

## Community Health Care Reform and General Practice Training in China – Lessons Learned

Liang Wannian, MD\* and Daniel Kam Yin Chan, MD†

\*Professor

Executive Director, National Training Centre for General Practice, Ministry of Health  
Capital University of Medical Sciences  
Beijing, China

†Associate Professor

University of New South Wales (School of Public Health & Community Medicine)  
Bankstown-Lidcombe Hospital  
Bankstown, NSW 2200 Australia

**Abstract:** Vast changes have occurred in China in the last five years since the decision of the Chinese Government to reform its health system. Many district and community hospitals in the city have been converted into community health centers. The hospital-based doctors who used to work in these centers are being retrained to become general practitioners (GPs). The reform had encountered many problems. The community has not embraced the concept of general practice readily. Lack of fair remuneration and lack of recognition of the importance of the reform by bureaucrats of local government are other problems encountered. The Ministry of Health meanwhile has also introduced a system of retraining hospital-based doctors to become GPs. A medical education curriculum for GPs has been developed. A nationwide network of GP training centers is progressively being formed. The GP training program has also extended to undergraduate medical students. Despite the progress made, many difficulties remained especially in regional areas. The speed and quality of GP training in wealthy, developed places is better than poorer regional areas. The issuing of national license and registration examinations for GPs has not been synchronized with GP training, leading to uneven standard of GP practice. Staff morale is also poor due to the lack of chance for promotion and professional development. Although a number of strategies have been proposed to improve the situation, problems are enormous that China may welcome international collaboration.

Visitors to China are often amazed by the enormous socio-economic changes that have occurred over the past two decades. Little is known about the health care system in the outside world. What has happened to the renowned success story of an affordable universal health care system in China? Indeed over the last five years, the health care sector has undergone reform as well. The aim of the reform is to introduce a community based health care system with general practice as the driving force to complement the existing hospital based health care system. China has 1.3 billion people and 63,000 medical treating institutions with three billion attendances per annum. When such ambitious health care reform occurs in a huge country like China, the implications are enormous, and not without risks. Lessons learned from the reform can also serve as reminder for other developing nations undertaking similar endeavors in the future.

Since the creation of new China in 1949, the health care system has consisted of a three-tiered, vertically organized network of community, district

and tertiary hospitals in the urban areas, and country health units in the rural areas. Therefore, the health system in the city has been entirely hospital based without community health or general practice. The decision to reform the health care system was made by the central Chinese government in 1997. Since then, vast changes had occurred in the city with many district and community hospitals being converted into community health centers and the specialists who used to work in these centers being retrained to become general practitioners (GPs). Many issues concerning community health care and general practice have occurred as a result. These issues are both interesting and challenging.

### The Current Status of the Community Health Service and the Aims of the Reform

In recent years, there has been a rapid expansion of the urban population in China. Some 20 years ago, only 20% of the population lived in the cities. Now approximately 30% of China's 1.3 billion people are in the cities. This rapid demographic change and the

increase in health care demands of a wealthier and ageing population mean increased burden on the health system. Few would argue that reform is necessary. It does not make economic sense for trivial illnesses to be treated in hospital settings. The country needs an affordable and effective health care system. General practice and community health care services can provide the solution.

By the end of year 2002, in the space of five years, community health services have been established in all 31 provinces and autonomous regions in China with a total of 2,406 community health centers and about 9,700 affiliated services established.<sup>1</sup> The community health care team usually consists of GPs, multi-skilled nurses, and public health personnel.<sup>2</sup> Nearly all GPs are employed by the local governments. Apart from providing medical treatment, the team is also involved in a range of activities including disease prevention, rehabilitation, health promotion, medical education and family planning. Most of the medical treatments are focused on diseases that can be handled in general practice. People with major illnesses are referred to teaching hospitals. The role of the community health team as defined by the central government is to provide an affordable and efficient health care system to the masses, and at the same time prevent the spread of communicable diseases as well as reducing the burden of the pharmaceutical cost on the society.<sup>2</sup>

### **Current Experience and Problems of Community Health Service Reform**

The ideals mentioned are sensible but in reality major problems have been encountered. The first major challenge is the lack of recognition of importance of the reform. The community has not embraced the concept of general practice and are not accustomed to community health care services. People with minor illnesses still prefer to be seen by doctors in prestigious tertiary hospitals even though it is more expensive. A visit to a specialist doctor in the outpatient of a tertiary hospital usually costs three times that of a consultation by a GP in the community health centre. Despite the difference, patients tend to bypass the GPs and go straight to the outpatient departments of big hospitals. Therefore, GPs have failed to establish themselves as "gate keepers" for acute hospitals. A typical day in a prestigious hospital outpatient department usually involves several thousand consultations compared to less than a hundred in a typical community health center. According to the Ministry of Health statistics<sup>3</sup>, in the year 2002, there were 1.2 billion consultations in hospital outpatient departments compared to 36 mil-

lion consultations in community health centers nationwide. Likewise, bureaucrats of local government also do not see the importance of the reform. Staff in the district hospitals are also reluctant to change and do not appreciate the long-term benefits that the reform will bring.

