TECHNICAL REPORT:

Implementation of Health Care Reform in Central Asia: Concepts and Examples from the Experience in Zhezkazgan Oblast, Kazakhstan

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I. Abstract

The innovative health reforms being carried out in one of ZdravReform’s pilot sites in Zhezkazgan Oblast, Kazakhstan, are based on delivery of cost-effective primary care. This report highlights how this sector is being restructured to introduce family group practices; sound practice management; patient choice and open enrollment; a new per capita fund holding payments system in primary care; a change in the hospital payment structure to a case-based system; and a fee schedule for outpatients. The report also discusses how ZdravReform has backed the Mandatory Health Insurance Fund as the relevant organizational structure to collect funds and distribute them based on the new payment systems.

Reform so far has been successful, and both medical personnel and consumers are adapting well to the system, with the former showing surprising initiative and enthusiasm and the latter adjusting well to the new emphasis on accessible primary care.
II. Executive Summary

ZdravReform has been providing assistance to health reform in the Zhezkazgan Oblast since 1993 in order to deliver a new health care system oriented towards the delivery of cost-effective primary care. Specifically ZdravReform has provided clinical training, development and implementation of new payment systems, development of clinical information systems, and development of public information and marketing campaigns for informed free choice of primary care providers.

Attempting to resolve the inefficiencies of the health care system and move the balance of resources and service to primary care, Zhezkazgan began a program of inter-related reforms including reorganization of the primary care sector; hospital rationalization; the introduction of new incentive-based payment systems; and the introduction of free choice of primary care providers through open enrollment.

Reform in Zhezkazgan has been hindered, however, by the reorganization of the administrative structure of Kazakhstan leading to the merger of Zhezkazgan Oblast with Karaganda Oblast, with Karaganda assuming control. The merger led to numerous tensions and although the authorities have said that the reform program would be allowed to continue, implications for its expansion have not been discussed.

Restructuring primary care in Zhezkazgan has taken the following form: establishing nine fully privatized FGPs serving roughly 10,000 patients each; provision of intensive clinical and business training and equipment to physicians and managers, to enable transition to family practice; reform of the payment system to a capitated fund holding system where payments follow the patient and the FGP is responsible for the cost of referring patients to outpatient or hospital services, thereby creating an incentive to treat patients in the primary care sector; appointing practice managers to run the financial side of the FGP efficiently; creating FGP Associations to give FGPs a stronger united voice; and encouraging population participation through a system of open enrollment – so that patients can enroll in any FGP they choose. This last is a new innovation in local health systems and it transfers choice to the patient for the first time.

The reform of primary health care has displayed initiative and enthusiasm amongst practice doctors, nurses and other workers. Access to local doctors has increased because of more accessible location of practices in apartment blocks; cross-training, taking place within practices, has increased confidence and improved clinical skills; patient clubs have emerged for specific complaints under the guidance of a physician advisor, and hospital admission rates for club members have decreased from 49 to 28 percent; and a general consensus that doctors and nurses are ‘working for the future’ has been expressed.

At the start of reforms the hospital sector dominated the health system. Approximately 70 percent of resources were devoted to hospital care. With reform, underutilized facilities have been closed and inefficient vertical specialty hospitals have been consolidated. The number of hospitals has reduced from 51 in 1994 to 22 in 1997 and the number of beds from 6225 to 2919.

Health care reform in Zhezkazgan was also aimed at creating a stronger role for consumers. To bring this into effect a public awareness campaign was set up with ZdravReform’s help to increase consumer knowledge, which was followed by a marketing program to inform the consumer about the concept of free choice of provider. This was itself followed by a free enrollment campaign in which 75.6 percent of the population exercised their right to choose their family doctor. This open enrollment campaign, which will take place once a year is, when combined with capitation payment, expected to provide an added incentive for providers to hone efficiency and provide the best possible services for consumers.

The final initiative backed by ZdravReform was the development of the Mandatory Health Insurance Fund, a division of the Oblast Health Department, which acts as a mechanism to introduce the new payment systems and to implement health insurance. Zhezkazgan is one of two oblasts in Kazakhstan that has pooled all health care resources in the MHI Fund and thereby managed to avoid using the dual benefits package widespread in Kazakhstan. ZdravReform has provided technical assistance to the Fund in the areas of introduction of fund-holding programs, health facilities management, and development of advanced payment mechanism for health services.
III. Health Reform: Concept and Strategy

A. Introduction

ZdravReform is funded by the United States Agency for International Development (USAID) and the principal contractor is Abt Associates. In 1994 USAID developed a strategy to support health sector reform in the Newly Independent States during the transition to a market economy. The principal goal has been to provide technical assistance, training, and grants to support health reforms with an emphasis on introducing market-based reforms into the health system to improve efficiency.

At the request of Kazakhstan’s central Ministry of Health, a team of specialists from Abt Associates Inc. evaluated a health insurance fund demonstration underway since early 1993 in two towns within the Zhezkazgan Oblast with the goal of providing recommendations for ZdravReform technical assistance. Since that time, ZdravReform has provided assistance to the reform activities in Zhezkazgan in the areas of clinical training, development and implementation of new payment systems, development of clinical information systems, and development of public information and marketing campaigns for informed free choice of primary care providers.

The health reform program in Kazakhstan is attempting to address the fundamental problems in the health care system that developed under the former Soviet system: under financing, inefficiency, and lack of consumer choice.

In 1991, Kazakhstan became an independent state embarking on the transition to a market economy. The break-up of the centrally planned economy of the Soviet Union and the subsequent decline in the economy have had dramatic consequences for the health sector in all of the countries of the former Soviet Union. Specifically, resources available for health care in Kazakhstan have declined steadily since the 1980’s, with health care expenditures as a percentage of gross domestic product (GDP) declining from about six percent in the 1980s to less than three percent in 1995. As GDP continued to fall over that period, there was a significant reduction in real per capita health expenditure. In addition, the economic decline suffered by Kazakhstan over the past several years has caused a reduction of locally generated tax revenues, the result of which is an emerging funding crisis in health services.

The decline in health care funding brought to the surface the underlying problem of profound inefficiency in the health system inherited from the Former Soviet Union. One of the fundamental problems in the system is the imbalance between the hospital and primary care sector. In Kazakhstan, as in all countries of the former Soviet Union, the health care system is dominated by an overdeveloped hospital sector with too many hospitals and beds. In 1996, more than 76 percent of government health care expenditures were allocated to hospitals, leaving minimal resources to fund primary care. Structurally, the hospital sector is characterized by overspecialized facilities with separate hospitals for adults, children, women, tuberculosis, psychiatry, dermatology and sexually transmitted diseases, and oncology. The hospitals treat patients inefficiently as shown by the long length of hospital stays, approximately two weeks. Since hospitals are funded by the number of beds and occupancy rate, there is no incentive to treat patients in primary care or reduce the number of inappropriate referrals or admissions. Under the current financing mechanism in which budgets are allocated according to capacity and utilization, this causes further reductions in financing for primary care. The result has been a cycle of starvation of primary care and what ZdravReform refers to as the inverted
pyramid. More cost-effective primary care should form the base of the health care pyramid, receiving a greater share of resources and providing a greater share of health services.

Finally, the system is unresponsive to patients' needs and is overly bureaucratic. Patients have no choice of their polyclinic physician or of hospitals. One of the results is that patients were not actively involved in their health care by making choices. Furthermore, the financing of the health system provides no incentive to physicians to develop a meaningful doctor-patient relationship and provide better quality of care.

In an attempt to resolve the inefficiencies of the health system and to shift the balance of resources and service to primary care, Zhezkazgan has begun a program of interlocking reforms, including re-organization of the primary care sector, rationalization of the hospital sector, introduction of new incentive-based payments for primary care and hospitals, and the introduction of free choice of primary care providers through open enrollment.

**B. Restructuring of the Health Care Delivery System**

The inefficiency of the health sector is one of the principal issues that must be addressed by health reform. Even if the health sector can mobilize additional resources, these resources will not improve the health of the population without significant restructuring of the health care system.

A goal of the health reform project has been to downsize the hospital sector and shift resources to an improved system of primary care. The concept is to create a new primary care structure that would deliver cost-effective care and decrease the need for hospitalization. Prior to the introduction of health reform, primary care was under the administrative, financial and clinical control of specialty-oriented polyclinics and hospitals. Urban primary care was provided through polyclinics, which had a wide range of narrow specialists as well as primary care physicians (catchment physicians). There were three polyclinics in each administrative region of each city: one for adults; one for children; and one for women's reproductive services (women's consultation centers). There were therefore different primary care physicians for adults, children and reproductive health services who were trained either as adult therapists, pediatricians or gynecologists.

The overall reform of the primary care sector would create a new structure to begin the process of shifting care from the hospital sector to the primary care sector. The new system would be based on FGPs consisting of a pediatrician, a therapist, a gynecologist, and several practice nurses and a practice manager. This requires restructuring of the current polyclinic system and increasing physicians’ clinical responsibilities.

Reform of the hospital sector requires a two-step strategy. The first step is to remove excess capacity by implementation of a rationalization plan. This means that certain hospitals would be targeted for closure such as the city hospital and dispensaries. This would generate some initial savings in the health sector, which could be used to improve the financing of existing hospitals and primary care. The second step is to introduce a new payment system, which would reward hospitals for greater efficiency.

**C. New Payment Systems**

The financing of the health sector in Kazakhstan followed the Soviet practice of paying health facilities guaranteed budgets. The annual budgets were based on the planned capacity of the facility, which is determined by the size of the building and number of employees. Under the budget system, the planned capacity served as an output target for the facility. If the output target was not met, the facility’s capacity, and therefore the budget, was reduced in the following year. Conversely, if the output target was exceeded, the facility’s capacity and budget were expanded. Financing was not linked to the value of the services provided or the satisfaction of the consumers served.
The chapter budgeting system for hospitals creates little incentive for efficiency. Hospitals are paid based on the number of beds and bed-days. If they decrease their beds, the result is a decrease in their budget. This idea of introducing a new hospital payment system is to pay hospitals a fixed amount for each admission. Under this new system hospitals would have an incentive to decrease their length of stay and to allocate their resources more efficiently. Furthermore, FGPs would be given the right to refer their patients to any hospital. This would create competition in the hospital sector.

Under the new hospital payment system, hospital managers would be forced to run their hospitals more like a business. They would have to match the costs of running their hospital to the income they generated by admissions. If certain departments are not generating sufficient income, they will need to make managerial decisions to improve the efficiency of the department.

The new hospital payment system would address some of the underlying inefficiencies of the hospital sector by creating strong incentives to decrease the length of stay and by forcing hospitals to improve their efficiency by understanding their own costs and matching them to the income generated through the new payment system. This new system does not, however, directly address the high admission rates to hospitals that are a by-product of the inefficient system of primary care.

The new payment system for FGPs is intended to decrease the need for hospitalization, and shift resources to primary care. By creating independent primary care entities (FGPs) that can be financed directly, primary care can be paid differently than specialty outpatient care. This allows new financing mechanisms that can accomplish the dual objectives of shifting resources to primary care, and creating incentives to improve efficiency and quality of primary care services.

