

Developing family medicine in Mongolia

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Abstract

Background: Mongolia previously had no tradition of Family Medicine. As part of overall health sector reform, a general practice model has now been established with a primary care system of family doctors in group practices covering all population centers in the country.

Methods: The present article describes the family doctor implementation process, including capitation payment arrangements, registration, retraining programs and community education.

Results: The Mongolian experience – targeted and focused primary care reform with investment of resources and government commitment to change and innovation – offers lessons to other countries in central Asia developing Family Medicine models.

Conclusions: The challenges for Mongolia and for other transitional central Asian countries remain reorienting the health system from hospital based services to primary care and to raising quality and standards.

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Key words: capitation, central Asia, clinical training, Family Medicine, health reform, quality improvement.

Mongolian health care

Mongolia is a large landlocked country in the northern part of central Asia, located between Russia and China. A relatively small number of people – 2.4 million – live in a large geographic territory of 1.56 million sq km, 2400 km long from east to west and 1260 km from north to south, giving a population density of 1.5 inhabitants per sq km. However, approximately 50% of the population lives in urban centers – 700 000 people in the capital Ulaanbaatar alone. As in Australia and Canada, other countries with vast territories, ensuring appropriate health services in a country with urban and sparsely populated rural areas like Mongolia, presents significant organizational and logistical challenges.

In common with other countries influenced by the Soviet model of health care, the Mongolian health system was centrally planned; dominated by the hospital

sector with no tradition of general practice; and exclusive of community involvement or participation.¹ Patients were regarded as passive consumers of services prescribed and organized by largely anonymous bureaucrats.

Since the transition to a market economy in the early 1990s, health reform is now firmly on the Mongolia agenda and one of the major vehicles for health service reform in the country is the Health Sector Development Program (HSDP), an initiative funded from Asian Development Bank loans to the Mongolian Government. The HSDP has been underway since mid 1998 and according to a recent review,² has already impacted on the structure and delivery of Mongolian health care. The HSDP is directed towards structural and organizational reform by moving the Mongolian system from the inefficiencies and poor standards of the old model towards a modern customer focused approach emphasizing quality and patient care. The reform program is aimed at developing primary health care via the family doctor initiative (doctors working in groups as general practitioners separate from hospital based services); improving quality (through quality assurance processes to focus on continuous improvement practices); improving services (through equipment provision and hospital refurbishment and

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upgrading); and strengthening systems capacity (through licensing and accreditation processes and management retraining).

Health insurance provides near universal coverage for curative services in Mongolia, and the government funds directly a range of preventive and public health services including emergency admissions, childbirth and treatment for infectious diseases. Important emphases of both the government and the reform program have been protection of poor and vulnerable groups in Mongolia and community participation.³

The major element of reform in Mongolia, however, is the establishment of the Family Group Practice (FGP) model aimed at developing general practitioner services. The current article describes how a general practice model emphasizing Family Medicine and holistic care has been established in Mongolia; outlines the current situation; and discusses how the Mongolian experience could offer lessons for other transitional countries seeking to develop Family Medicine, particularly in central Asia.

Setting up a system of Family Medicine

Under the old system, Family Medicine was unknown. Public health doctors focusing on prevention worked alongside specialists in polyclinics attached to hospitals. In the early 1990s, there were sporadic attempts to change these public health doctors into 'family doctors', but the change was mainly in name, as activities remained the same. The HSDP provided the opportunity and resources to address the need for systematic primary care through a Family Medicine focus. The program had several key elements:

- moving doctors from the hospital base to practices in the community, particularly poorer areas (often with no water or electricity supplies)
- encouraging the population to register with a family doctor in the FGP of their choice – thus strengthening the patient role
- changing the payment basis of the new family doctors from paid state employees to private practitioners paid under publicly funded capitation arrangements for patients in their care.

The FGP program started in mid 1999 and as HSDP nears completion, 234 FGP have been established throughout Mongolia, 118 in the capital, Ulaanbaatar, and 116 in the population centers in the aimags (provinces). Over 56% of the population is covered by the 234 FGP (1.3 million people), which include 940 family doctors and almost the same number of staff (mainly family nurses, assistants, caretakers, etc.). On average, each family doctor services 270 families with a ratio of one doctor to 1350 individuals.⁴

General practice is generally accepted as the central discipline within primary care, and the general practitioner should be the key professional and first point of contact for health and health related problems.⁵ Mongolia's reforms have been built on these precepts.

Certain factors were critical in establishing the FGP. First, existing public health doctors and interested specialists were recruited to comprise the pool of new family doctors forming themselves into FGP (ranging from three to five doctors in each practice) and choosing to operate from a practice base. Potential practice bases were mapped out according to target populations and potential FGP selected their particular area. The program concentrated initially in three districts in the capital, and in three aimags (out of 21) as pilot areas for the program.

