HOW HEALTH WORKERS EARN A LIVING IN CHINA[1]

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SUMMARY

During the period of the command economy government health workers were paid the same salary throughout China. Over the past twenty years the government has managed a gradual liberalisation of the labour market, as part of the transition to a 'socialist market economy'. This paper explores this process in the health sector.

One consequence of the economic reforms is that the differences between average incomes of residents in rich and poor regions and employees of profitable and unprofitable enterprises have grown substantially. Government has found it impossible to maintain uniform pay levels, particularly in the face of a radical devolution of its own financial management. It has permitted individual facilities to pay bonuses out of revenues generated from user charges and the sale of drugs. This has enabled personnel in successful facilities to earn much more than colleagues in less well endowed facilities. On the other hand, governments in poor localities do not even pay the basic salaries, any more.

Health workers have increasingly resorted to informal methods of earning an income. Doctors quite commonly accept cash gifts from patients. The government considers this to be unprofessional behaviour and has used a combination of moral pressure and loss of professional privileges to discourage it. There is evidence that some doctors also accept kickbacks from drug suppliers or facilities seeking referral patients. These are criminal offences.

The Chinese government's strategy for managing the transition to a market economy has been to establish a broad policy framework within which individuals and enterprises are encouraged to find adaptation strategies. New regulatory rules have been established gradually. This strategy has enabled the economy to adjust to major changes. However, it has allowed people to profit from opportunistic behaviour. In the health sector this has led to a shift from prevention to an increasingly costly style of medical care. The paper concludes that the government will need to establish a new regulatory framework that permits health workers to earn a reasonable income, whilst encouraging them to provide effective and affordable health services. It suggests that the relationships between health workers, governments, and civil society organisations are likely to change considerably in China and other low and middle-income countries during the next few years.

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1. INTRODUCTION

1.1 The formal/informal dichotomy

Informal payments can only be understood in contradistinction to a formal system of health worker payment and regulation. The health sector in many countries is divided (in theory, if not in practice) between a highly organised public sector and a variety of private practitioners. The latter vary from specially trained personnel working in a highly regulated environment to a large informal sector of poorly regulated service providers.

Discussions of informal payments usually refer to public sector employees, although similar considerations apply to health workers in private facilities or private practitioners under some form of service contract. The public health service tends to be staffed by civil servants. They are generally full-time employees who are subject to a variety of rules regarding their duties and responsibilities in exchange for a contract which covers pay, promotions, security of tenure and pensions. Traditionally, civil servants are not allowed to ask for additional payments for services during working hours or see private patients. Informal payments are receipts of money or other benefits which the rules forbid.

The existence of informal payments is one aspect of a more general crisis in the performance of government services in many countries (World Bank 1997a). Nunberg and Lindauer (1994) put forward a number of reasons for this phenomenon including low levels of public sector pay (Colclough 1997a), inadequate promotion structures, poor working conditions and the loss of the self-perception of civil servants as a socially responsible elite. The extent of informal payments provides a measure of the gap between the formal rules of the public sector and the emergence, in many countries, of an informal market for public services (Leonard 2000).

This paper describes the response of Chinese health workers to radical changes during the transition to a market economy. It argues that transactions between health service users and providers now have many characteristics of a market. This process cannot be understood in terms of a simple dichotomy between formal (legal) and informal (illegal) transactions. China is transforming almost every aspect of its social, economic and legal structures. It is renegotiating a regulatory framework which will establish, amongst other things, rules of behaviour for providers of social services.

Chinese health facilities combine characteristics of public and private sectors. They receive government grants but raise most of their budget from users. Their employees are government personnel and are theoretically entitled to nationally defined pay and benefits. In reality, levels of pay are related to a facility's financial health. China is only beginning to create a regulatory framework which differentiates between public and private entities (Lichtenstein 1993).

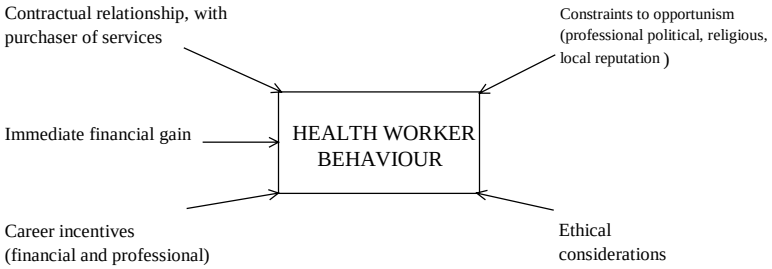
The story is complicated by the transition from a command and control model of personnel management to a regulated labour market. This has led to increasing differences in pay between regions and between profitable and unprofitable enterprises. The government has limited the ability of health facilities to generate profits by keeping charges for certain services artificially low, without providing compensatory financial support. This may have contributed to an increasing resort by some health workers to extra-legal means for increasing income.