FGPs would be paid on the basis of capitation: a fixed sum per person. The number of patients in the practice is initially assigned according to catchment areas and, after an introductory period allowing FGPs to establish themselves, would be determined by free choice of the population during open enrollment. Open enrollment would take place every six months initially and after the system stabilized, once every year. A long-term goal of the FGPs is to move toward a system of partial fund holding followed by a transition to full fund holding. Under partial fund holding, FGPs would receive revenue based on a capitation rate for their enrolled population, and from this money they would provide primary care services and purchase outpatient specialty and diagnostic services. Under full fund holding, the FGPs would additionally purchase hospital services for their patients. The more health services an FGP could provide, the fewer services they would need to refer and pay for. Funds that were not used could be reinvested in the practice to increase their clinical capability. With this type of payment system, unnecessary referrals and hospitalizations become a penalty to primary care physicians, since funds are removed from this fund holding account to pay for referrals and hospitalizations.

This capitated payment system along with free choice of provider can provide financial rewards to primary care physicians for higher activity levels in their own practices and reductions in inappropriate referrals to specialists and hospitals. It introduces competition into the entire health care system, encouraging physicians to become cost-conscious purchasers and suppliers of health services and increasing the prominence of primary care in the health system.

In terms of outpatient care, polyclinics would be paid using a fee schedule. The fee schedule would be a relative value scale based on points. These points would be converted to payments based on the level of resources allocated to outpatient care. FGPs would have free choice of specialists, laboratories, and diagnostic tests. For example, if the FGPs needed a consultation by a specialist or a diagnostic procedure, they could refer their patient to any hospital or polyclinic, and to any specialist within these facilities. This creates a competitive environment that encourages outpatient specialty and diagnostic centers to improve their clinical resources in order to attract referrals.

In terms of inpatient care, the hospital payment reforms began with a shift from the traditional chapter budget financing system to payment of a fixed amount per hospital bed-day in each inpatient facility. This method was then refined to reimburse using a case-based system by clinical department, which was further
refined to reimburse hospital cases according to clinical statistical groups (groups of diagnoses with similar clinical characteristics and similar costs). Under this payment system there would be a fixed amount for a clinical category. FGP would have the right to refer their patients to any hospital.

The new payment systems would therefore consist of three inter-related systems: FGP capitation moving toward fund holding, an outpatient fee schedule, and a case-based hospital system.

D. Health Insurance Fund

One of the principals behind the creation of a health insurance fund is to create a mechanism to introduce new payment systems. The introduction of new payment systems requires a new organizational structure for financing health care. The control over the use of funds would be shifted from the Ministry of Finance to a new organization: the Health Fund. This organization would be responsible for running the new payment systems.

The new payment systems require that all health care funds are pooled into a single fiscal intermediary. The Health Insurance Fund was designed to administer insurance contracts and collect premiums from employers through a payroll tax and local government administrations for unemployed and protected populations, including children and pensioners. Premiums from employers for the working population are combined with budget funds for the registered unemployed and children. This unified funding pool is divided into separate pools for hospital, outpatient, and primary care, which determine the base rate for the hospital payment system, the conversion factor for the fee schedule, and the capitation rate for primary care fund holding.

The Health Insurance Fund needs a new financial and clinical information system. Every hospital admission must be computerized along with all outpatient referrals. This requires a computer network to process information for the new payment systems.

Finally, the health insurance fund would become the organization responsible for implementing health insurance. The creation of this new organization thus separates the purchaser of care from the provider of care, a critical step in reducing the overall cost of the health care system.

E. Conclusion

The underlying vision of the health reform project is to create a new health care system oriented towards the delivery of cost-effective primary care. The fundamental change has been the creation of FGP. The new payment methods give FGP the right to refer to any outpatient and hospital facility and their choices determine the flow of money. Under the new systems, money will follow the patient. The new hospital payment system creates an incentive to treat patients in hospitals more efficiently with shorter lengths of stay. The new systems of quality assurance counteract the incentives to admit patients unnecessarily and to discharge patients too early.

The overall result of the demonstration has been to create a more efficient health sector oriented to the population. Under these conditions, the new funds made available through health insurance will not be squandered by an inefficient health system, but used to improve the health of the population.
IV. Health Reform: Background

A. History of Health Reform in Zhezkazgan

The history of health reform in Zhezkazgan Oblast can be traced back to the New Economic Mechanisms (NEM), which were approved in Moscow and initiated throughout the Soviet Union in 1989. This program established a number of demonstration sites in each of the republics and increased the autonomy of the local government administrations, allowing them to retain a portion of local tax revenue and exert greater control over the development of local budgets. Under the NEM, the towns of Karajal and Zhaires in Zhezkazgan Oblast established a locally controlled Territorial Medical Organization (TMO), a structure similar to a health maintenance organization, to coordinate health financing and service delivery reforms. The TMO integrated and channeled the flow of health funds and provided general oversight of service delivery. The TMO was the precursor to the current MHI Fund structure, and provided the framework for many of the health reforms currently being implemented in the Oblast and throughout Kazakhstan.

Although the NEM were canceled at the national level in 1990, local support for the health reform initiatives in Zhairem-Karajal continued and significant reforms had been implemented by early 1991 by the TMO, changing the way facilities received their financing, allowing more discretion in the allocation of funds at the facility level, and establishing groups of primary care providers.

In 1992, the Zhairem-Atasou Free Economic Zone (FEZ), which included the towns of Karajal and Zhairem, was established. The FEZ provided the administrative and legal structure for health reforms to continue and expand.

In an effort to protect and expand the levels of funding for health care, the national government began to lay the foundation for a national health insurance system with the law “Protection of the Population’s Health,” enacted by the national parliament in early 1992. The national health insurance scheme, which was modeled after the system adopted by Russia, would establish Mandatory Health Insurance (MHI) Funds in each oblast and at the national level.

The Government of Kazakhstan designated the Zhairem-Atasou FEZ in Zhezkazgan a demonstration site for the health insurance scheme. An MHI Fund was established in the FEZ in December 1992, and was financing health facilities by March 1993. The MHI Fund was designed to administer insurance contracts and collect premiums from employers through a payroll tax, and from local government administrations for unemployed and protected populations, including children and pensioners.

The MHI Fund also replaced the TMO as the purchaser of health care in the FEZ. The MHI Fund purchases care through contracts with providers. As a result, the financing for health care was changed to be largely off-budget, and the purchaser of care was thus separated from the provider of care, a critical step in reducing the overall cost of the health care system. The MHI has also developed new payment methods and a quality assurance program.

In 1994 when the government extended the health insurance experiment to the entire oblast, Zhezkazgan became the first oblast in Kazakhstan to finance nearly all health facilities through mandatory health insurance. The oblast MHI Fund began financing health facilities in July 1995, and health care financing reform was initiated.

The President of Kazakhstan extended health insurance nationwide on June 15, 1995 with a decree guaranteeing medical insurance for all citizens of Kazakhstan. A Federal MHI Fund was established, and oblast-level funds became operational in all 19 oblasts and in Almaty City by April 1996. The Federal MHI Fund was intended to develop a basic benefits package, provide management and financial oversight to oblast-level Funds, draft policy guidelines on provider payment methods, and monitor the quality of care.
Before the national insurance system reached the implementation phase, conflicts arose at the national level between the Federal MHI Fund and the Ministry of Health over the division of financial responsibility and control, as well as the questions of provider payment and quality assurance. By the time the oblast funds became operational in April 1996, the MOH had passed a resolution to divide financing responsibility by establishing a dual benefits package: the Guaranteed and Basic Packages.

The Guaranteed Package, financed by the MOH budget, includes such services as public health, emergency care, acute and medium-severity cases, and all services in specialty facilities such as tuberculosis, infectious diseases, and psychiatric dispensaries. The Basic Package, financed by the MHI Funds, includes all other services, such as planned hospitalizations and nearly all outpatient care. The national system of dual benefits package has added complexity to financing reforms, requiring facilities to maintain duplicate reporting systems and to analyze each case to determine the appropriate payer.

Zhezkazgan is one of only two oblasts in Kazakhstan that has pooled all health care resources in the MHI Fund, and has avoided the dual benefits package. This is possible because a strong Oblast Health Department is able to relinquish control of resources to the MHI Fund without sacrificing decision-making power in the health sector.

**B. Oblast Reorganization in Kazakhstan, May 1997**

Until 1997, Kazakhstan was divided into 19 oblasts. In an effort to reorganize the administrative structure of the government, however, the national government restructured the existing 19 oblasts into 14 oblasts by mandating that several oblasts merge. On May 4, 1997, the Karaganda Oblast, which is located adjacent to the Zhezkazgan territory, assumed immediate administrative control of the Zhezkazgan Oblast with all oblast-level authority being moved from Zhezkazgan city to Karaganda.

This was a significant event in the history of the Zhezkazgan reform efforts since, under a new oblast-level administration now located in Karaganda, there was strong concern that the advances Zhezkazgan had made would be retracted by the new authorities who were less supportive and progressive than the authorities of the former Zhezkazgan Oblast.

During the two weeks following this announcement, a number of rapid-fire events occurred:

1. Within 24 hours of the announcement, Karaganda Administrative authorities were in Zhezkazgan assuming immediate control.

2. The Head of the Zhezkazgan Oblast Health Department, Dr. Rakhybekov, requested assistance from ZdravReform staff in Almaty to preserve the reform effort in Zhezkazgan.

3. Planning and coordination meetings occurred to strategize and implement steps to preserve the material reform progress that had been made to date and make immediate contact with Karaganda authorities. Assistance included the drafting of decrees to preserve the demonstration site, letters to key decision-makers in the reform process, and arrangements for meetings and follow-up with the new and old oblast leadership.

4. ZdravReform staff met with the Head of the Karaganda Oblast Health Authority and discussed their concerns. ZdravReform was assured that the experiment would continue, with enthusiastic support by the new authorities and continued financing.

5. The Karaganda police arrived in Zhezkazgan, confiscated a reported eighty local police vehicles, and took them back to Karaganda. Similar confiscation of equipment was reported to have occurred in the oblast administration building.

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1 An oblast is an administrative region one level below the national level.
6. The Head of the Zhezkazgan Oblast Hospital was relieved of his duties.

7. The new city Akim named the former Head of the Oblast Hospital, who had been dismissed by Dr. Rakhibekov in 1994, the new Head of the “Zhezkazgan Territory” Health Department.

8. Dr. Rakhibekov was relieved of his duties as Head of Zhezkazgan Oblast Health Care Administration and was offered a Deputy position in Karaganda with a staff of three.

9. The President of Kazakhstan flew to Zhezkazgan and met with the new Karaganda Administration of the Zhezkazgan territory, as well as executives from Samsung Corporation, a major investor in the region. The President, apparently not informed of the reform effort, discussed with the Minister of Health on Zhezkazgan TV, how reforms were not happening fast enough and how this situation was unacceptable. (Ironically, the televised discussion between the President and the Minister of Health occurred in front of the Samsung Hospital in Zhezkazgan, a world-class state of the art 350 bed facility built in 1995 but with absolutely no equipment, staff, or even one patient. The original funds set aside to build the hospital for Samsung had not been managed properly by local Kazakhstan counterparts, and no money was available for the purchase of any equipment necessary to make the hospital useable. So, the hospital sits empty, guarded by a skeleton security staff, and one friendly mongrel.)