Lack of a fair remuneration system is another issue. For instance, some important services such as public health education and disease prevention as provided by community health centers have not been received appropriate remuneration by the government. Also, financial resources to support a multi-disciplinary health care team, which includes allied health, have not been established.

One of the goals of the reform is to establish a market driven, community based health care system. However, health care administrative skills have not been developed to go hand in hand with the need of community health services reform. Competition and driving forces of a market economy are also lacking. Better human resources management and utilization of technological know-how are some of the issues facing the reform. There is also a lack of customer focus and understanding on risk management.

### **The Current Situation of the National Medical Education Program for GPs and Community Nurses**

The Ministry of Health has introduced a system of retraining hospital-based doctors to become GPs. In addition to developing a medical education curriculum for GPs and community health nurses, the Division of Medical Education in the ministry has also set standards or requirement for other training programs in the community health services. In the year 2000, a national centre for GP training was established at the Capital University of Medical Sciences. At the provincial level, the health bureaucrats in fifteen provinces (or cities) have included GP medical education in their portfolio and have commenced its implementation. By the end of 2001, 16 provinces (or cities) have already established provincial GP training centers. Fifty-eight clinical centers and 56 community health centers nationwide have been accredited for training.<sup>4</sup> Therefore a network of GP training centers is progressively being formed. As a result of these efforts, GP training programs have started in 17 provinces (or cities) for those who are already working in community health centers. Ten different provinces have arranged bedside clinical teaching based in such centers. Up to year 2001, 13,523 GPs graduated via clinical bedside training.<sup>1</sup>

It is contemplated that this training program will be completed by year 2005.

Nationwide, progress has also been made in undergraduate and postgraduate teaching of general practice. Twelve provinces (or cities) have listed general practice as part of their core (or elective) undergraduate teaching activities in the medical curriculum and medical students from 16 institutions are enjoying general practice as part of their curriculum. Six provinces or cities (Beijing, Shanghai, Zhejiang, Heilongjiang, Guaihou, Fujian) have commenced programs in general practice postgraduate training. To-date, 639 district hospital doctors have already been retrained as GPs<sup>4</sup>. The funding of the retraining comes mainly from income generated by health care services, resources from units and individual workers. Fourteen provinces have commenced the training of GP trainers. To date 1,359 people have been trained as GP trainers in provinces in addition to the 600 already trained by the Ministry of Health<sup>1</sup>.

Six provinces (or cities) have started the training of community nurses and have trained 2,513 nurses to date.<sup>1</sup> Another five provinces have begun training community nurse managers.

### **Existing problems of GP training and registration**

Despite all the seemingly positive statistics, the reform has been slow in some regions. Some regional bureaucrats have not recognized the importance of community health development and have therefore not put enough emphasis on its reform. In some other instances, some regions while putting emphasis on the provision of community health services, have not give emphasis to the development of personnel. As a result, there is uneven development of GP training in various regions. The speed and quality of GP training in wealthy, developed places such as Beijing, Tianjin, Shanghai, Zhejiang, Shenzhen are faster and better. In comparison, there are places where development and quality of GP training are poor. For instance some places only require training for two or three days and claim that the training process has been completed.

The execution of the national license or registration examination for GPs is also out of step with GP training. For example, GPs can sit for the registration examination without necessarily going through the training program. Furthermore the contents of the examination are not necessarily based on the training curriculum. Worse still many examinations do not actually reflect the bedside clinical practice of GPs.

Therefore the license examination cannot be used to judge how competent a GP candidate actually is.

There is problem also with staff morale. Staff who have undergone training receive similar salary and opportunity for promotion as staff who have not. This has affected the enthusiasm of people who want to undergo training. The role of GP and patient number to staff ratio are not clearly defined. Consequently staff are not being fully utilized to their full potential and this has resulted in wastage of training.

Professional and career development opportunities (such as Master and PhD courses) for GPs are less when compared to other hospital based specialties. There is a severe shortage of training funds in most provinces (or cities). Many regions do not have a budget for GP training and some trainees actually have to pay for their own training costs.