The dichotomy between formal and informal payments does not adequately convey the reality of a health sector which is renegotiating the relationships between users, providers, health workers, government and civil society organisations. It may be more realistic to view the health sector in China, and in many other countries, as a publicly subsidised and poorly regulated market, where new rules are being negotiated to regulate provider behaviour.

1.2 Influences on health worker behaviour

Most analysts agree that health workers respond to economic incentives: salaried employees tend to work less intensively; those earning a fee related to service provision tend to see more patients and recommend more tests and interventions; and those paid a fixed amount per patient per year tend to minimise the time they spend on each consultation. However, immediate financial gain is only one of a number of influences (Figure 1).

Figure 1, Influences on the behaviour of health workers



The pursuit of a profession requires a substantial investment. Health professionals may trade immediate opportunities for gain against long-term career prospects. For example, British doctors work for many years for modest pay, hoping to achieve consultant status. Doctors and nurses in other countries resist working in rural settings, if they feel it will impede their professional progress. Public sector systems for allocating training opportunities and selecting people for promotion strongly influence health worker behaviour.

One of the defining characteristics of the health sector is that users have little capacity to judge the quality of advice and services they receive, but the consequences of making a poor choice can be very damaging (Arrow 1963). Societies have developed mechanisms for reducing the risk and transactions cost of selecting expert health services. One commonly used strategy is for the state to license certain kinds of practitioners as experts. It may forbid everyone else from providing certain services and/or charging for them. It may protect licensed providers, while treating as a criminal anyone else who causes harm by supplying drugs or intervening surgically. The aim is to protect users from dangerous practices and enable them to identify competent practitioners.

The state gives practitioners a considerable amount of power by awarding them a monopoly right to sell certain services. In many countries it also establishes mechanisms to limit opportunities for health workers to use this power to earn an unreasonably high income.

One mechanism for reducing the room for manoeuvre of health workers is for government to employ them. This places them under a contractual obligation to provide certain kinds of services in exchange for a salary. It is dangerous to generalise, nonetheless, the relative pay of health workers tends to be lower where government is their principal employer.

Many societies have established professional regulatory bodies to prevent opportunistic behaviour by health workers. Some argue that these bodies give more weight to their members' interests than to the public. However, the long-term survival of health care professions depends on the public's perception of their integrity and they have a stake in limiting inappropriate behaviour. There is little knowledge about the performance of these bodies in low and middle income countries. Some societies also depend on political or religious organisations to induce health workers to serve public needs.

Health worker behaviour is constrained by hard-to-define cultural factors. In some countries health workers internalise a set of medical ethics, in others they respond to political or religious factors. In exchange they have high social status as trusted advisors. The values of professional service have contributed to the preservation of the effectiveness of services in some countries which experienced periods of administrative chaos.

This chapter tells how the Chinese government has tried to ensure widespread access to expert health care advice and services at a time of wide-ranging economic, institutional and political change: it describes the factors which influenced health worker behaviour during the period of the command economy; it then discusses how these factors changed during the transition to a market economy; it describes the legal and illegal livelihood strategies of health workers during the latter period; and it discusses the blurred boundaries between the two in a society undergoing radical reforms.

2. HEALTH WORKERS AND THE COMMAND ECONOMY

2.1 The economic and institutional context

Prior to the economic reforms of the 1970s, the state bureaucracy, rural communes and Communist Party dominated the Chinese economy. The state bureaucracy, which included state-owned enterprises, was organised according to the principles of the command economy: the national government set prices, assigned workers to enterprises, set pay scales and controlled investment decisions; lower levels of government, enterprises and individuals were expected to fulfil plan targets.

The rural areas were organised into communes which managed collective production. They used a portion of their output to finance investment and local services, and distributed the remainder to their members in proportion to the number of workpoints they had accumulated. Members of a commune earned workpoints for time spent on various collective activities.

The Communist Party played an important role in economic and social activities. Its cadres directly influenced decision-making in all institutions. The politicisation of economic life reached a high point during the late 1960s and early 1970s, when the Cultural Revolution put 'politics in command'.

2.2 Organisation and finance of health services in the 1970s

China's health sector was very poorly developed in 1950, but by the early 1970s a highly organised health service had been established throughout the country. Its character reflected the society within which it was created (Tang et al 1994).

Hospitals and work-based clinics provided services for the urban population. These facilities were owned by the Ministry of Health or state-owned enterprises, such as the railways. The Ministry of Health paid the salaries of government health workers and financed some other running costs of its facilities. Health facilities charged patients for drugs and services. Government employees and workers in state-owned enterprises were covered by health insurance which paid most of these charges.