10. ZRP staff met with key stakeholders to assess the situation, including interviews with head physicians and practice managers from four key FGPs, interviews with the Head of the Health Care Administration and his deputies, and interviews with the MHI Fund.

11. The Ambassador of the United States wrote a letter of concern to the Prime Minister of Kazakhstan (Kazhegeldin), the Akim of Karaganda Oblast (Nefedov), and the Akim of East Kazakhstan (Mette) indicating her hope of continued reform in this area and the prevention of any dismantling of existing reforms.

12. Karaganda administrative authorities, including members of the finance and health departments, toured the FGPs and other health care facilities in Zhezkazgan.2 One FGP was told their effort was nothing and they were given indications that the experiment would not continue along with other critical comments.3 Doctors were asked when they were last paid, and responding that their pay was up to date, they were advised not to continue to expect up to date payment in the future, as doctors in Karaganda had not been paid for months.4

13. The MHI Fund reported they were advised that the continuation of the 15 percent partial capitation rate from the MHI Fund would diminish, that only those insured would obtain funding.

14. According to some residents, the electricity began to go off more frequently.

Another example of the tension that arose between the new Karaganda Oblast authorities and the Zhezkazgan leadership was an “Evaluation of the Health Care Reforms in Zhezkazgan Oblast” presented by the Head of the Karaganda Oblast Health Department (Alikov) and the Head of the Oblast MHI Fund (Shmakov) between May 14 - 20, 1997. In this report, the authors concluded that the accessibility of medical services is sharply limited by the low number of available hospital beds and medical personnel; that the primary health indicators (birth rate, mortality rate, disease rate) in Zhezkazgan Oblast are worsening; that there is a direct violation of the “Health Insurance Law” in terms of accessibility and equity; that the capitation rate for family practices is not adequately administered; that the principle of financing hospitals creates a basis for ruining emergency care and specialized forms of diagnostics and

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2 Source - Dr. Rokybekov, former Head of Oblast Health Care Administration
3 Source - Dr. Abzalova, FGP Chief Doctor - Zhezkazgan
4 Source - Dr. Tillman, FGP Chief Doctor - Zhezkazgan
treatment; and that the Oblast Health Department lost administrative and economic control for properly managing medical services.

The Director of the Zhezkazgan Oblast MHI Fund (L. Tarasova) responded quickly, however, to these accusations with the reply “Elaboration and Explanations of the ‘Evaluation Report’ submitted by Karaganda Oblast Health Department and Karaganda MHI Fund”. She claimed that the evaluation reported inaccurate data and misinterpreted the payment methods of the MHI system in Zhezkazgan Oblast. She proceeded to explain in detail each of the misinterpretations and included a seven-page table “Selection of Medical Services Provided in January 1997” outlining payment per department in each of the hospitals. Tarasova methodically addressed each conclusion and explained how each was not well-grounded based on an accurate interpretation of the data.

As of May 23, indications from the new and old local authorities confirmed that the FGPs could continue to exist, although there was no confirmation that the primary care program would be allowed to expand. The financing of FGPs was still under discussion as the Head of the Karaganda MHI Fund indicated he was not in favor of capitated financing, the Zhezkazgan MHI Fund leadership reported they were in favor, and the National MHI Fund representatives refused to indicate either way.

V. Service Delivery Restructuring

A. Restructuring of Primary Care

1. Rationale

One of the fundamental problems in the health care system has been the imbalance between the hospital and primary care sector. Given the limited funding available, the dominant share of resources should be devoted to cost-effective primary care. Unfortunately, hospitals consume approximately 70 percent of health care resources, while the primary care sector is poorly equipped. The primary care sector further contributes to this discrepancy by referring a large percentage of patients to hospitals. Even if they desired to treat more patients in primary care, polyclinic physicians are limited by inadequate equipment, insufficient training, and clinical rules, which mandate referrals. Furthermore, the system is unresponsive to patients’ needs and overly bureaucratic. Patients have no choice of their polyclinic physician or of hospitals. One of the results is that patients are not actively involved in their health care by making choices. Finally, the financing of the health system provides no incentive to physicians to develop a meaningful doctor-patient relationship and provide better quality of care in an outpatient setting.

Family Group Practices

A key concept of health care reform is to create a new primary care structure that would deliver cost-effective care and decrease the need for hospitalization. The new system would be based on FGPs consisting of a pediatrician, a therapist, a gynecologist; several practice nurses, and a practice manager. The formation and development of FGPs as the means of developing primary care entails a major shift in emphasis in both how medical care is practiced and how medical services are financed and administered. This shift requires changes in the existing system; that is, restructuring of the polyclinic system into FGPs.

In forming FGPs, the goal is to completely reorganize the polyclinic system and disperse the FGPs throughout the community. Instead of adults, children, and women traveling to different locations for their care, they would now receive all of their primary care from a single provider. Furthermore, the number of FGPs has to be sufficient to allow some choice for patients. The ability of patients to choose is essential to creating a strong doctor-patient relationship and to ensuring a high quality of primary care.

Clinical Training

FGPs would be the nucleus for a transition to family practice. Family practice as a medical discipline is not well established. Rather than having separate specialists for women, children, and adults, family practitioners provide comprehensive and continuous care to families. A well-trained family practitioner is
capable of treating approximately 80 percent of medical conditions. With better training, family physicians will be able to treat more conditions in their own practice and decrease referrals to specialists and hospitals.

The idea of FGPs is to transform existing specialists (a pediatrician, therapist, and gynecologist) into family practitioners. The specialists will cross-train each other supplemented by additional training from other specialists. Oblast specialists’ from the Postgraduate Training Institute and foreign experts in primary care would provide the three types of physicians with intensive training. They would be provided with a basic set of equipment that would allow them to improve their clinical capabilities.

**Locations**

Once the physician groups have been formed, locations should be chosen. Emphasis should be placed on locating many of the practices outside of polyclinics in apartments, in other buildings controlled by the health administration such as health centers, or in sections of hospitals that have their own entrance. Once the locations are chosen, they should be renovated with particular emphasis on creating an independent practice with its own entrance. It is essential to give the new locations an identity different from the old polyclinic system. The new system of FGPs would be dispersed, so that primary care services are no longer concentrated in the polyclinics, but located throughout the community.

**Equipment**

A basic goal underlying the need for a more effective system of primary care services is to enable more patients to be treated on an outpatient basis at lower cost and to reduce reliance on expensive specialist and inpatient services. This could not occur unless the providers of primary care services possess at least minimal clinical equipment and medical supplies allowing them to responsibly and adequately treat patients. It was for this reason that a list of basic clinical equipment was developed. To procure adequate quantities of this basic equipment, various sources of grant funding were identified, grant proposals prepared, and funding acquired in order to provide basic equipment to the FGPs as an initial step in developing their capacity to provide primary care.

**Population Participation**

The introduction of choice is integral to the reorganization of the primary care system into FGPs. Consumers must become actively involved in their health care. One way to involve consumers more is to enable them to make a choice of health providers. This is both a symbolic step away from the former system in which people were assigned to providers based on catchment areas (place of residence), and a real mechanism for consumers to begin to hold providers accountable for the care they deliver.

An extensive marketing campaign would be carried out to inform the public about changes occurring in the health care reform demonstration with particular emphasis on primary care reform. Different media channels could be used to increase the knowledge of the population about the FGPs and their right to free choice of a primary care provider. This would be followed by an enrollment campaign where the population would choose their FGPs. Open enrollment would be held every six months initially and after the system stabilized, to once every year.

**Reform of the Payment System and Practice Managers**

The reorganization of primary care into FGPs is closely linked to dramatic changes in the payment systems. The new payment system for FGPs is intended to decrease the need for hospitalization, and shift resources to primary care. FGPs would be paid on the basis of capitation: a fixed sum per person. The number of patients in the practice is determined by free choice of the population during open enrollment.

Reorganization of the primary care sector establishes FGPs as independent organizations without the economic and accounting support of polyclinics. FGPs must, therefore, function as business entities. An entire new class of health management professionals --practice managers--was created to address this issue. Each of the FGPs includes a practice manager who brings a business orientation to the FGP and
oversees the financial planning, accounting, internal control, and management of operations of the FGP. This position is critical to the initiation of a financially oriented FGP. Attempts to implement an effective FGP accounting or financial information system without this position would be difficult.

The process of recruiting and training practice managers is very important and should include a job description and qualifications, advertising for positions, a careful interview process and a lot of training. Their primary function is to be a full, participating partner in the FGP, responsible for financial and management functions and providing financial information to FGP physicians to improve operations and decision-making. On a daily basis, they work with their FGPs to manage the clinical and financial management system. They meet with FGP physicians often, provide information and analysis on FGP operations, and participate in decision-making. They are an important partner in the FGP.

**Clinical and Financial Information Systems**

Since FGPs must function as businesses, primary care providers must be concerned about the health of their practices as well as that of their patients, and they must market themselves to the users and purchasers of health care.

In order to function as independent business entities, FGPs need clinical and financial information systems. FGP physicians need to collect and analyze clinical data about the number and type of office visits they have, the diagnoses of the patients they see, the number of office procedures they perform, and the number of referrals for specialty visits, diagnostic tests, and hospital admissions. A clinical information form completed for each visit is entered into the FGP practice manager’s computer network. The data is then analyzed and the practice managers work with the physicians to evaluate the nature of their clinical practice and implement improvements.

As the FGP clinical information system develops, it is important to evaluate the results of the system and make improvements when necessary. In addition to clinical information systems, FGPs need financial information systems. FGPs need to plan their budgets, manage their finances and bank accounts, and prepare financial reports for their internal management and to submit to the OHD/MHI Fund. The financial information system allows FGPs to adjust their operation to changes in the environment in order to remain a viable entity.

**Family Group Practice Association**

In order for the physicians providing primary care to increase their efficiency and cost-effectiveness while maintaining or increasing the quality of medical services they provide, they need an adequate level of clinical, financial, and administrative flexibility to find and develop innovative ways to approach the provision of primary care. This shift requires a number of financial, technical, and training resources. As FGPs began forming, the physicians who comprised those practices began to see the need to organize themselves into an association through which material, financial, technical, and training support could be acquired and channeled for the development of primary care and through which FGP physicians could represent themselves with a common voice. A group of FGP physicians formed a private, non-profit, voluntary professional association.

2. **Family Group Practices in Zhezkazgan and Satpaev Cities**

**History of formation**

With the formation of FGPs, primary care has been physically, financially and administratively separated from the specialist polyclinic system. In Zhezkazgan, primary health care is currently provided by nine private FGPs:
Initially, in 1995, when the Zhezkazgan health sector leaders made the restructuring of primary care the center of their agenda, a total of 20 FGPs were established as independent, but not yet privatized, practices in medical facilities throughout the city. Two FGPs (Tilman, and Kengir) were established on July 1, 1995 and were located in an apartment and former SUB (small rural hospital), respectively. The remaining eighteen were established on December 1, 1995 and were located in polyclinics or hospitals, with each polyclinic having two or three FGPs. They each consisted of one therapist, one or two pediatricians, and two or three nurses. Within a short amount of time, however, several problems arose with this structure. With so many small practices, establishing 20 independent, negligible bank accounts and 20 charters became logistically difficult. Additionally, with an average of only two physicians per group, problems occurred when one physician was ill or on vacation.

