the nature of the disease. Even if they try to hide their condition because it does not impact work performance, they might be unsuccessful. In a study done of multinational businesses working in China in many different sectors including electron communications, chemical, transport and finance, at least 84% of the companies require applicants to take an HBV test and present the information to their potential employers, although the number could be larger considering only 5% explicitly said they do not require applicants to take a medical test (Yan [2009] Xinhuanet "Survey: Implicit discrimination"). The same survey found that 44% of the companies immediately refuse applicants who have HBV without even acknowledging their level of education or qualifications. These same companies very rarely require the HBV test for the potential workers in the other countries in which they have offices or factories.

Even the already employed and successful workers do not escape the double problem of lack of government sponsored education about hepatitis and transparent medical records. A large electronic factory that uses assembly line labor fired a 28-year-old engineer who had recently won an award for his high quality performance (Fan [2007] "Among Chinese, Fear…"). The man was required to take a company medical exam that ended up showing that he was an HBV carrier, though that fact did not at all impact his

performance. Discrimination runs rampant throughout Chinese society however seeing as a manager even told him "You're a hepatitis B carrier. You're not fit for collective life, for working in a factory with colleagues." (Fan [2007] "Among Chinese, Fear…"). Often infected Chinese cannot hide their ailment, despite the fact that is impacts nothing they do and will only become active in 25% of cases (Lai et al. [2003] 2090).

As previously stated, many of these infections occurred through mass vaccination campaigns that re-used needles without properly sterilizing them, putting the government in the position of responsibility. The actions that have since been taken, however, are not nearly enough to help those in need. In an attempt to help some of the people unable to find jobs now because of their condition, the central government passed the Employment Promotion Law in 2007 which "prohibits employers from refusing an applicant on the basis that he carries an infectious disease" (Yan [2009] Xinhuanet "Survey: Implicit discrimination). Still, many employers ask for medical examinations and, though they claim to not use them in their decision process, do not accept HBV infected workers into the company.

Education Attempts

There have been attempts to educate the public about the nature of hepatitis, but only very recently, and only from sources outside China. Bristol-Myers Squibb, a New York-based pharmaceutical company, has adopted corporate responsibility programs related to educating certain sectors of the Chinese population about hepatitis. Two initiatives, centered on the Pearl River Delta in Guangdong and Shanghai, use almost US$900,000 to try to raise awareness about the nature of hepatitis ("Hepatitis in Asia" BMS website). It hosts efforts such as educational campaigns, creating sites for free

diagnosis, and bringing free treatment to some. Though these causes are noble in attempting to bridge some of the information gap, often they are opportunities for Bristol-Myers Squibb to also market the hepatitis vaccination and treatment plans that it offers in China, making its compassionate goal seem somewhat dubious. An educational campaign that does not come from the government is often considered with a great deal more skepticism, and might not even be accepted by the Chinese.

The efforts of Bristol-Myers Squibb also hint at a wider theme in the government's inaction in the face of widespread problems. As explored briefly in the Introduction, China is a huge player on the international scale, undergoing a rapid shift toward globalization since the economic reforms of the 1970s and 1980s. In the midst of this globalization, they invited foreign companies to begin to play a bigger role in the Chinese economy, even to tap into the mass consumer base that China's population offers. Taking this into account, one might look at the central governments unwillingness to take on the problem of education about hepatitis as an opportunity for a foreign pharmaceutical company, like Bristol-Myers Squibb. The vacuum of information left by government inaction was taken up readily by Bristol-Myers Squibb not only to educate the population about hepatitis, but also to create a huge potential consumer base out of newly acquired want to access treatment by the hepatitis-infected who knew little about the disease previously. Thus, the Chinese government and Bristol-Myers Squibb get the biggest benefit with the people educated and wanting to buy treatments from the company, while the Chinese people themselves are used as pawns of globalization.

Analysis

As a medical case, hepatitis reveals the severe problems in government approach to medical concerns, as well as the downfall of medical care systems that were made to help people, but end up harming them. It is a disease that can cause debilitating pain and liver damage, or can exist within the body with no trace for a person's entire life. Though the hepatitis-carrying population has grown only slightly since the danwei era, some might believe that it does not reflect the current problems of the medical care system. However, in the age of vaccinations and highly advanced medicine, both the central and local governments must take some responsibility in the health of those who suffer from hepatitis because of vaccinations meant to prevent other illnesses. It is up to provincial and local governments to ensure that health campaigns are carried out in a way that does not further endanger the lives of those involved. There is also a level of responsibility that must be put on the government for those who can no longer afford any sort of health care and are unable to pay for medical care in the wake of the collapsing danwei system. Additionally, a hospital system that not only charges extra fees and co-payments for patients to get necessary vaccinations and services, but then freely gives medical information with the knowledge that it might cause harm, is a broken system that must be re-examined. Finally, the information gap that causes the stigma against those with hepatitis must be patched, a job that falls to the government responsible for the welfare of its people.

Conclusion

The Decline of Chinese Medical Care

The Chinese medical care system has steadily worsened since the beginning of economic reform, a reaction to the actions of several different players. After comprehensively changing the doctrine of Communist control over the economy, the central government took its place as a rising world power. It also completely shifted its role as part of the health care system. These aspects of the shift answer the first research question proposed regarding the shift in governmental perspective on popular access to medical care. As the economy shifted, opening up markets to the outside world, the government took a backseat in the medical care system, withdrawing funding and choosing to let the system evolve as it would without government direction.