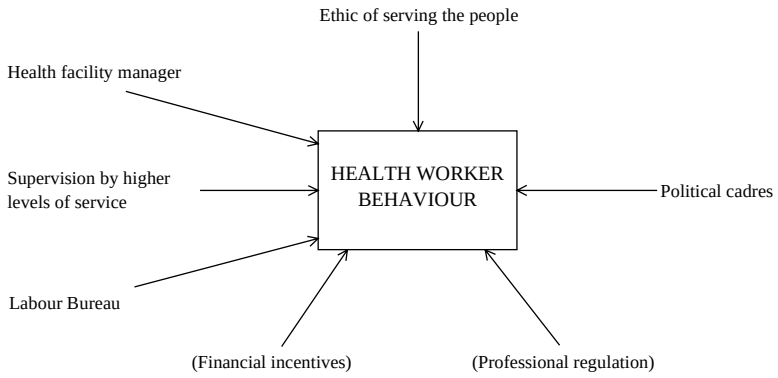
By the 1970s the so-called 'three-tier' rural health services were well established throughout most of China. Approximately 85 per cent of villages had a health station staffed by one or more barefoot doctors, peasants who had been given a short training course. They provided a combination of curative and preventive services. The commune health centres provided referral services and supervised the barefoot doctors. All counties had a government hospital and specialised preventive institutes. The health bureau was responsible for planning and overseeing the management of all of a county's health services. A number of public health campaigns were organised under the technical leadership of the Ministry of Public Health and the political leadership of the Communist Party, which played an important role in mobilising the population (Sidel and Sidel 1973).

Both the government and the communes supported the rural health services financially. The former paid the salaries of government employees and covered some of the operating costs of county-level facilities and preventive programmes. The latter paid non-government health workers a share of agricultural output much like any other member of the collective. Preventive services and consultations with barefoot doctors were supplied free or at very low cost, but patients purchased their own drugs and paid for curative care at township and county level facilities. The cooperative health system, local prepayment schemes which derived revenue from individuals and the commune, reimbursed a portion of these charges.

2.3 Influences on health worker behaviour in the command economy

Figure 2 summarises the influences on health worker behaviour during the 1970s. The health service was a tightly organised system which combined components of what Moore (1992) calls 'hierarchical control' and 'solidarity'. When Moore speaks of hierarchical control, he is referring to a bureaucratic system in which individual actors are answerable to successive levels of managerial authority. There were two parallel mechanisms of hierarchical control in the health sector. The first was the government, which employed all health workers down to the county-level and in state-owned commune health centres. The Labour Bureau assigned personnel to posts, where they were paid according to a national salary scale. During the late 1960s many health workers were reassigned from urban to rural health facilities. Health workers were answerable to the health facility manager and they were supervised by personnel from higher levels in the Ministry of Health hierarchy.

Figure 2, Influences on the behaviour of health workers in 1970s China



Barefoot doctors and health workers in commune health facilities worked as members of the collective. They received workpoints for time they spent on health activities, which entitled them to a share of total output. The county health bureau was ultimately answerable for the technical quality of health work in the county and it supported supervisory visits and training sessions for commune level personnel. The commune health centres supervised the barefoot doctors.

The second mechanism of hierarchical control was the Communist Party, through its network which extended to villages. During the 1970s, local political cadres directly influenced management decisions (Lee 1991). The Communist Party was the primary route for implementing many government policies. For example, it organised mass campaigns for improving public health by killing rodents, eliminating snails from irrigation canals, and so forth with technical support from the health sector.

The popular slogan which called on people to 'put politics in command' highlighted the importance of non-bureaucratic and non-economic factors. Health workers were expected to serve the people by leading local public health campaigns. They were answerable to local Communist Party structures and faced serious sanctions if they acted in a manner considered to be self-interested or counter-revolutionary.

Health workers were not strongly influenced by professional regulatory bodies, which were profoundly weakened during the Cultural Revolution of 1966-1976 (Gong et al 1997). During this period the Communist Party led a reaction against the development of a bureaucratic and intellectual elite whose interests were perceived to be divorced from those of the people they were meant to serve (Lee 1991, Tsou 1986). Between 1966 and 1969 medical universities and colleges were closed and through the mid-1970s training institutes provided courses of practical orientation of no more than three years' duration (Lampton 1977). Within health facilities, status and role differences among personnel with different levels of expertise were reduced in an attempt to diminish the power of physicians. Hospitals were governed by revolutionary committees, whose members often had relatively little specialised training, but who became responsible for medical decision-making. Ranking by titles was opposed and promotion of any kind stopped for ten years.

There is a general consensus that the health system of the 1970s provided almost universal access to basic preventive and curative health care, contributing to a dramatic improvement of health status (World Bank 1997b). However, there were problems. There is evidence of an informal arena in which parents used their influence to secure employment for their children, and people with political connections obtained

better health care than the rest of the population. Also there is a general belief that the high employment, low wage economy led to low effort and inefficient services. Feng et al (1995) argue that one reason why peasants were unwilling to contribute to local health prepayment schemes after de-collectivisation, is that local elites had benefited disproportionately from them. It is impossible to assess the magnitude of these problems. Nor is it possible to determine the degree to which health workers demanded informal payments from patients.