Although the Ministry of Health has published standardized teaching material, some regions are still using their own material which are poor in quality and may even deviate from the standard instruction. Others are hampered with mistakes and therefore diminish the quality of teaching. Furthermore, some regions have organized training at a college level instead of university. Therefore, there is a lack of uniformity of teaching material and teaching standard.

### **Improvement Strategies and possible future changes**

A number of strategies have been developed to improve the quality of care and speed of the reform. The importance of health service management is emphasized in these strategies. There are plans to break down the monopoly of government owned facilities in the provision of community health services. Individual or company investment will be welcomed in the new plans<sup>5</sup>. It is hoped that competition will help the spread of the reform. Furthermore, there are plans to reform human resource management. Unlike the past, different units of community health services will be allowed to choose their employees freely with a selection process based on ability and performance. An individual is also free to come and go, and is no longer bound by the unit.

A key performance indicator system for funding is to be introduced. The government will change its funding arrangement from treatment based alone to performance based. With this initiative, the government hopes to change the focus of the provision of community health services from disease treatment to ho-

listic patient care. The government also plans to introduce the concept of health care as a business. There will be organizational and contractual changes. The different community health care organizations or centers will be allowed to go beyond the geographical boundary to provide services to other districts. They will also be allowed to group into bigger organizations and therefore have better financial power.

### Strategies to tackle the GP training problems

A number of recommendations have been made to improve the training of community health service personnel (including GPs) and promote better management. These include:

#### 1. Improving recognition and salary

It is hoped that through educational campaigns to the general public and bureaucrats, the message about the importance and relevance of community health services in health reform can be filtered through. Apart from adequate resources and funding which are essential in GP training, more emphasis will be put on management and there will be better remuneration of people with appropriate training.

#### 2. Strengthening leadership and organizational structure

The Medical Education Division of the Ministry of Health will inform different provinces (or cities) with clear instructions and guidelines about the reform. The regions falling behind will be encouraged to set up their own training centers and form networks with major national training centers in order to improve the GP training process.

#### 3. Improving the quality, training and management of GP trainers

More emphasis will be put toward the training of GP trainers and an overall strategy is to achieve the goal of forming a core group of GP trainers in two years. The GP training centre in the Ministry of Health (Capital University of Medical Sciences) will play a key role to help the development of GP trainers in regional centers, especially in the western (poorer) part of the country. All training in different training centers is to be coordinated and managed together in order to standardize the quality and requirement.

#### 4. Registration of GP to be in line with training

Only people who have undergone training will be allowed to obtain the GP registration. In other words, training for general practice will be a prerequisite for the sitting of the license or registration examination.

#### 5. Speeding up the community health service model

The goals of community health services and the policies regarding the training of its personnel will be made clear. The enforcement of all community health personnel to undergo necessary training will be an integral part of the overall strategy to help the formation of a community health service model.

#### 6. Policies are required for professional and career development after graduation

It is suggested that GPs should be offered more opportunities for post-graduate training such as Masters or PhDs. More opportunities for jobs after training and better salary will also be helpful.

### Conclusion

The health care reform undertaken by China to change from hospital-based care to community-based care in the city is huge and many difficulties are encountered. The training of GPs requires more resources, and the status of GPs along with community health services development requires more recognition from the bureaucrats and the public. Many regions especially the poorer areas are falling behind in standards of care, training and resources. These problems are enormous and China may welcome international co-operation to improve the quality and quantity of the training of community health workers including GPs.

### References

1. Ministry of Health - "General Survey of Community Health Services". 2002.
2. Division of Primary and Women's Health, Ministry of Health - "Opinions about Development of Community Health Services in the Cities". 1999; No. 326 document.

3. Ministry of Health 2003: Statistics of various health services utilisation in year 2002.
4. Division of Medical Education, Ministry of Health - "Survey of Community Health Services and General Practice training" 2002.
5. Division of Primary and Women's Health, Ministry of Health - "Circular regarding the Opinions about Development of Community Health Services in the Cities". 20 August 2002.

### **Correspondence**

Daniel Kam Yin Chan, MD  
Associate Professor  
University of New South Wales (School of Public Health & Community Medicine)  
Bankstown-Lidcombe Hospital  
Locked Mail Bag 1600  
Bankstown  
NSW 2200  
Australia  
Telephone: 61 2 9722 7558  
Fax: 61 2 9722 8275  
Email: [daniel.chan@swsahs.nsw.gov.au](mailto:daniel.chan@swsahs.nsw.gov.au)