As a result, within a year it was decided that several of the practices should be combined to form fewer, yet larger, physician groups. The physicians themselves were allowed to decide with whom they wanted to work, and the location of the larger practices was determined by the allocated territory and population. Initially each FGP was assigned a population of about 10,000 for which they would receive a capitated rate. A total of nine FGPs were then established, each consisting of between 5-7 physicians. When the Women’s Consultation Center closed as part of the rationalization process, the gynecologists were hired by the FGPs. Each FGP hired one gynecologist to treat gynecologic patients, to begin the training process for the pediatricians and therapists in their clinical development as family physicians, and to serve as the primary physician in charge of family planning information and consultation.

Tilman’s FGP (No. 8) and the FGP Kengir (No. 9) were the first FGPs established in Zhezkazgan in July 1995. At that time, Dr. Tilman, a psychiatrist by training, opened his clinic in an apartment in a residential complex located about four kilometers from the nearest polyclinic and was allocated a population of 4,000 residents. He and his wife, a pediatrician, served as family physicians seeing approximately 20-30 patients a day. The FGP Kengir, on the other hand, was established in a former SUB in the Kengir village and consisted of two therapists and one pediatrician, as well as a dentist.

The remaining eighteen, as mentioned previously, were located in polyclinics and hospitals in Zhezkazgan city. After the merging of the FGPs, however, two of the nine, Kulzila (No. 2) and Adisha (No. 6), were encouraged to find apartments for their practices in order to be closer to the community they served. FGPs No. 1, 3, 4, and 5 remained in former polyclinic buildings.

Although FGP No. 7 was not one of the original twenty practices established, the owner of the privatized cardiology clinic Zhurek (Dr. Abzalova) recognized that primary care was quickly becoming the focus of the health reforms and decided to establish an FGP by the same name on the second floor of the building she had purchased for the cardio center. Her staff was recruited from those practices that were closing during the reorganization of the original twenty practices.

Family Group Practice Association

All FGPs are members of the Family Group Practice Association, which was established in Zhezkazgan in October 1996 in order to coordinate the activities of the FGPs and to assist in legal, financial, and clinical areas. A Board was elected consisting of a President, a Manager, and Clinical Specialists. The Association is located in the facility of FGP No. 3 on Satpaev Street. It occupies two rooms on the first floor of this building for its meetings and activities. Dues from the FGPs finance the Association.
Privatization

All nine FGPs in Zhezkazgan are now privatized and owned by the head physicians. The privatization process occurred gradually over the course of two years between 1995 and 1997. Four of the FGPs began as newly established private facilities. Tilman’s FGP was the first to be established as a private structure in August, 1995, followed by Koshumbaeva’s FGP (No. 2), Abildinova's FGP (No. 6) in February 1997, and then the Zhurek FGP (No. 7). The remaining five FGPs were formerly polyclinics and converted into government-owned FGPs at the beginning of the reform program. After a year and a half operating as government facilities, the FGPs were privatized in accordance with the State Privatization program in June-August 1997 and purchased by the physicians who were managing them. Although the practices in Zhezkazgan city are private, they receive nearly all of their financing from government sources through a contract with the oblast Mandatory Health Insurance Fund.

Facilities

The physical transformation of former polyclinics and apartment buildings into comfortable, more welcoming environments is one example of how privatization of the FGPs has altered the physicians’ approach toward the patient as well as instilled a sense of pride and community within each group. Cold, sterile buildings have been transformed with curtains, carpets, plants, posters and pictures. Waiting rooms are now equipped with comfortable couches with floral patterns and television sets. One waiting room has a special section designed for children that is equipped with a television and video game bought by the head physician herself as a way of keeping the children occupied and entertained while they wait. When the FGPs first put in carpets, people were afraid to walk on the carpets.

Each group of physicians takes pride in establishing themselves as a community. One group, for example, is very dynamic, wearing bright turquoise blue coats that identify them as members of this team. They have created a poster board with each physician and nurse’s picture, as well as a short description about their education and experience.

For those group practices located in apartment buildings, remont (or repairs) consumes a large part of their time and energies. They are dedicated to improving their facilities in order to better and more comfortably serve their population. One head physician (Tilman) is currently practicing in four combined apartments, but with his growing population, he plans to move to a new building where he will have more space for his practice. In this new, two-story building (a former kindergarten building), he will be able to open his own pharmacy and expand his services. He and his family will live in one section of the building, allowing him to be available to his patients twenty-four hours a day.

Another practice is located in two joined apartments, with ongoing repairs and plans to expand into a third apartment. A third practice is also located in a remodeled apartment, where the head physician and her family live directly upstairs. She is working long hours late into the night in order to remodel a new entrance for patients with a larger waiting area and new rooms for the physicians’ offices.

The location of FGPs in apartment buildings has significantly changed the dynamic of primary care medicine. By being located amidst apartment complexes, patients now have convenient access to their family physician and do not have to struggle with the limited transportation to travel to the polyclinic located across town. Furthermore, the head physicians themselves claim that by living upstairs or next door to their clinics, the patients know that they are able to call their physician at any time if they need assistance. This was not the case under the old system, where assistance after hours could only be obtained by calling an ambulance.

Another striking impression is how ambitious and dedicated these head physicians are to create a comfortable environment for their workers and patients. They spend long hours working on their repairs, and it seems to be an important shared interest, as exemplified by site visits where two head physicians engaged in long conversations about how each other was organizing their facility.
The restructuring of primary care has even extended down to the level of the organization of the physicians’ rooms. While physicians and nurses used to sit together in the same room, in all FGPs the nurse sits by herself in a separate assessment room and registers patients, checks their blood pressure, and records vitals. The patient is then directed to the physician’s office. This new system preserves patient confidentiality, as well as improves the efficiency of the nurses’ and physicians’ work. Of additional interest is the fact that the nurses have taken on more active, independent roles within this new system.

Training

Training is one of the central components of the health reform project in Zhezkazgan. An initial survey of the population revealed that the main concern people have about their primary care is the technical ability of the family practitioners. Historically, the best physicians have practiced in hospitals, which is one of the reasons patients often by-pass the primary care system and go directly to hospitals. The other important aspect of training is changing narrow specialists into family practitioners. This requires specialists to be trained outside of their specialty.

FGPs in Zhezkazgan consist of former internists and pediatricians who have been trained as family practitioners, and one gynecologist who used to work in the Maternity House or polyclinic. The training process for these family physicians consisted initially of an eight-week intensive course from May-July 1996. Instructors from the Kazakhstan Postgraduate Institute for Physicians taught this course, with funding support from ZdravReform. 67 physicians were trained in the areas of internal medicine, infectious diseases, midwifery, surgery, pediatrics, physiotherapy, otolaryngology, neonatology, ophthalmology, and drug formularies.

Out of the initial 67, ten physicians were chosen to be family doctor trainers (six from Zhezkazgan City, two from Satpaev City, and two from the Zhana-Arka Rayon) who would be responsible for training the family physicians on an ongoing basis. These physicians then underwent further training in August 1996 in the areas of EKG skills, Obstetrics and Gynecology, ENT practical skills, and Neurology. They continued their training in four day cycles in Extrainert Pathology in Pregnancy (February 24-28, 1997), Psychiatry (March 31-April 4, 1997), and Gerontology and Geriatrics (April 21-25, 1997).

In Balkhash city, 56 physicians were trained in a similar eight-week intensive course conducted by Postgraduate Institute Instructors and funded by ZdravReform from September 9 to November 2, 1996.

In November 1996, the Kazakhstan Postgraduate Institute developed a program for the training of family doctor trainers as well as a program for the preparation of family doctors as a continuation of their initial eight-week training. Both of these programs outline specific topics and the number of required lecture and practical hours per subject. Through this continuous postgraduate training program, the physicians are trained through travel cycles and seminars. Middle medical personnel of the FGPs are trained in the medical colleges.

In 1997 as part of the plan to integrate the treatment of certain infectious diseases, including Acute Respiratory Infection, Childhood Diarrhea Diseases, Tuberculosis, Immunizations, and Sexually Transmitted Diseases, into the primary health care system, ZdravReform allocated special funds for training FGPs in these clinical areas. Modern treatment protocols developed by BASICS (based on WHO material) for ARI/CDD were introduced to Zhezkazgan City region, with training directed primarily towards family group practitioners. Further training is planned to continue the integration of vertical programs, programs that were treated under the old system in specialized hospitals and institutions, into the more cost-effective primary care arena.

In addition to clinical training, a training workshop was conducted in Zhezkazgan by ZdravReform technical assistance on how to develop strategic, operating, and business plans for FGPs. Forty physicians, health department administrators and managers participated in this “Financial Management for FGP” training course on August 16-17, 1996. Key issues discussed during the workshop included developing and implementing a clinical information systems and data sheet with ICD-9 disease
information as a critical step for tracking referrals, interviewing and hiring Practice Managers for the new FGPs, establishing an accounting system, renovation of FGP offices, purchasing instruments and equipment for the FGPs, and the need to pay salaries on a more regular basis.

A second two-day seminar, “Management Accounting and Control for Improved Health Care Management,” was conducted in Zhezkazgan on February 10-11, 1997. This workshop covered topics such as management accounting, budget applications, budget preparation and development, internal control, and cost accounting. Forty-one senior health managers, chief economists, physicians, and family practice managers participated.

**Practice Manager**

The role of the practice manager in Zhezkazgan FGPs has developed into an important figure, illustrated by the fact that the most elaborate equipment in every FGP is the computer and printer in the practice managers’ offices.

Each FGP is required to have a business plan and monthly financial reports. The practice manager is responsible for developing the FGP’s business plan, assisting with the financial and managerial functions of the practice, conducting statistical and economic analyses of their data, and managing the marketing and enrollment campaigns.

Three practice managers for three of the FGPs in Zhezkazgan are recent graduates of the local institute. They were all classmates studying economics and, when advertisements were announced for practice manager positions, they were each hired. Other practice managers who were hired have backgrounds in economics.

The head physician of one FGP serves as his own manager. He and 16 other physicians have been taking economic classes at the institute so that they can better understand the business and financial aspects of their practices. When he moves to his larger facility, however, he too will hire a separate manager, as he realizes with a growing practice he does not have enough time for his clinical work, administrative work, and statistical analyses.

**Equipment**

Each FGP in Zhezkazgan city is equipped with an electrocardiogram machine, a clinical lab, a physio-room, a vaccination room, a treatment room, an obstetrician-gynecologist room, and physicians’ examining rooms. A core set of clinical equipment for FGPs has been identified and funded by the USAID-sponsored ZdravReform small grants program for several of the practices in Zhezkazgan. In addition, seven of the nine FGPs have computers, two having acquired them with grant support and five having bought them with their own funds.

Each of the FGPs in Zhezkazgan has set up its own laboratory by obtaining laboratory equipment either for free or by purchasing the equipment cheaply from hospitals which were closing. None of the FGPs in Satpaev, however, have their own laboratory. Instead, all laboratory tests are carried out at one general outpatient laboratory in the city.

All Zhezkazgan ambulatory laboratories offer basic blood and urine analyses, while the Zhurek Cardiac Ambulatory Laboratory offers additional, more specialized tests for cardiac patients. Since these tests are offered only at the Zhurek Laboratory, there is an arrangement with the other private ambulatories for specimens to be referred there for testing.