Next, through an extensive information and education campaign, the population was invited to register with FGP. To assist in selection, individual doctor details (name, age, background, experience and interests) were circulated along with doctors' photographs and registration forms. Registration details were critical as the information supplied (including income levels) formed the basis for the doctors' reimbursement. Under a capitation arrangement, doctors were paid for each patient registered. The capitation payments were weighted according to derived needs categories, risk adjusted and comprising 10 classes of clients defined by age-sex and poverty ratings. Thus, the relative payment weights ranged from 1.00 (applied to the standard estimated cost per patient) to 3.79 for babies under 1 year from poor families.⁶ The capitation payment rate was deliberately weighted towards poorer people for reasons explained in more detail below. Table 1 shows the Mongolian needs categories and the distribution of registered clients of FGP.

The next factor in setting up the FGP was a program of training and retraining. Training took the form of seminars on primary health care principles and the concepts of Family Medicine; general practice as carried out in Australia and in the UK; practice management arrangements and systems; and finance and accounting issues for the new FGP.

Retraining was intended to refocus the new family doctors towards general practice based on a series of clinical modules emphasizing patient centered approaches; management of common conditions; holistic care; and communication. This retraining consisted of 10 modules (Table 2), conducted over 6 months with lecture sessions and practical sessions involving patient presentations and role plays, use of instruments and diagnostic and assessment techniques.⁷ A three-volume set of materials was developed based on existing Mongolian protocols and inputs from overseas including the UK, Australia and Holland, and made available to each family doctor.

Table 1 Distribution of registered clients in Mongolian FGP by capitation category

Age and sex [†]	Income group	Relative weight	Percent client distribution
0–1	Poor	3.79	1.2
	Not poor	3.35	0.7
1–15	Poor	1.36	19.1
	Not poor	1.28	12.8
16–49 female	Poor	1.59	15.5
	Not poor	1.57	17.7
60+	Poor	2.25	4.7
	Not poor	2.05	3.0
Other age groups	Poor	1.09	12.6
	Not poor	1.00	12.4
All	Poor		55.1
	Not poor		44.7

FGP, Family Group Practice. [†]Aggregate of both sexes for each age group, other than for females aged 16–49.

Table 2 Summary of clinical retraining for Mongolian family doctors

Clinical module	Training components (in days)		
	Lectures and theory	Patient examinations	Practical skills
Problems in pediatrics and adolescents	8	9	9
Obstetrics/gynecology; family planning	4	5	5
Acute and chronic medical presentations	10	10	4
Trauma and minor surgery	4	4	8
Medical emergencies	5	6	6
Infectious diseases (including TB and STI)	4	6	5
Aged care, home care and palliative care	3	3	3
Disability and rehabilitation	3	3	2
Mental health	4	2	2
Common eye and ENT problems	3	4	4
Total days	48	52	48

ENT, ear, nose and throat; STI, sexually transmitted infections; TB, tuberculosis.

Each FGP was given an extensive package of equipment, purchased under the program, comprising basic items such as stethoscopes, ophthalmoscopes, suture sets, sterilizers, folding table, gynecologic chair, fridge, lamps, etc. In all, each package contained over 100 items of equipment. New equipment was seen as an important factor in demonstrating to the public that the new FGP were professional and competent.

The final factor was establishing a contract between FGP and local government for the provision of services and as the basis of payment. The contract specified extended working hours for the FGP; a system of regular home visits; health education and prevention activities; ongoing education for doctors (as a reform commitment to continuing professional development); and targets for immunization and vaccination, although typically in Mongolia, immunization rates are very high – for children under 1 year for example,

pertussis, diphtheria and tetanus (DPT3) coverage is 94%; for oral polio (OPV3), 94% coverage; for measles, 93% coverage; and for tuberculosis, 95% coverage.⁸

For the FGP, the contract sets out the payment rate (based on aggregated capitated amounts for patients registered) and frequency of payment (quarterly). The lump sum payment covers all FGP costs – salaries; rent; heating, electricity, etc.

Doctors' payment arrangements

The FGP services are free for registered patients and for unregistered people in the case of emergency. Funding for the FGP as newly established private entities is from local health allocations, largely in part from the transfer of doctors' previous salary costs from hospital budgets to a specific allocation for primary care. From the viewpoint of Mongolia, capitation is the most

appropriate payment system to support overall reforms. Risk adjusted capitation means higher payments for residents of poorer areas and encourages doctors to work in more deprived communities, thus increasing service provision and equity. No direct patient payment and universal coverage encourage people to use the new FGP services as an alternative to hospital based services and assists in the overall sector reform aim of transferring resources from the heavily subsidized hospitals towards primary care. As more people use the FGP services there will be a corresponding reduction in outpatient services (and also, eventually, unnecessary admissions to hospital) and resources can be redirected to reinforcing Family Medicine.