As we have seen, the new focus on globalization brought with it the recognition of a potential influx of foreign capital, causing the Chinese central government to refocus the ideals to which it had so desperately held. Instead of being the 'people's government' who claimed to speak for the good of the entire population, it sought ways to step back from its role as a beneficiary, reducing the funds that were supplied to the medical care system while willingly allowing foreign companies such as the pharmaceutical industry and medical insurance business gain access to a whole new market for their goods. Mired in complex bureaucracy that remained a vestige of a former era, the government struggled to make change to help its people while policies aimed at helping those citizens ended up harming them in some cases, as in the attempt to vaccinate populations of certain diseases that consequently left thousands infected with hepatitis.

Furthermore, the corruption within government bodies and structural aspects which made change nearly impossible due to lack of communication and fractured power structures revealed that this government was no longer able to work for the people; instead it took steps to secure greater monetary gain. As cancer spread among the citizens due to pollution from many different sources, the central government stood by, not taking action while corrupt officials sifted off the money, pulling it away from environmental control and medical care projects and putting it towards their own pet projects, or into their own pockets'. The process of globalization virtually begged the government to ignore the people, instead focusing on production, a request that was willing granted. Even in the insurance system the government only made a spotty attempt at salvaging its reputation, creating vastly undefined, not enforced guidelines for the system like the GIS, LIS and BMIS that supposedly covered the population but in reality punished hundreds or thousands of failing companies who could not provide for their workers while rewarding those who were successful.

The government's failure, and in some cases inability, to act in the best interests of its people is not the only problem that is presented through this research, however. The second research question questions the response of the hospital system to the economic changes. As the government withdrew from its directorial position, the hospital system was left to its own devices, struggling to meet shrinking budgets. Yet the hospitals also grasped on to the by-products of globalization in taking a cost-effective approach to medicine. Instead of treating those in need, it closed off barriers to those who could not afford care. By asking patients to pre-pay for procedures, even if their lives were on the line, hospitals no longer focused on the good of the good of the individual. As we have

seen, citizens died in the attempt to raise funds that would save their life, while neither the hospital nor government tried to bring about change. Without finances, the hospitals turned away many who entered their doors. Moreover, the doctors, those who were trained to help the population, instead became a product of the new ideology. They prioritized patients who could pay a little extra on the side, and were willing to become a player in the game of businesses looking to access the Chinese health market. Even though they themselves were losing funding, helping themselves became more important than helping others who were in far greater need.

The core of my research was aimed at the reasons for the decline of the Chinese health care system. As new economic policies took hold of China, a fundamental shift in ideology in the government's approach to social services surfaced. As opposed to its Maoist Era policy of centralized control, the appeals of profit in the face of globalization allowed the central government to take a step back from its former, all-encompassing role. Instead it withdrew funds, hoping that the insurance system from domestic and international sources would make up the difference. Though red flags started to rise as time went on, attempts at change never arose due to complex political bureaucracy with no direct lines of power. In addition, the hospital system was left to function for itself, and chose to pursue policies of cost-effectiveness over those of equity. Thus, many Chinese were left without access to care as prices for services rose and doctors turned to 'back door' methods of gaining money which prioritized some patients and left others without care. The combination of these factors led to the decline of the Chinese health care system in bringing affordable medical services to the Chinese population.

Necessary Future Actions

Millions of urban residents have no means to gain access to the health care system as it stands, and yet little is being done to change that fact. Several steps should be taken to remedy this situation so that the next generation of Chinese does not simply become party to the horrible situations of today. The first major step that would bring hope to medical establishments is the shift in government policy. The lack of compassion or want to protect toward the people suffering most at least stir social unrest, while also causing grieving families all around China to lash out at a government who swears to protect it. If real change were to happen, it must come from the highest level of governments, yet, even lower city governments could make a change by starting to root out corruption in their ranks. More money funneled into the heath care system would provide a highly constructive starting point for where the health care system needs to go.

In many ways, democratic political control would help bring about greater change to the medical system. Still, this form of government is not necessarily what China needs. The biggest structural shift that must happen is the creation of a clear line of hierarchy in decision-making, prioritizing certain ministries at the central, provincial and city government levels that can enforce change when it is needed. This also means that city government not following the laws set out by the central government within a certain guidelines must also be punished or reevaluated for the good they are doing for the people. Another necessary shift is the imposition of stricter penalties on corruption and greater oversight of government funding. Corruption does not only exist in regards to health care. As a systemic problem, the government must begin to address all cases of corruption, rooting out those responsible until corruption no longer poses a threat to health care funding.

Another step is the creation of barriers in China's boundless quest for foreign capital. International companies are chomping at the bit to enter China's huge consumer market, yet China creates few boundaries for their entry. As a result, the Chinese population is used as guinea pigs in experiments, plied with products without the knowledge to make an informed decision, and subject to terrible environmental and physical conditions. The companies perpetrating these terrible situations are not held accountable for their actions, while continuing to be allowed to bribe doctors and health care professionals who are desperate to make money. In this relationship it is the doctor that is punished, not the company, another example of the China's acceptance of all things foreign, including lack of morality.

Finally, the payment of hospital systems must be reformed so that those who urgently need care can access it, even if it means the creation of a basic public welfare system that the government will provide with a portion of its tax revenues. The payment of doctors in the public sector must be raised to a reasonable minimum with pharmaceutical and other companies severely punished for lavishly treating doctors. This can go hand in hand with doctor punishments for those who accept.

All of these proposals are sweeping base level reforms that are fundamental if change is to be made and the health care system can survive. Though many of these proposals are idealistic and might take years to accomplish, the lack of a stable foundation will continue to eat away at the health care system, even if superficial changes are made to cover the roughest patches. As time goes on, looking to the next 30 years of Chinese history, it can be seen as a way for the Chinese government to win the hearts and wallets of the people of China, or one where they stood by and watched the system fall

apart with massive death rates. The system is broken and the government must have the courage to fix it or face the consequences.

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