Although every FGP now is equipped with its own laboratory, each laboratory has only minimal equipment, including one microscope (often unifocal) and a small autoclave. All laboratories use broken test tubes and other glassware every day, and there is a short supply of microscope slides and coverslips. Occasionally one pair of gloves is available, but most of the staff work without wearing gloves. The
physiotherapy room, however, is the best-equipped room in the clinic, most often complete with several beds and instruments for various therapies.

A continuing problem is medications. While supply is no longer a problem (both Russian and European drugs are available), the limiting factor is cost, particularly since everything must be flown into this remote region. If there is an emergency or acute case, the FGP pays for the drugs out of its budgets. For regular treatment courses, however, the patient himself must pay. Since pharmaceutical companies are now private, most FGPs rent space in their practice to the pharmaceutical company to sell medications to their patients. The head physicians would all like to own the pharmacies themselves, however the license is too expensive at this point in time. One head physician currently buys the medicines from the pharmaceutical company and sells them directly to his patients. He then gives the money to the pharmaceutical company, making a ten percent profit on the sales.

**Access to Physicians**

Currently, the FGPs in Zhezkazgan have 185 workers, 56 physicians and 85 middle medical personnel. According to the regulations outlined by the Family Group Practice Association, each physician is expected to see 20 clinic patients and make six home visits per day. The gynecologist, who does not make home visits, is required to see 26 patients in clinic per day. In practice, the average number of patients per day per physician in each FGP was 15-20 patients, for a total of about 100-150 patients per day (about 5-6 doctors in each). An additional 100 patients come each day for laboratory and/or physiotherapy services.

Unlike outpatient clinics in Western countries, patients do not schedule appointments. Rather, they simply come in when they need to. Although it would make the physician’s schedule easier to regulate, the head physicians claim that it would not work in Zhezkazgan because people would forget that they had made an appointment and would fail to show up.

As mentioned previously, the new location of several FGPs among the apartment complexes seems to have increased access to physicians and medical/laboratory services. Also, each facility has posted a schedule in the front entryway of the physicians’ hours and the hours of operation for the physiotherapy room and laboratory. Most of the physicians work four to six hours per day. Patients come for laboratory services in the morning, and most come to the clinic in the afternoon.

Most of the physicians admit that they see sicker patients now in the FGP than they previously saw as internists or pediatricians in the polyclinic. They attribute this increase in severity to a general uncovering of many sick patients that were either ignored or dismissed under the old system.

**Clinical Practice**

Because the transition to competent gynecologic care has been the most difficult for family doctors, FGPs in Zhezkazgan have each hired a gynecologist who sees patients but is gradually training the other physicians in basic gynecologic exams as well as gynecologic pathology.

For the physicians, this system of cross training seems to be an effective means of training for general practice. This method not only allows the physicians to learn gradually in practice with an available resource on hand, but it also increases confidence and improves clinical skills through reinforcement and appropriate monitoring. Additionally, more trust is established with patients, as they can become increasingly more comfortable that their physician's skills are developing under the supervision of a well-established gynecologist.

The gynecologist also appears to be the key organizer and spokesperson for family planning consultation services. In one practice the gynecologist has arranged a family planning corner, complete with pamphlets about contraception and notebooks (charts) for each patient with a color-coded sticker designating what type of contraception the woman was using. An enthusiastic "of course" was the answer to a question regarding whether women come to the clinic only for consultation on family planning. In addition to the contraception charts, the gynecologist keeps hand written records listing all of her patients according to
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Specific diagnoses (endometriosis, infertility, etc.) and procedures (placement or removal of intrauterine devices, for example) with dates of visits as well as the number of births and abortions for each patient.

**Additional Services**

An important part of the development of competition between practices has been the expansion of services each group attempts to offer their population. With the new payment method, head physicians are able to provide more services than before. This includes laboratory services, physiotherapy services, and a few specialty services. For example, one head physician has hired an ophthalmologist into his practice to which he refers his patients. Another practice has incorporated an otorhinolaryngologist into its physician group. While this new structure allows for internal referrals, it will be interesting to note whether this trend of including specialists in the FGP will expand, thus resembling a privatized mini-polyclinic.

An additional component of this new system is the responsibility each FGP has for the medical care of schoolchildren. Each FGP has between two to four schools for which they provide medical services. A nurse from the practice is primarily responsible for seeing the children at school, and when necessary, a physician is called. Although they do not get paid for medical care they provide for children who are not enrolled in their FGP or foreign children attending the school they serve, they consider it a public service as well as an investment for the future. If they treat these children now, they will have a relationship to build on as the children get older, eventually leading to more enrollees in their practice. One practice serves the local institute as well, which provides a large population of women of childbearing years who utilize their family planning consultation services.

A very striking clinical innovation has been the formation of patient clubs that educate patients about their disease and provide recommendations for preventive health care. These clubs have a physician advisor, but a patient leader organizes and operates the activities, demonstrating a profound change from the old system where full responsibility for the population’s health rested on the physician to a new system involving active participation of the patients themselves in their healthcare.

The first club was created after the leading cause of morbidity and mortality in Zhezkazgan was determined to be cardiovascular disease. As a result, the head physician of the FGP Zhurek, who is also the owner of the cardiology center Zhurek, proposed a program that would focus on preventive measures. The resulting cardiology club (called Zhansaya - a Kazakh word for “resting of the soul”) is now a group of almost 500 members who meet on a monthly basis to teach each other about prevention of heart disease. The leader of this group is a patient himself who has had two heart attacks, and serves as an example to encourage patients to alter their diet and lifestyles. They are officially recognized with their own charter, and a cardiologist and nurse facilitate their discussions. They have provided members instructions on what to do in the case of chest pain, for example, with a written list of phone numbers that they are encouraged to post by their telephone as well as details about what actions to take while they are waiting for help. This list includes the phone number of their cardiologist as well as the number of their family physician. The most impressive result is that the number of hospitalizations and deaths from heart disease has decreased among this group. The hospital admission rate for club members has decreased from 49 percent to 28 percent, the readmission rate decreased from six percent to five percent, and ambulance calls decreased by 1.5 times. Other such groups have similarly been created based on this model, including one for diabetic patients and one for asthmatic patients. The formation of these patient education groups is a significant step in improving health at the primary or preventive level. In addition to overall improvement in health, these groups represent a very cost-effective approach to treatment and control of chronic diseases.

**Home Visits**

Doctors continue to make home visits, however nurses now do many of the basic visits. In addition, an increasing number of questions and problems are addressed through phone consultations with nurses or doctors. Some physicians are trying to decrease the number of home visits and encourage patients to
come to the clinic if possible, where they have more resources available. Patients complain, however, if the physicians do not make as many home visits as before. The perception still seems to exist that a physician cares more and gives better treatment if they make personal visits to the patient's home.

For many pensioners, this may be an indication that someone is looking out for them. With the new system, there is still a strong need for medical attention among some patients, as illustrated by one elderly woman with hypertension who lives nearby and comes to the clinic everyday to have her blood pressure checked, despite the fact that her physician assures her that her pressures are well controlled.

**Patient Responses**

Although initially the changes were met with a lot of disapproval and antagonism, physicians now claim that the population better understands the advantages of this system. They recognize that it is more convenient, now that some clinics are located among their apartment buildings, and they appreciate the interest that physicians are taking in their health.

One elderly gentleman was very pleased with the new system. He liked his physician and was very positive about the clinic, noting that it was very convenient for him and that his physician treated him as a whole person. However, two other women, a middle-aged woman and her elderly mother, were not so enthusiastic. They stated that they did not like the new system. They had always known and trusted their gynecologist, but they are now skeptical that their new family physician (a former pediatrician) is competent in this area.

One mother claimed that this new system initially made things more complicated, as she had to take her child to the family practice for check-ups and then to the polyclinic for immunizations. Once the family physicians began providing immunizations, however, it became more convenient than before.

**Strong Personalities and Energy combined with Changing Attitudes**

It is important to note that strong, dynamic personalities seem to have provided the driving force for many of these changes. When looking at the Zhezkazgan experience, much of the progress that has been achieved is a result of having a leading, progressive figure in the Department of Health who was in a position to make significant legislative and financial reforms. This leading force was combined with energetic, entrepreneurial physicians who shaped the direction of these changes. One head physician notes that there is a remarkable change in the physicians' attitudes, which is noticeable particularly when physicians from other regions come to visit or she and her colleagues visit other areas of the country. Other physicians, she claims, are similar to how she and her colleagues were four years ago before the FGPs were created. Unfortunately such personalities are difficult to duplicate.

An important key to the success of these reform activities has been the development from the community itself, rather than being imposed from an outside force. In Zhezkazgan, the reform efforts had actually been initiated about one year before ZdravReform became involved by providing technical assistance for financial reforms, clinical training, assistance with clinical information systems, and marketing support. In this manner, the community was much more accepting and understanding of the process because it was not simply a foreign concept system that was being forced upon them. In the physicians' opinion, it is important to initiate reform efforts at the community level, with foreign assistance providing support and recommendations throughout the process, rather than an outside force providing the energy for reform.

**Motivation**

Throughout several conversations the theme of working for the future is expressed. Although the new payment system of capitated rates for each enrolled person is established and active, the FGP physicians have not yet received any more per month than they used to. They recognize the transition to partial fund holding as the way to improving their salaries. Under the current capitation rate payment system, they could just simply send their patients to the polyclinic without doing any work and still collect the same rate. This does not appear to be happening, however, as the physicians seem committed to keeping their
patients healthy and satisfied with the services they offer, motivated by the assumption that things will improve under partial fund holding.

B. Facility Rationalization

1. Rationale

One of the fundamental problems in the health system is the dominance of the hospital sector. Approximately 70 percent of health resources are devoted to hospital care. The hospital sector is characterized by too many hospitals, over-specialization, and too many beds. Hospitals are inefficient as evidenced by very high admission rates and long lengths of stay. The strategy of the demonstration has been to address excess capacity in the hospital sector through rationalization and the introduction of a new incentive-based hospital payment system.

To decrease excess capacity in the hospital sector, a rationalization plan was developed to consolidate and close hospitals. The goals were to incorporate dispensaries into existing hospitals and to close inefficient providers such as small rural hospitals.

The new hospital payment system will provide further pressure to consolidate and reorganize hospitals. Since FGPs will be allowed to refer to any hospital, this will create competition in the hospital sector, particularly between central rayon hospitals and oblast hospitals. Hospitals will have an incentive to improve their efficiency because of the case-based payment system. Hospitals will need to restructure their internal organization to lower costs based on the income generated by hospital admissions.

2. Restructuring of Hospital Services in Zhezkazgan Oblast, 1995-1997

Since 1995, Zhezkazgan authorities have made significant structural changes in the hospital sector as part of its reform efforts aimed at resolving the inefficiencies of the health system and shifting the balance of resources to primary care. As a result of this rationalization program, underutilized facilities were closed, and some of the inefficient vertical specialty hospitals were consolidated.

The Oncology Dispensary and Narcology (Substance Abuse) Dispensary were each closed and beds for these departments were incorporated into the main hospital (Regional Multi-Specialty Hospital). The buildings were given to the Governmental Committee on the Management of State Property.