3. HEALTH WORKERS AND THE TRANSITION TO A MARKET ECONOMY

3.1 Organisation and finance of health services

China is transforming itself into a 'socialist market economy'. This involves changing from collective to household agricultural production; phasing out price controls; reforming state-owned enterprises; creating a labour market; and developing new forms of enterprise ownership. China has experienced rapid economic growth and its gross national product increased by 9.5 per cent a year between 1978 and 1994 (State Statistical Bureau 1995).

Government revenues have not kept up with economic growth and they account for a diminishing share of gross national product. The reflection of this in the health sector is that the government's contribution to total health expenditure (not including health insurance for government employees) fell from 28 per cent to 14 per cent between 1981 and 1993 (World Bank 1997b). Health insurance accounted for 36.6 per cent, society financing 6.6 per cent and out-of-pocket payments 42.5 per cent of the total in 1993.

The government has raised national scales of public sector pay several times and it permits cost centre managers to pay bonuses (Tang 1998). Earnings have increasingly diverged between personnel in profitable and unprofitable enterprises, and rich and poor localities. Local governments in the poorer parts of the country spend up to 80 per cent of their budget on personnel (Wong et al 1995). In spite of this, they can no longer afford even basic salaries. One of the authors has visited health centres where personnel receive 60 per cent of the government salary. Some facilities signal their continuing belief in a national pay scale by recording the shortfall as debt to their employees.

The so-called *iron rice bowl*, whereby trained personnel were assigned jobs and guaranteed employment for life, is gradually ending. The changes have been slowest in the public sector. Local labour bureaux still assign new graduates to government facilities, which are expected to employ them. Employees can change jobs, however, managers are not fully free to dismiss personnel. Many rural health facilities have increased their number of employees but lost their most qualified personnel.[5] Utilisation of these facilities has diminished, as they have offered fewer services while competition has increased (Gong *et al* 1997). Hospitals in areas experiencing rapid economic growth have been able to increase their number of highly trained staff as the demand for specialist services has increased. Their employees have greater opportunities to supplement their basic salary.

The government provides as little as 15 per cent of the budget of hospitals and health centres (Bloom and Gu 1997). Health facilities generate revenue from service charges, selling drugs and undertaking profit-making activities, such as manufacture of pharmaceuticals and so forth. Government grants to the public health programmes have not kept up with inflation. Preventive institutes have developed revenue-generating activities and charge for some preventive services (Shu and Yao 1997).

The end of central planning has given cost centres a great deal of autonomy. Government bureaucrats and local politicians no longer have the right to interfere with management decisions (Lee 1991). The command and control model of supervision has not been replaced by a functioning regulatory system because the legal framework is still being developed and many local governments are unable or unwilling to enforce the existing regulations (Lichtenstein 1993).

Political decentralisation is proceeding slowly. The Communist Party intervenes less than previously in economic and administrative matters. Professional regulatory bodies are still weak. Alternative mechanisms of local public accountability, such as village representative bodies, are only in the process of being established (O'Brien 1994). This limits the degree to which local service providers are accountable to users.

3.2 Extra-legal payments for health services

Health workers employ a variety of strategies to augment relatively low basic government salaries. Health facilities, like all other enterprises, are permitted to pay bonuses out of surplus earnings. They can be as large as the basic salary. Patients may also give them gifts, called 'red packages', and suppliers of drugs, equipment and services may pay them 'kickbacks'. These payments span a spectrum from perfectly legal to liable to criminal prosecution. The boundary between categories is shifting as China creates a regulatory framework for its market economy (Zu 1995; Hao et al 1998).

This section describes payments outside the ethical and/or legal norm. It is based on a review of academic literature, newspaper articles and government statements. These sources provide an impression of current thinking; they do not provide systematic data on the relative importance of formal and informal economic incentives. Section 3.3 discusses how health worker behaviour is influenced by market-like mechanisms (legal and extra-legal) for earning a living.

3.2.1 Red Packages

During the period of the command economy people often had to wait a long time to gain hospital admission or access to specialised services and sophisticated drugs. Some gave gifts to a doctor or manager who allowed them to jump the queue or obtain special services. These gifts are called 'red packages', which were traditionally exchanged as an expression of mutual obligation. These practices were considered anti-social during the Cultural Revolution and red packages were infrequent and secret (Zhou 1994).

Red packages have become much more common during the transition to a market economy. Xing (1996) reported that health workers in 190 hospitals recently turned over 3.5 million yuan in red package

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[5] In 1998 the government announced it would reduce the number of its employees. If governments in poor localities implement this policy, they can increase their subsidy per employee.

payments to local government, Feng and Feng (1994) found over 50 per cent of inpatients in Shengyang had paid a red package averaging 260 yuan[6] and Li and Huang (1995) reported that 74 per cent of inpatients had made informal payments. Most studies have focused on urban health facilities. However, Jing et al (1996) report that health workers in rural Jiangxi receive red packages.