Capitation in the new Mongolian model is also aimed at quality improvement and client focus among family doctors. Under the Mongolian system money follows the patient. If patients register with a doctor in another FGP, the capitation payment goes from one practice to the other. Thus, by voting with their feet, it is hoped that patients will drive improvements in standards. The theory is that patients under this market approach will tend towards the 'better' doctors (as understood by the client, not in a strictly clinical sense), that is, those who explain treatment options; provide comfortable premises; emphasize courtesy; provide education materials; carry out home visits, etc. There is therefore under the Mongolian capitation payment system a direct incentive for family doctors to focus on patients and their needs and to continuously look to improve quality and services – the essence of the quality approach in primary care.⁹

One of the priorities in the ongoing evaluation of the FGP model will be testing the relationship between this market oriented approach and tangible improved standards and clinical care provided by family doctors.

How the system is working

Since 2000, the FGP model extended from the original pilot areas to gradually cover all urban districts and population centers in Mongolia by mid 2002. The FGP system needs a population base. Remote and rural populations – often nomadic in Mongolia – rely on small village based hospitals of approximately 10–15 beds for services, although it is intended in future to refocus these hospitals towards more outreach based services, incorporating primary care principles of prevention and follow up as well.

Recent survey research has concluded that the Mongolian FGP model provides 'generally satisfactory services in an equitable way'.⁴ Evaluation conducted to date indicates strong consumer support and satisfaction (as measured by regular satisfaction surveys) with the FGP.¹⁰ From the viewpoint of family doctors, again

measured by specific surveys, there has been an overwhelmingly positive response to the new system. Research on FGP attitudes indicates that the main points of doctor satisfaction are: the group practice (team) concept (89% of surveyed respondents); the opportunity to work as private practitioners (75% of respondents); an enhanced doctor–patient relationship (93% of respondents); and greater autonomy (70% of respondents).¹⁰

Problems identified related to difficulties with remuneration (delays, etc.); refurbishing premises; and communication and relations with local governments administering the contracts. These difficulties – important as they are to the doctors concerned – relate mainly to process and hopefully can be redressed as the system develops further. Based on the research to date, family doctors appear to greatly appreciate the autonomy and increased clinical opportunities afforded by the new system. Previously, their focus had been narrowly preventive; now treatment and holistic care are central to their work. The new system has also increased the status of family doctors, reinforced by ongoing public information campaigns about the model and the ways family doctors are now geared to serving the community. This, it is hoped, will in turn strengthen the nascent gatekeeper role of the FGP and further enhance their role as the community's first point of contact with the health care system.

Lessons from the Mongolian experience

It has been noted that to varying degrees, the former Soviet influenced central Asian republics are attempting to develop Family Medicine based primary care and replace specialists with general practitioners.¹¹ In Kazakhstan, the FGP have been established in some pilot regions, but widespread retraining has not yet occurred. In Kyrgyzstan, the FGP have been established in urban centers and a 5-year plan drawn up to extend Family Medicine over the whole country.¹² In Tajikistan, a comprehensive reform plan incorporates retraining specialists to work as generalists in primary care settings, but limited capacity and resources have meant only a few doctors can be retrained each year.¹³ In Uzbekistan, family doctors are being used to strengthen the emergency care network and rural outpatient centers rather than as primary care providers in practice settings.¹⁴

In the components comprising FGP development, there are marked differences among the central Asian republics. As indicated in Table 2, the Mongolian clinical retraining for family doctors was extensive. In contrast, in Uzbekistan, specialists are being retrained as general practitioners, but due to lack of teachers and

funds, courses are becoming increasingly shorter and physicians are having to learn on the job.¹¹ In Turkmenistan, specialists have been simply relabeled as family physicians by decree.¹⁵

Currently, there are several schemes in the central Asian republics aiming to develop capitation payment systems, with varying success to date. In Kazakhstan, Kyrgyzstan and Uzbekistan, capitation budgets for ambulatory clinics with bonus payments to provide a stimulus to improve care have been noted.¹⁶ However, the conclusion is that these systems have been hampered by a lack of finance, with most of the budget going to maintain basic salaries rather than on service development or improved quality. Delegation of management authority is often lacking, thus negating many of the potential efficiencies of global budgets for family doctors.