After the merging of Zhezkazgan Oblast and Karaganda Oblast, the remaining vertical specialty dispensaries (Tuberculosis Dispensary, Psychiatry Dispensary, and Dispensary for Dermatological and Sexually Transmitted Diseases) were re-appointed as city as opposed to oblast dispensaries. Of note, the Tuberculosis and Psychiatry Dispensaries are located in Satpaev, while the STD Dispensary is located in Zhezkazgan City.

The Oblast Medical Hospital added beds from the closing Oncology and Narcology Dispensaries and was renamed the Regional Multi-Specialty Hospital.

The buildings of the City Hospital Number 1 and the Infectious Diseases Hospital were located in one complex in Zhezkazgan. The cardio center Zhurek was opened in one of the buildings in this complex as well. When it was decided that the City Hospital No. 1 would be closed, the services of the Oblast Children’s Hospital, located in a deteriorating facility that was given to the same Committee on the Management of State Property, were transferred to the buildings of City Hospital No. 1 and the Infectious Diseases Hospital. At the same time the Infectious Hospital was incorporated under the administration of the Children’s Hospital as a department treating children with infectious diseases. The Oblast Children’s Hospital, now located in the former buildings of the City Hospital No. 1 and the Infectious Diseases Hospital, was renamed the Regional Children’s Hospital.

The Maternity House in Zhezkazgan remained open.
In Satpaev, the two city hospitals, City Hospital No. 1 and City Hospital No. 2, were merged and the building of City Hospital No. 2 was closed. The enterprise-based medical facility remained open.

In Balkhash, the services of the City Hospital, Children’s Hospital, Maternity House, STD Dispensary, TB Dispensary, and Psychology-Narcology Dispensary were consolidated into one Multi-Specialty City Hospital. The Tuberculosis Dispensary and Psychiatry-Narcology Dispensary remained open.

In Priyorsk City, the City Hospital was closed, and patients are now treated at the military hospital. In Karajal-Zhairem, Territorial Medical Institution No. 2 was closed, and Territorial Medical Institution is the only remaining hospital in these towns.

All 15 SUBs in the oblast (small rural hospitals) were reorganized into Family Practice Ambulatories with day beds.

As a result of these consolidations, the number of hospitals in the oblast was reduced from 51 in 1994 to 22 in 1997 (56.8% reduction) with the number of beds decreasing from 6225 in 1994 to 2919 in 1997 (53.1%).


The long history of disproportionate resource allocation between the hospital and primary care sector has reduced the capacity of the primary care sector to provide adequate services to the population, causing primary care physicians to refer simple cases to specialists and hospitals or for patients to bypass primary care completely and refer themselves directly to hospitals. One of the primary goals of the health reform effort, therefore, is to strengthen the primary care sector both clinically and financially. The first step in achieving this goal was to restructure the system of primary care service delivery. Primary care has now been physically, financially and administratively separated from the specialist-dominated polyclinic system. A network of independent FGPs has been established in an effort to improve access and quality of primary care.

In Zhezkazgan city, three pediatric polyclinics were closed. One building was given to the Committee on the Management of State Property, while the remaining two buildings were occupied by FGPs. Three other FGPs were organized in the buildings of the Center of Health, Blood Bank, and SUB Kengir. The services of these organizations were closed or transferred. The head physicians of three FGPs (Tilman, Adisha, and Kulzila) bought and remodeled apartments themselves to provide convenient and accessible primary care services for their patients. The FGP Zhurek is owned by the same head physician who established and operates the cardio center Zhurek, and it was therefore established on the second floor of the same building. As mentioned previously, this building is located in the complex of buildings now occupied by the Children’s Hospital (formerly City Hospital No. 1).

Polyclinic No. 1 was privatized to become the only Consultative-Diagnostic Center in Zhezkazgan City. The Women’s Consultation Center was closed and the building was given to the Committee on the Management of State Property.

In Satpaev, two polyclinics were closed (Polyclinic of City Hospital No. 2 and the enterprise-based polyclinic), and the Children's Polyclinic was converted into the only Consultative Polyclinic in the city. In this same building FGP No. 2 was also established. FGPs No. 4 and No. 8 were established in the buildings of the former Blood Bank and Health Point, respectively. Four other FGPs (No. 1, 3, 5, and 6) were established in apartment buildings or former kindergarten buildings.
VI. Population Participation

A. Rationale

In order to define a stronger role for consumers in the health care sector, a marketing program was established with the goals of increasing consumer participation in health care through public awareness campaigns to inform the public about changes occurring in the health care reform demonstration, particularly about primary care reform and the concept of free choice of provider.

The rationale behind this effort is based on the fact that informed consumers are more likely to become active consumers who hold providers accountable and thus play a role in improving the quality and efficiency of health care, and that the increased power of patients in decision making about health care can contribute to the desire for more democratic participation in other sectors of the economy.

The population participation strategy consisted of three phases. Phase one was a public awareness campaign. The goal was to use different media channels to increase the knowledge of the population about FGPs and their right to free choice of primary care provider. Phase two was a marketing campaign, which focused on explaining to the population why and how to enroll in a FGP. Phase three was the actual enrollment in FGPs. This phase involved the operational activities required to establish enrollment sites, hold enrollment day activities and manage many logistical problems such as distributing and completing enrollment forms.

The introduction of choice is integral to the reorganization of the primary care system into FGPs. Consumers must become actively involved in their health care. One way to involve consumers more is to enable them to make a choice of health providers. This is both a symbolic step away from the former system in which people were assigned to providers based on catchment areas (place of residence), and a real mechanism for consumers to begin to hold providers accountable for the care they deliver. It is also a major technical element because creation of the enrollment database and subsequent linkage to other clinical databases allows the analysis of patient level data required to establish age and sex adjustments to the capitated rate, refine the hospital payment system, and evaluate the nature of clinical practice.

B. Open Enrollment Campaign in Zhezkazgan

The reorganization of primary care into FGPs with free choice of provider was introduced to the population of Zhezkazgan through a public information and marketing campaign. Prior to these campaigns, however, an initial survey was conducted in Zhezkazgan in August 1996 in order to assess the public's knowledge and attitudes about the reorganization of primary care, as well as to determine the most effective channels through which information should be distributed. With the financial and technical support of USAID/ZdravReform, 350 people were interviewed. The results of this survey showed that 82.3 percent of the population knew nothing about the tasks and goals of the MHI Fund, 87.1 percent did not understand the new payment system, 65.1 percent did not know about family practitioners despite the formation of 20 FGPs, 73.7 percent would like to be able to choose their own physician, and the most important items in choosing an FGP are the high qualifications and skills of the physicians, a good relationship with the physician, sufficient equipment, and a convenient location. In addition, the survey team found that most people read local newspapers or watch television in the evening, while fewer listen to the radio. These results were then used in developing a strategy for the public information, marketing, and enrollment campaigns.

The first phase of this strategy was the public information campaign, which took place in Zhezkazgan from March-May, 1997. During this time, information was provided to the public explaining the new structure of primary care and free choice of a primary care provider. This campaign was conducted with the intention of having the enrollment campaign follow in June 1997. With the merging of the Zhezkazgan Oblast with Karaganda Oblast in May 1997 and the uncertainty about the progression of the reform efforts, however, all activities were temporarily suspended. When the Karaganda Administration
informed health reform officials in Zhezkazgan that the reform efforts could continue, it was decided to delay the enrollment campaign until December 1997.

The second phase, the marketing campaign, was more narrowly targeted than the public awareness campaign and was intended to provide the public with information on their right to free choice, the process for enrollment, as well as distributing data to allow people to make an educated choice of FGP. This campaign was conducted in two steps. The first step took place from June-October, 1997, during which time several articles were written for the local newspapers, advertisements were made on local television and radio, informational segments were created for television, public information meetings were held at schools and clinics, informational pamphlets about the various FGPs and their doctors were created, special health promotion activities were conducted in the community, and pens, shirts, and bags with “Choose Your Family Doctor” logos were distributed. Since one criterion for choosing is the background and experience of FGP physicians, physician background sheets were also distributed to the population during this time to help people make a better choice of the most appropriate FGP for them.

During this time, Prikaz (government order) No. 47 issued on September 23, 1997 established a working group in Zhezkazgan, consisting of one representative each from the Zhezkazgan Oblast Association of Family Physicians, Oblast Health Department, MHI Fund, and the Center for Health, in order to help coordinate and monitor the activities of the marketing campaign. This was followed by statement No. 571/9 on September 29, 1997 that supported the implementation of the campaign and designated 600 thousand tenge for the campaign efforts.

The second step of the marketing campaign was organized during the month prior to the enrollment period, from November 11-December 11, 1997. During this time each FGP advertised their practices and physicians, emphasizing the services they offered and creating individual slogans for people to remember. As part of this process, the FGPs in Zhezkazgan created personalized short videos for television and advertisements for radio and newspapers. Each FGP highlighted their competitive advantage in order to persuade the community that their services were better. For example, one head physician whose FGP is located in four combined apartments encouraged people to register for his practice because it is conveniently located amidst the apartment complexes and physicians are available at all hours of the day. Another head physician emphasized the cardiology center located in the same building as her FGP and offered attractive services for patients with heart disease. An FGP located in a former pediatric polyclinic attempted to appeal to parents by highlighting the pediatric day beds that this FGP could offer so parents would not have to stay home from work when their child became sick and needed care.

In addition, a seminar on “Financing and Management of Primary Health Care” was organized as well as a press conference where several important questions were addressed concerning FGPs and free choice of a family doctor.

The public information and marketing campaigns culminated in an open enrollment campaign to encourage families to choose an FGP during an open enrollment period from December 12-20, 1997. The Practice Managers of the FGPs conducted the open enrollment campaign, with oversight provided by the working group. Enrollment points were established at strategic locations throughout the city, and were open from 8 am - 7 pm all nine days. The results of this first open enrollment campaign revealed that 75.6 percent of the population exercised their right to choose their family physician.

A second enrollment period took place in Zhezkazgan November 7-17, 1998. This second process resulted in an additional ten percent of the population registering for an FGP by choosing their family physician, raising 1997’s figure of 75 percent to 85 percent of the population now enrolled. In addition to new enrollees enlisting, there were also several people who exercised their right to change their family physician, thus demonstrating effective competition between FGPs.

After these information campaigns, patients are more informed about the health care system in general and now have higher expectations of primary care providers. Patients and physicians now know that if patients are dissatisfied with their primary care provider, they can choose a new one during the next open
enrollment, and under a capitated payment system, the money follows the patient. This transfer of some of the power in the doctor-patient relationship to the patient may have some effect on health worker motivation, beyond the obvious incentive to attract more patients for financial gain. Open enrollment results are made public, and a practice that does not attract many patients not only loses financing, but also professional status among its peers. There is now true competition between primary care providers, both for financing and prestige.

VII. Health Insurance

A. Rationale

1. Institutional Structure

The biggest obstacle to health reforms is the institutional structure for the implementation of comprehensive health reforms. The institutional structure for the implementation of health insurance and other health reforms was imported from Russia and incorporated into health insurance laws in Central Asia. It consists of the establishment of a new government agency, a Health Insurance Fund, in addition to the Ministry of Health. The problems faced in Russia and Kazakhstan are that the split in authority among the Ministry of Health and the new Health Insurance Fund has created confusion, conflict, duplication of administrative costs, and major technical difficulties in the implementation of health delivery system restructuring and new provider payment systems.