Red packages have evolved from gifts to cash payments. Factors associated with their size include: location in an affluent locality, degree of sophistication of the health facility, seniority of the doctor and area of specialisation (Zhou and Zhang 1994). Surgeons, obstetricians and anaesthesiologists tend to obtain larger payments. Surveys of hospitals, excluding township level facilities, carried out in several provinces have reported average payments between 140-320 yuan (Song 1996; Huang et al 1995; Zhang HT 1995; Li and Wang 1996). Studies of large referral hospitals have found average charges of 400 yuan or more (Wang and Ma 1995; Yue 1994).

A survey in Xian found that 64 per cent of red packages were paid before treatment and the others were gifts in gratitude for high quality services (Yue 1994). Some patients pay to encourage the doctor to give their case special attention. The payer may still view the red package as a gift which cements a reciprocal relationship, as a newspaper article about a man who attacked his father's doctor when he refused a red package illustrates (Chen and Sun 1995). Uninsured patients may pay the doctor to reduce the charges and refrain from recommending unnecessarily expensive items (Guo 1995).

Health workers have ambivalent attitudes towards red packages. Zhou and Zhang (1994) reported that 21 per cent of doctors surveyed said they accepted them to compensate for unrealistically low pay, 59 per cent refused them on ethical grounds and 15 per cent turned them down for fear of punishment. Another survey found that 31 per cent of recent medical school graduates thought that red packages were normal (Liu et al 1995). It is impossible to assess whether these attitudes reflect actual practices of doctors.

3.2.2 Kickbacks

The government allows health facilities to accept discounts from suppliers of drugs or equipment, as long as they record them in the accounts (Zhou 1998; Shi and Chu 1998). The maximum allowable discount has been 2-3 per cent and is now 5 per cent (Health News Agency 1998). All other payments are illegal. These kickbacks commonly take the form of cash, cars, air-conditioners mobile telephones, banquets, entertainment and travel (Qu et al 1996; Wang 1995; Chen HY 1996; Yao and Ren 1994). They are paid to health facilities and/or individuals. Wang (1995) reports that they typically amount to 8 per cent-10 per cent of the cost of common drugs and 30 per cent of the cost of advanced ones, and Zhou (1996) reports kickbacks averaging 25 per cent.

Health organisations or departments also pay doctors 'prescription fees' for ordering a particular investigation or drug, 'introduction fees' for sending new patients, or 'referral fees' for sending patients for specialist care. These forms of informal payment emerged in the mid-1990s, reflecting the relative over-supply of health resources and the competitive nature of the health service market, particularly in the urban areas.

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[6] One US dollar was equivalent to approximately 8 yuan during the mid to late 1990s,

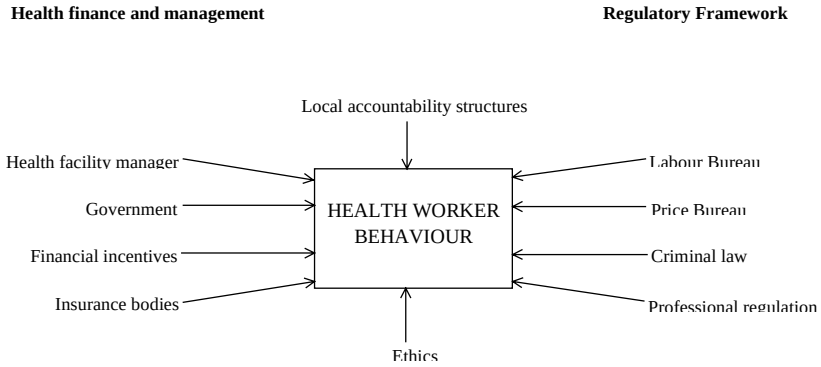
There is little information on the extent of kickbacks. The government recently asked pharmaceutical companies and health facilities to carry out a self-audit. The 117,714 participating institutions reported 1.74 billion yuan in drug kickbacks over four years. The government also received 6103 complaints involving illegal payments of 664 million yuan (Zu 1998). Provincial-level audits have revealed substantial problems in Zhejiang, Hunan and Shanxi (Zu 1998; Chen 1997; Zhou 1997; Li and Wang 1996; Peng and Deng 1998).

Policy analysts have identified several negative consequences of drug kickbacks including: loss of taxes, bypass of quality controls, and over-prescription of drugs (Wang 1995; Yao and Ren 1994; Wang 1995; Hao et al forthcoming). There are reports of companies using kickbacks to promote comparatively expensive imported drugs or locally produced brand name products (Wang CS 1995; Wang JZ 1995; Wang 1997; Wang and Yu 1998). This has contributed to rapid rises in health expenditure. The importance of kickbacks to some health facilities is illustrated by Zhou (1998), who estimates that a mid-scale hospital can earn as much from this source as from the typical government grant.

3.3 Influences on health worker behaviour in the socialist market economy

Health workers are more influenced than previously by material incentives and, what Moore (1992) calls, 'dispersed competition'. However, many providers do not act as if their only motives are financial. Figure 3 identifies factors which explain this. Some are diminished versions of the major influences on health workers during the 1970s and others are new. The discussion is complicated by the rapidly changing structure of the health sector. Since 1997 the government has enacted reforms of many aspects of health sector management, finance and regulation.