Even where the family doctor concept has been advanced, problems have been evident in implementation. For example, in Kyrgyzstan, Uzbekistan and Turkmenistan there is limited capacity for patients to freely choose their own family doctor, with defined catchment areas dictating which doctors can be selected.¹⁷ In some countries, the change to family doctors is mainly terminological, while in Kazakhstan and Kyrgyzstan in contrast, there are systematic retraining programs with links to undergraduate and postgraduate medical education.¹⁸ All in all though, development of general practice type systems in central Asia has been less than systematic. It is reportedly still weak in many important respects with, too often, deficiencies in the quality of care being provided.¹¹

As in central Asia, it has been found that in many other transitional countries in eastern Europe, family doctors are still in salaried service, working in polyclinics, and with few exceptions (e.g., Croatia, Slovenia), relatively weak in terms of a primary care role; a solution put forward is investment and regulation to strengthen primary care and to improve quality.⁵

Mongolia's relative success to date in establishing an effective and viable Family Medicine system can be attributed to several factors.

First, Mongolia recognized at an early stage that aspects of health sector reform are inextricably linked. For example, developing primary health care necessarily means a rationalization of the hospital sector, redistribution of resources to primary care and prevention, raising quality and standards and major changes in medical education and postgraduate training. By putting development of general practice at the center of the reforms, Mongolia has been able to advance the change process overall in the health sector.

Making Family Medicine the hub of the reforms meant that all the necessary elements – registration, financing through capitation, retraining – were able to be brought together as an integrated package and

implemented systematically, something that has been lacking in similar attempts in other countries.

Second, the HSDP was viewed by the Mongolian Government as first and foremost a financing vehicle for major restructuring and reorganization and as such, provided the requisite resources to implement the FGP model. This was in contrast to many other transitional countries where funding for general practice development has been insufficient from the start or badly targeted. In Mongolia, earmarked funding was used to cover training, equipment, acquisition of premises and comprehensive implementation of the FGP program, from pilot phase to nationwide extension.

Next, health sector restructuring and development of primary care systems has received continued and broad ranging bipartisan support across the political spectrum for the reform process. This has been achieved in Mongolia by engaging the community on the reform package and the benefits to be conferred. In addition, the FGP model has been supported by extensive and professionally conducted social marketing campaigns employing print and electronic media messages and communication techniques to highlight the changes and the implications for the community.¹⁹ Information campaigns significantly obviated any potential problems in terms of community acceptance during the implementation of the family doctor system.

The Mongolian Government has also been willing to take the risks involved in undertaking large scale change and to examine innovative approaches to advance the reform agenda. For example, when it became evident that acquiring premises for FGP clinics in urban areas would be prohibitively expensive for new doctors, the government allowed the use of the HSDP funds to secure buildings for family doctors and in some cases to actually construct new premises for use by the FGP. Flexible payment arrangements allow doctors to repay the cost of these premises over time and through adjustments to the capitation payments.

A final element contributing to the success and progress of the FGP program has been the adoption of an integrated consultant team approach at the start of the program to bring together all the various components – defining the capitation system; establishing a registration database; and developing a retraining package – to create synergy and to maximize early impacts. Additionally, the local consultant team comprised specially selected experts with wide recognition and standing in the Mongolian professional community. This ensured access to key players and stakeholders; conferred status and legitimacy on program aspects; and provided local advice on strategies, solutions and tactics relevant to the Mongolian context.

The future

The challenges for Mongolia are to continue to support the FGP model. The Government remains committed to primary health care, not least because it recognizes the efficiency aspects in the face of an over-extensive and inefficient hospital sector, but also that in a tight economic climate further funding will have to come at the expense of public hospitals. This required redistribution of resources and emphasis on Family Medicine will be an ongoing strategic issue for Mongolia. Politically, the government also needs to continue to inform the community about the primary care model and to ensure that the changes are in accord with public opinion.

The continuing emphasis for the future also needs to be on quality and continuous improvement. Continuing professional education for family doctors is now a condition of licensing and all doctors must provide evidence of commitment to ongoing education

and development. The reform agenda needs to support the family doctors with opportunities for further training; to provide a base for Family Medicine in the undergraduate medical curriculum; and encourage dissemination of new ideas and good practice among the country's practitioners. An important vehicle for these activities is the recently established Mongolian Association of Family Doctors, a non-government organization aimed at supporting the FGP. The Association's aims are to promote best practice among family doctors and to increase doctors' access to international research and clinical guidelines. An important element in these aims has been the inception of a new Mongolian primary care journal *Family Medicine*, with the first edition published in September 2002. The Mongolian Association of Family Doctors will, it is hoped, provide an important framework for advocacy for family doctors; for training and accreditation; and for raising of standards.

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