ZdravReform strongly feels that the functions of purchasing health care and the provision of health care should be separated to allow competition, decentralization, and management autonomy in the health sector. However, the functions of purchasing health care (defining a benefit package, allocating resources, establishing new ways to pay providers) do not need to be split between two agencies. If they are, health reforms are severely hampered by the resulting conflict, increase in administrative costs, and inability to restructure the health delivery system, change provider payment methods, and change clinical practice.

Much of the technical assistance provided by ZdravReform and work done by oblast officials on health reforms was targeted at the creation, development, and strengthening of the MHI Fund organizational structure.

The MHI Fund is a separate division within the Oblast Health Department. This allows the establishment of the institutional capability needed to restructure the health system and manage various aspects of the new provider payment systems.

2. Pooling of Funds

In the former Soviet Union, the national, oblast, municipal, and rayon governments all financed and operated their own set of facilities. In order to introduce incentive-based provider payment methods, allow health providers to refer to any health facility, and give the population free choice of provider, all the budget funds from the different government levels must be combined or pooled. After the funds are pooled, new provider payment methods can be introduced, as one pool of money reimburses all health providers serving the population.

Pooling of funds from different administrative units is also important for restructuring of the health sector. As the realization grows that too much capacity in the form of health facilities, beds, and staff exists in the health sector it becomes important to restructure the system so that national, oblast, municipal, and rayon facilities do not duplicate services. In order to build this seamless system where the population can receive services from any health provider, the funds from all administrative units need to be pooled.
B. Health Insurance in Zhezkazgan

The Zhezkazgan territorial MHI Fund was established in accordance with Decree No. 90/12 “On MHI Introduction in the Oblast” on December 27, 1994.

The MHI Fund is an independent governmental off-budget financial-banking system authorized for financing health services within the framework of the territorial basic program. The fund is managed by a Board of Directors, and a separate Executive Management Group headed by an Executive Director. The Board of Directors consists of 21 members and was elected by a group of representatives of mandatory health insurance participants. The role of the MHI Fund Board of Directors is to determine prospective objectives of the MHI Fund; approve MHI Fund annual financial reports; determine channeling of profit and reserve funds; develop regulations on improving health insurance; establish a Revision Commission; and appoint the CEO of the MHI Fund.

The MHI Fund Executive Management Department is subdivided into four departments. The Economic-Analytical Department regulates economic relationships between the MHI system participants, provides economic expertise of health facilities’ bills, allocates temporary free funds, and controls MHI Funds allocated to the subsidiaries and facilities. The Insurance Payments Registering Department provides registering and analysis of insurance payments, performs accountancy control of the MHI Fund economic-financial activities, and controls the adequate utilization of material and financial resources. The Medical Department organizes the work of medical experts for accreditation of facilities, controls quality of care and resource utilization under the MHI system, investigates claims on inadequate care or violation of regulations, and coordinates activities with the planning-economic department on issues related to the economic assessment of the facilities’ activities. The Software Department participates in designing software programs for the MHI, establishing the local computer network of the MHI Fund, and training of the MHI staff.

Concrete tasks of this MHI include:

- Reorganization of health care management and the structure of health care facilities.
- Reform of existing health care financial systems, including moving from an item-budget financing system to a new system based on actual delivery of health services.
- Development of general and priority public health programs.
- Development of an MHI territorial base program.
- Design and approval of MHI regulations.
- Accreditation and licensing of health facilities.
- Development of a payment mechanism between providers and the MHI Fund for services delivered.
- Development of a quality assessment system for health care delivery.
- Organization of training for health care providers.
- Establishment of an automatic billing system for health services delivered.
- Development of a multi-specialty health care system, including a private practice network and a de-monopolized pharmacy network.
- Development of incentive mechanisms and true responsibility for health care on the part of the state and individual citizens.
• Extensive community education on the MHI principles.

The MHI system was introduced in two stages. During the first stage, March-June 1995, the infrastructure of the MHI Fund was created. The oblast economic entities were registered, medical standards for health delivery were developed, tariffs for hospital and ambulatory care were calculated, licensing of health facilities and private practitioners was carried out, contracts between the facilities and private practitioners and the fund were signed, health personnel were prepared for their work under the MHI Fund, and advertising took place within the community.

During the second stage beginning June 1995, the fund started pooling premiums from employers and on-budget premiums from local administration on capitated rate agreements for nonworking populations. Health facilities started their practices based on their contracts with the MHI Fund in concurrence with fees approved by the joint committee, correction coefficients and payment regulations. The MHI Fund also performs off-ministry expertise of health service quality and resource utilization, as well as providing credits for private practice development.

MHI Fund finances are formed by premiums from enterprises in the amount of 5.5 percent from the payroll salary fund, which became mandatory in January 1996. Premium receipts are then pooled with budget funds, which are received in capitation allowances from the Ministry of Finance to pay for the care of the nonworking and special populations. About half of the people are to be provided health care via budget funds. One of the main problems that emerged during the introductory phase was inadequate financing of the MHI system resulting from non-payments from enterprises and local administrations.

By the time the oblast funds became operational in April 1996, the MOH had passed a resolution to divide financing responsibility by establishing a dual benefits package: the Guaranteed and Basic Packages.

The Guaranteed Package, financed by the MOH budget, includes such services as public health, emergency care, acute and medium-severity cases, and all services in specialty facilities such as tuberculosis, infectious diseases, and psychiatric dispensaries. The Basic Package, financed by the MHI Fund, includes all other services, such as planned hospitalizations and nearly all outpatient care. The national system of dual benefits package has added complexity of financing reforms, requiring facilities to maintain duplicate reporting systems and to analyze each case to determine the appropriate payer.

Zhezkazgan is one of only two oblasts in Kazakhstan that has pooled all health care resources in the MHI Fund, and has avoided the dual benefits package. This is possible because a strong Oblast Health Department is able to relinquish control of resources to the MHI Fund without sacrificing decision-making power in the health sector.

In Zhezkazgan, the MHI basic benefit package includes all outpatient care except occupational check-ups, including dental and emergency care. Inpatient care is also included, excluding routine non-surgical cases. Outpatient prescriptions are excluded, although inpatient drugs are covered by MHI as long as they are included in the oblast inpatient formulary, which was developed for the oblast by ZdravReform technical assistance.

Some health facilities are funded directly from the budget. These facilities include Children’s Homes, Sanatoria under the MOH, Blood Transfusion Stations, Milk Kitchens, AIDS Centers, and Physical Therapy Dispensaries.

Public health programs are also funded directly from the oblast budget. Public health priorities have been selected based on local risk factors. Specifically child delivery, pediatric care, cardiology, preventive immunizations, tuberculosis, and disease control and epidemiological surveillance are defined as targets for direct on-budget funding. As a result of these special programs, there has been a decline in the incidence of neonatal infectious diseases in Zhezkazgan by a factor of three; the incidence of intestinal infection among infants has been reduced; and the incidence of TB has reached a plateau.
The Zhezkazgan MHI system also provides accreditation of health facilities. The objective of accreditation is to advocate the covered population and provide the required amount and quality level of health services in the MHI-driven environment. One licensing-accreditation commission performs accreditation and licensing in the oblast. The MHI Fund only contracts with licensed facilities.

The accreditation-licensing commission determines the terms of licenses and certificates accordingly. The regulations stipulate that the term of the certificate is not to exceed five years, with the term being reduced to three years for non-governmental facilities. After review by the accreditation commission, facilities and individuals get a certificate defining the adequacy of health care services as complete, with restrictions, or a refusal.

ZdravReform has developed a program for providing technical assistance to the fund in the areas of introduction of fund-holding programs, health facilities management, and development of advanced payment mechanisms for health services. With the assistance of ZdravReform representatives, the fund was awarded a grant in the amount of $21,000 for a local computer network. Also, several staff members of the MHI Fund, health department and various health facilities underwent training in the USA, Western Europe, and CIS on contemporary problems of health insurance.
VIII. Incentive Based Provider Payment Systems

A. Rationale

1. Fund Holding System

One of the principal goals of the health reform demonstration is to shift health services from expensive hospital care to cost-effective primary care. The key to shifting from hospital to primary care is the creation of FGPs consisting of a pediatrician, a therapist, a gynecologist; several practice nurses, and a practice manager. The question is how to change the payment system to encourage them to treat more conditions in primary care and to decrease referrals to specialists and hospitals. The current payment system based on the number of visits provides no incentive not to refer patients.

The solution proposed is that FGPs would receive a budget based on a capitation rate (a fixed sum per patient) for the number of patients who enroll in their practice. The number of patients in the practice is determined by the annual open enrollment campaign, where the population is given free choice to enroll in one of the FGPs as its primary care provider. The capitation rate includes three components: primary care; outpatient services; and hospital care. Under fund holding, FGPs would be responsible for purchasing outpatient and inpatient care. They are given autonomy to choose providers for all services. They have a right to refer to any specialist, laboratory, or hospital. With this new payment system, the money follows the patient, so outpatient specialists and hospitals are reimbursed based on their referrals from FGPs.

In terms of outpatient care, polyclinics are paid using an outpatient fee schedule. The fee schedule is a relative value scale based on points. These points are converted to payments based on the total sum of resources currently allocated to outpatient care. When an FGP makes an outpatient referral this amount is paid from their fund holding account.

In terms of inpatient care, hospitals are paid using a case-based payment system. Under the case-based payment system, there is a fixed amount for a clinical category. When a patient is admitted to the hospital, the diagnosis determines the clinical category, which determines the payment. Under full fund holding, the FGPs would pay for all hospital admissions for their enrolled population from their fund holding account.

The fund holding system aligns the financial incentives with the new organization of FGPs. FGPs now become the financial center of the health system making determinations on the use of outpatient and hospital resources. FGPs have an incentive to decrease their referrals because money that they save can be used to reinvest in their practice. To assume these new financial responsibilities, FGPs need practice managers to keep close track of the fund holding budget. The Health Insurance Fund needs clinical and financial systems to track the flow of patients to debit fund holding accounts. Finally, the Health Insurance Fund will need to closely monitor referrals to make sure that patients are being referred appropriately.

The purpose of fund holding is to provide the financial tools necessary to redirect funds from the hospital sector to the primary care sector. As FGPs increase their clinical capabilities and decrease referrals, the result will be a shift in financial resources to primary care.

2. Case-Based Hospital Payment System

The previous hospital payment system in Kazakhstan was a budget system in which the hospital is allocated a fixed amount of funds to operate for a year. The budget is inflexibly partitioned according to budget chapters. As the budget system allocates funds based on production input measures such as number of beds, it contains a direct financial incentive to increase and maintain capacity. The result is a health service delivery system with too many hospitals and too many beds. This form of hospital payment
provides no incentives for efficiency, and in so far as the chapters prevent the flexible use of funds, the payment system actually inhibits the efficient use of resources.

Market oriented hospital payment systems typically provide a payment for the production of a defined unit of hospital output. One market oriented payment system is a per-case system, providing a set payment for each discharge from the hospital. Case-based hospital payment systems are intended to provide payment equal to the average cost of producing a unit of output in an efficient hospital.