Figure 3, Influences on the behaviour of health workers in 1990s China



Most health workers are employees of a health facility. The major exceptions are village health workers, who mostly work privately, and the growing number of licensed private practitioners (Liu et al 1994). Village health workers receive little money from government and earn most of their income from consultation fees, selling drugs and non-medical work (de Geyndt *et al* 1992 and Deng *et al* 1997). This section focuses on the employees.

3.3.1 Provider behaviour in a regulated market

Chinese health facilities are neither public nor private, as understood in established market economies. They are mostly owned by local government, although some localities are experimenting with alternative forms of ownership. The government signs a contract with the facility manager and negotiates an annual grant. The facility raises the rest of its revenue (up to 85 per cent) by charging patients directly or billing the employer of insured workers. The facility manager has a great deal of autonomy and can use surplus revenue to pay salary enhancements or invest in improvements. The manager also influences promotion decisions. Government policy statements in 1999 call on local governments to give health facilities even more autonomy.

Weitzman and Xu (1993) call this kind of Chinese entity 'vaguely defined cooperatives'. By this they mean that the manager is answerable to the employees and to local government. They argue that enterprises have been successful, in spite of the fact that property rights have been vaguely defined, because the Chinese are used to limiting self-seeking behaviour in the interest of the community. Hsiao (1995) makes a similar point in arguing that China may be more able to create sustainable rural health prepayment schemes than other countries because its villagers are used to working cooperatively. In this view, the performance of health facilities is a result of a continuing negotiation between government, employees and users, moderated by a poorly defined pressure for a socially acceptable outcome and the relevant regulatory framework.

The regulatory bodies inherited from the command economy are modifying their roles. Until recently the Labour Bureau assigned personnel to health facilities and the local manager had little control over hiring and firing. This is changing and reforms currently underway will give considerably more power to managers. Health workers can already change jobs more easily. This has given skilled personnel greater negotiating power and the best trained have left facilities in poor localities. Other facilities have maintained a stable workforce by paying salary bonuses. Many facilities pay more to personnel who generate the most revenue.

Government price bureaux have kept charges for preventive services and routine consultations low, in order to keep them accessible. According to Zuo (1998), many health facilities experienced serious financial problems during the 1980s and the government responded by allowing them to earn a 15-20 per cent mark-up on drugs and other consumables and to set high fees for services for relatively sophisticated equipment. This enabled health facilities to cope with a relative fall in government funding, but it created incentives which encouraged cost increases.

Health facilities reward revenue generation with salary bonuses. Tang (1997) describes how some rural health centres pay larger bonuses to members of the more profitable clinical cost centres. In spite of these adaptations, health facilities cannot pay their employees as much as profitable enterprises.

Health workers have responded to these incentives by shifting their activities from preventive programmes to curative services. The institutes responsible for supervising a county's maternal and child health services or epidemic control programmes, now also charge for maternity services, medical examinations for food handlers or specialised laboratory services. They may not have enough time to supervise preventive services as intensively as in the past.

Their second strategy for increasing revenue has been to sell drugs as a means of generating more revenue per health care encounter. Zhan et al (1998) found that the average number of drugs prescribed per consultation by health centres in three poor counties varied from 2.3-4.3. Zuo (1998) documents very rapid increases in drug expenditure in Shanghai since the mid 1980s. This contributed to rises in the cost of health care and exposed patients to the risk of adverse reactions. The government is actively seeking methods to reduce the direct linkage between the volume of drugs a hospital sells and its total budget.

There has been a rapid increase in the availability of relatively new technologies. In rural facilities, this is typified by the spread of X-ray equipment and ultrasound. Many of the urban hospitals have acquired CAT scanners. This was partly a response to the demand for increasingly sophisticated services by workers whose income has been rising, but it also reflects the revenue which health facilities earn from these investigations.

Local health departments play a diminished regulatory role. Officials control budgetary allocations to health facilities, but they mostly pay little attention to the quality or cost of services. This reflects the low priority local governments have given to health, under the influence of national policies which have emphasised economic development (Liu et al 1996). Some local governments even took the view that health services should be treated like any other marketed good or service. The government issued a major health policy document in late 1997 which assigned to all levels of government responsibility for ensuring access to appropriate health services at an affordable price. This may stimulate greater political interest in health services.

Other reasons for the decline in regulation, particularly in poor localities, include low technical capacity of many local governments to monitor health facility performance and lack of funding for supervisory visits or courses for front-line health workers. Also health facilities, such as county hospitals or anti-epidemic stations, which are responsible for supervising grassroots providers, depend on revenue generation and have little incentive to allocate resources to regulatory activities.

Health departments of higher levels of government provide almost no funding for health facilities which belong to lower levels of government and they have almost no influence on their performance. They also spend very little on supervisory visits. In spite of this, Zhang et al (1997) describe how Yunnan's Provincial Maternal and Child Health Department influences the performance of local health facilities by paying performance-related bonuses to township health centres. The authors report that the facilities improved their performance in response to a combination of peer pressure and small financial incentives.

The other major influence over service providers are urban and rural insurance schemes. The schemes for urban workers generally reimburse health facilities on a fee-for-service basis. Since the early 1980s, claims on them have consistently risen faster than inflation (World Bank 1997). The newly created Ministry of Labour and Social Security is reorganising the system of urban health finance. It plans to establish unified insurance bodies in each city which will be responsible for negotiating more cost-effective health care. These could, potentially, exert a substantial influence on provider behaviour by monitoring their performance more closely and altering the payment mechanism.

Most rural residents pay for their own health care. However, around 10 per cent of villages have established health prepayment schemes (Carrin et al 1999). Recent government policy statements strongly

urge other localities to create such schemes. Most schemes reimburse individuals for a proportion of treatment costs. However some have tried to influence health worker performance by monitoring drug prescription behaviour, auditing hospital costs of hospital, negotiating alternative forms of contract with health facilities, and so forth (Bloom and Tang 1999). The new government policy recognises the potential influence of these schemes on the pattern of health provision.

3.3.2 Redrawing the boundary between legal and illegal practices

The government has become increasingly concerned with the use of extra-legal strategies by health workers to augment their income. Its response has depended on whether it perceived the strategy as criminal or merely undesirable.

The government's principal complaint against red packages is that they contradict its efforts to keep the cost of medical consultations low. The government has tried to stop this practice and the Deputy Minister of Health made it a priority anti-corruption task in 1997 (MoPH 1995 and 1998; Tao 1997).

The government treats red packages as unethical and unprofessional. Health Departments take them into account in evaluating hospital performance, and Hunan, for example, downgrades hospitals where more than 1 per cent of employees accept red packages (Liu JQ 1995; Wang 1995). Health facilities award prizes for 'honest medical service' and rewards of up to 20 per cent to health workers who refuse a red package or give it to the authorities (Dai 1995; Wang 1995). They punish offenders with fines, loss of bonuses, termination of employment, postponement of promotion, demotion and/or loss of the right to prescribe drugs for up to a year (Zhang 1995, Luo and Zhang ZJ 1995; Lu 1995).[7] One recent strategy for tackling this problem has been to ask patients and doctors to sign an agreement undertaking not to pay or receive a red package (Song 1995; Liu XR 1995).

Some analysts attribute the growth in red packages to distortions in the health care market. Health facilities cannot charge economic fees for inputs of time by health workers. They have compensated by selling drugs and charging for the use of sophisticated equipment. However, they mostly have not been able to match the levels of pay of profitable enterprises. Health workers have sought additional income from informal sources. The different systems of health finance have created different markets for health services. People with health insurance, mostly in urban areas, can easily afford a relatively modest red package. The majority of the population who are uninsured have difficulty meeting formal hospital charges and have little capacity to make additional payments.

Viewed from this perspective, red packages are a response to rigidities in the health care pricing system and the widening differences in levels of pay. They have, in turn, increased inequalities in access to services between residents in rich and poor localities and the insured and uninsured and magnified the attraction of health workers away from poor areas. Their existence highlights difficult policy issues regarding health worker pay.

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[7] The number of people actually punished is small: Shanxi, Shandong and Henan Provinces punished 123, 67 and 241, respectively in 1994-5 (Huang et al 1995; Zhang HT 1995; Wang 1995).

Government views kickbacks as a form of bribery (State Council 1994 and 1996; Shi and Cho 1998). A number of Ministries, including the Highest People's Office of the Public Prosecutor, are coordinating efforts to stop them (Chen J 1996; Zu 1998a). The Ministry of Health and Provincial Health Departments have also carried out campaigns to stop kickbacks (Yang 1998). The punishments include: confiscation of the kickback, fines, and prosecution under the 'Law Against Unfair Competition'. People found guilty of accepting kickbacks can be imprisoned for between 5 and 9 years (Wang SP 1995; Zhang ZR 1995). Zu (1998b) documents 3363 cases of kickbacks which went to court between October 1995 and October 1997.

3.3.3 The importance of non-economic influences

The attempt to explain the behaviour of health workers in terms of economic incentives ignores the important influence of internalised values (Mechanic 1996) and political, administrative and professional influences. This explains why many village health workers continue to participate in preventive programmes and see poor patients in spite of the changes in the system of payment; it also explains why health facilities in Yunnan respond positively to small performance-related bonuses. It is hard to predict how long attitudes formed in an environment which emphasised social responsibility will persist as marketisation continues and inequalities grow.

The previous influence of local political cadres over health providers has weakened. This is partly because the former have been more interested in economic development than health. Also there have not been any mass political mobilisations in public health campaigns. This has reduced the pressure on health workers to take the interests of users into account. The new government policy acknowledges the need to shift the balance in favour of the community. It hopes to achieve this through a combination of better regulation by government health departments and strengthening the capacity of civil society to influence provider performance.

The government is formulating a new law which will establish criteria for registration as a professional (Gong et al 1998). It is not clear how the regulatory bodies will monitor health worker performance and it is too early to assess the degree to which they will promote some form of professional ethic.

The government is also beginning to establish elected village councils. In the health sector it advocates 'democratic supervision' of local health services. In practice, this may mean that community representatives will be included in the management committee of local health prepayment schemes. Most localities have not yet established mechanisms to improve accountability of health service providers.

4. THE CHANGING SOCIAL CONTRACT WITH HEALTH WORKERS

This chapter has recounted how health workers have adapted to major economic and institutional changes during China's transition to a market economy. China, in contrast to many other ex-command economies, has preserved an effective health sector during a time of great change. This is due, to a great extent, to its government's management of transition.

China has not attempted a blueprint, top-down approach to reform. Most changes have taken place as a result of local initiatives which other localities have replicated. The government has shifted policy to take into account the altered reality. This approach has enabled the government to maintain relative stability during a period of rapid change. However, it has given a great deal of influence to the outcome of local negotiations. It has also meant that government has tolerated major distortions in the regulatory framework while waiting for new strategies to emerge. It is too early to say how different social groups have fared in the renegotiation of the regulatory system.

The gradual approach to change is illustrated by the shift from administered prices to a market economy and from a managed labour system to a labour market in the health sector. The government has had to balance the need to prevent excessively large differences in access to health services and in health worker pay between localities against the need to maintain comparability between health and other sectors. Its strategy was to encourage local governments, health facilities and individual health workers to find local strategies for securing health worker incomes. Informal payments are one end of a continuum of adaptive activities. In some cases these adaptations have pushed the government to modify the regulatory framework; for example, by price reform. In other cases, it has drawn a clearer boundary between legal and illegal activities.

The national government established a regulatory framework aimed at keeping the cost of basic services low. This arrangement was relatively stable for over 15 years, but it created strains which have been expressed in movements of personnel to urban facilities, the shift in the balance of activities in favour of those which generate revenue and the increase in extra-legal payments. By the late 1990s, it had become apparent that the system was unsustainable due to rapidly rising costs and the increasing inequality in access to health services. The government has responded with a series of reforms concerning the allocation of public finance, organisation of health insurance and creation of new models of primary level care.

As long as there is substantial economic inequality, the government will be unable to establish a unitary pay scale for health workers unless it makes large fiscal transfers to poor localities to maintain salaries at levels appropriate to the richer cities. There are strong arguments for increasing subsidies to health services in poor areas, but there are also dangers in paying artificially high salaries to their health workers. Governments have to address a number of difficult questions in formulating strategies for managing the emerging market for health workers:

- Can the objectives of providing access to health services for all social groups be reconciled with the need to pay competitive salaries to health workers?
- How should health worker pay be established? To whom should different categories of health worker be compared? Should health worker income vary between rich and poor localities? To what extent should government intervene to reduce inter-regional inequalities in pay by controlling earnings in rich areas or subsidising health workers in poor localities?
- How can the willingness of richer social groups to pay more for health services be reconciled with the objective of ensuring access to skilled health workers for all? Can health workers earn additional income

from fees without creating unacceptable inequalities? Should 'private' patients be asked to pay the full cost of fees, rather than modest red packages?

- What are the relative roles of government, professional bodies and communities in supervising health worker performance?
- Can the transition to a market economy be managed without destroying the factors which encourage ethical behaviour?

Government may be able to reduce the prevalence of red packages and kickbacks by price reform and more active enforcement of the law. However, as long as it tries to ensure equitable access to health services, it needs to find a way to trade-off the desire of health workers to earn incomes comparable to those in other sectors against the needs of poor patients.

5. BEYOND INFORMAL PAYMENTS

The story of informal payments in China leads to more general questions about how the market for health care services can and should operate in low and middle income countries. The concept of informal payments depends on the existence of clearly defined 'formal' payments. These, in turn, are based on an assumption about how health workers should be paid and how they should perform.

The simple dichotomy between formal and informal payments has become blurred as many countries have increased the role of the market in their economy. Governments have been unwilling or unable to finance a health service which meets the expectations of the richer members of society or to pay salaries which meet the expectations of health workers with the most marketable skills. This has created a niche for legal and/or illegal markets for health services. In some cases health workers supplement basic government salaries with income earned (legally or illegally) from other sources; in other cases they leave public employment. The balance varies between countries.

The existence of informal payments is a sign of the increasing gap between the view of the health sector as a fully funded government service and reality. They also reflect a strain in the present contract between government and health workers. They cannot be controlled simply by punishing offenders more strictly. Governments have to revisit basic questions about how they should make the best use of their limited financial and regulatory powers to influence health service providers. This may lead to a redrawing of the boundaries between public and private sectors and a renegotiation of the social contract with health workers. The relationship between health workers, governments, and civil society organisations are likely to change considerably in China and other low and middle income countries during the next few years.

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