3. Fee Schedule for Outpatient Payment

Polyclinic budgets are based on staff and capacity, creating an incentive to increase capacity, not the provision of quality services. Physicians are salaried and underpaid; lacking incentives to increase income, they act as indifferent dispatchers referring patients to hospitals, further increasing hospital costs.

Implementation of a fund holding system for FGPs requires a new payment system for outpatient specialty visits and diagnostic tests. FGPs will receive a capitated rate for each enrolled person. They will provide primary care services for their enrollees and purchase other outpatient services and hospital care for their patients.

Implementation of a fee schedule for outpatient specialty visits and diagnostics tests establishes prices for polyclinic services provided to patients referred from FGPs. The polyclinic submits bills and is reimbursed from either the OHD/MHI Fund or directly from the FGP. FGPs have open referrals, meaning they can refer their patients to any polyclinic for services.

Under fund holding, all three new payment systems - the case-based payment system for hospitals, the outpatient fee schedule for outpatient specialty visits and diagnostic tests, and capitated rates for FGPs - are interlocking. A referral from an FGP triggers both the hospital payment system to determine the amount the hospital is paid for a treated case and the fund holding system because the FGP pays for this service from its fund holding account. The hospital payment system and outpatient fee schedule create competition and encourage restructuring of the health sector to support the goal of increasing health sector efficiency. In addition, they set a fixed price so that the FGPs know the approximate cost of all of their referrals.

4. System Infrastructure - Computer Systems

Computer systems are required to support the design, implementation, and evaluation of provider payment reforms. In the former Soviet Union, the MOH collected enormous amounts of information on health sector budgets, service utilization, and health status indicators. The data, however, were not compiled in a way that facilitated analysis, and it was difficult to link costs with utilization or health outcomes.

B. Provider Payment Systems in Zhezkazgan

The hospital payment reforms in Zhezkazgan have been enacted incrementally, with a gradual shift in financial risk to the facilities. This method has given facilities time to adjust to the administrative demands and the increasingly competitive environment. It has also allowed time for a comprehensive patient-level data system to be established.

1. Hospital Payment Reforms

The hospital payment reforms began with a shift from the traditional chapter budget financing system to payment of a fixed amount per hospital bed-day in each inpatient facility. This system was then shifted to reimbursement of a fixed amount per hospital case, which varies according to the clinical department. The last refinement is to reimburse hospital cases according to clinical statistical groups (groups of diagnoses with similar clinical characteristics and similar costs).
Per Diem Payment System: July, 1995-April, 1996

With the introduction of health insurance in 1995, the hospital payment system in Zhezkazgan made its initial break from the chapter budgeting system. Hospitals were financed on the basis of bed-days generated each month beginning in July 1995. Although this did not offer incentives to decrease unnecessary admissions and length of stay, this new payment system represented a significant change, a change from payment for capacity to payment for activity.

Case-based Payment System by Clinical Department: April, 1996-present

However, the payment system based on bed-days generated each month did not address the potential problem of increased admissions and longer lengths of stay to provide more revenue. This system was then refined to reimburse a hospital according to cases treated in each clinical department. As part of this process, real average costs of hospital cases were calculated for each hospital by each clinical department. The calculated costs were then averaged across the oblast hospitals resulting in a unified weight units scale against the average cost of the treated case in the oblast. The relative weights reflect the complexity of treatment by different specialties. Hospitals were transferred to the case-based payment system by clinical department beginning April 1996. A new information system was also developed for the accumulation of data on all admissions to the hospitals and the per-case payment.

Case-based Payment System by Clinical Group: January, 1999

Still, however, the case-based payment system by clinical department does not adequately capture cost differences in hospital cases, and therefore must be refined so that hospitals can compete on efficiency rather than case-mix.

A set of clinical statistical groups was defined across all inpatient facilities in the oblast. The average cost per case in each clinical statistical group was then determined. The total costs and average cost per bed-day were estimated for each department using step-down cost-accounting methodology. Each clinical statistical group was then assigned to a department. The average cost per case for the clinical statistical group is determined by multiplying the average length of stay times the average cost per bed-day in the corresponding department. The average cost per case for each clinical statistical group is divided by the global average cost for all cases to determine the relative weight of each department/clinical group to the global average cost, which by definition is equal to one. Specific weight coefficients are multiplied by a base rate, yielding price (costs) per case for a group of hospitals.

In Zhezkazgan, setting the base rate was a source of conflict between the Oblast Health Department and the MHI Fund, as the base rate was initially set independent of the MHI Fund's revenue projections and was set unrealistically high. The MHI Fund did not have sufficient revenue to fully pay the hospital's bills and was in debt to facilities. This conflict was eventually resolved.

Hospitals in Zhezkazgan will be reimbursed according to this case-based system by clinical group beginning in January 1999.

2. Family Group Practices - Capitated Rates and Fund Holding

Primary care payment reforms are being developed concurrently with the reorganization of service delivery. The health financing system for primary care is moving toward a system of capitation and fund holding, in which family practitioners receive capitated payment for each patient assigned or enrolled.

All FGP's in Zhezkazgan work under contracts with the MHI Fund, which finances the FGP based on this capitated rate. The capitated rate is calculated by dividing the total amount of reported or planned spending on the MHI benefit package by the number of residents in the community. For 1997, this amount was calculated to be equal to 23 tenge per person per month, or 270 tenge per person per year. The capitated payment to FGP's based on the size of their enrolled populations went into effect in January 1997. At this point, the enrolled population was simply the population each FGP was assigned during the initial formation of the existing network of FGP's. With open enrollment campaigns, however, the idea is
that the capitated funding will follow the enrollment patterns. The first enrollment campaign took place in Zhezkazgan in December 1997 and the enrollment data was entered into the database at the MHI Fund by March 1998. FGPs in Zhezkazgan began receiving capitated payments based on the results of the December enrollment campaign by about June 1998. The second enrollment campaign was then conducted in Zhezkazgan from November 7-17, 1998, and the new payments based on these results will go into effect beginning in 1999.

Because FGP physicians became increasingly dissatisfied with a uniform capitation rate, risk adjustment became a pending issue. Adjustment of the capitation rate began with crude risk adjusters by allowing for health care cost variation by age/sex groups.

FGPs are in the process of transitioning to partial fund holding. Under this system, the FGP will operate as comprehensive fund holder with the authority to subcontract with secondary and tertiary care providers. Unnecessary referrals to outpatient specialists or diagnostic centers will become a penalty to primary care physicians since funds are removed from the fund holding account to pay for referrals. FGPs will keep the surplus portion of the capitated rate, however, if there are savings through cost-conscious spending without a negative impact on quality. They will also assume financial risks associated with over-spending and low enrollment. Inherent in this system are incentives for moving care to the outpatient setting, placing emphasis on prevention, and selecting the most effective and efficient subcontractors.

With Resolution No. 614/11 “On Capitation Payment of the Primary Care Sector Based on the Partial Fund Holding System” on November 11, 1998, the Akim of Zhezkazgan approved and provided regulations for the transition of FGPs in Zhezkazgan to a capitation payment method based on the partial fund holding system. A description of the process of partial fund holding was outlined, as well as the calculation methods and criteria for evaluating the quality of services under this new system. According to this plan, the transition to the partial fund holding system is to occur in three phases: Three FGPs (Zhurek, Tilman, and Makenbayeva) began receiving partial fund holding payments as of November 1, 1998; another three as of December 1, 1998 (Baimenova, Almenbetov, and Abeldinova); and the last three beginning January 1, 1999 (Bekseitova, Kengir, and Koshumbaeva).

There has been discussion of moving toward a full capitation system over time. Under this type of payment system, funds are removed from the fund holding account for hospitalizations as well as for outpatient specialty and diagnostic visits. Thus, primary care physicians will essentially purchase outpatient specialty care at polyclinics and hospital care as needed.

This capitated payment system along with free choice of provider can provide financial rewards to primary care physicians for higher activity levels in their own practices and reductions in inappropriate referrals to specialists and hospitals. It introduces competition into the entire health care system, encouraging physicians to become cost-conscious purchasers and suppliers of health services and increasing the prominence of primary care in the health system.

3. Outpatient Fee Schedule

Under the old system, polyclinics were paid according to staff and capacity, thereby creating an incentive to increase capacity rather than focus on improving quality. In an effort to link payment with performance rather than capacity, a new payment system on a per visit basis was introduced for polyclinics in July 1995. Because this initial payment method did not address variations in cost based on different specialties and diagnostic services, an outpatient fee schedule was developed in February 12, 1997. This fee schedule is essentially a list of charges for services rendered to patients including paraclinical services and consultations by specialists. It is comprised of 389 services, arranged in 13 chapters, out of which the MHI Fund pays for 264 services. The new payment system for polyclinics based on the outpatient fee schedule was introduced in May 1997.
C. Definitions of Key Terms for Health Care Payment Systems

*Capitation* - Payment of a predetermined fixed sum per period (monthly or yearly) to cover some or all health services for each family member enrolled for that specific period.

*Primary Care Fund-holding* - Specifically designated funds held in a special account for primary care physicians which are distributed based on enrollment and the number of referrals to specialists, ancillary services and hospital admissions.

*Fee schedules* - A series of values that are derived by the development of a relative value scale based on points related to historical costs. The points relate to a fee for service or a charge for specific services.

*Case Based Payment System* - A payment method which structures the payments to hospitals based on a classification system of various types of cases and usually places clinical diagnoses/departments into specific groupings of similar types of admissions.

*Single-Payer System* - In this system, the health insurance fund becomes part of the health finance division of the Ministry of Health and the Oblast Health Departments. There is one payer for all health facilities.

*Multi-Payer System* - A new organization is created at the federal level and in every oblast which is responsible for collecting the new payroll tax and paying for the health care of specific populations (employees, dependents). This new organization pays hospitals and polyclinics, but the Ministry of Health is still responsible for paying hospitals and polyclinics for uncovered populations, such as children, and the unemployed. The Ministry of Health would also be responsible for paying specialized health facilities such as dispensaries. Thus, in a multi-payer system two organizations pay for health services: the Oblast Health Department and the new Health Insurance Fund.

*Step-down and Costing Approach* - A procedure of allocating the outpatient and inpatient direct and indirect costs of non-revenue producing departments to the revenue producing departments on a systematic method of allocation which can result in a total cost of operations of these departments.
Appendix 1: Related Tables

Table 1: Hospitals in Zhezkazgan Oblast, 1995

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<th>Hospital Category</th>
<th>No.</th>
<th>Location</th>
<th>Total Number of Beds</th>
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<td>Oblast Hospital</td>
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<td>Zhezkazgan</td>
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<td>Oblast Children’s Hospital</td>
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<td>Central Rayon Hospitals</td>
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<td>Zhezdy, Ulitau, Zhanarka, Agadir Akrogai, Aksu-Alui, Ozerny</td>
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<td>SUB (small rural hospitals)</td>
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<tr>
<td>Maternity Hospitals</td>
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<td>Zhezkazgan, Balkhash</td>
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<tr>
<td>Tuberculosis Dispensary</td>
<td>2</td>
<td>Satpaev, Balkhash</td>
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<td>Oncology Dispensary</td>
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<td>Dermatologic-STD Dispensary</td>
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Table 2: Health Facilities Closed in Zhezkazgan Oblast, 1995-1997

- Oblast Oncology Dispensary
- Oblast Narcology Dispensary (Drug Treatment Center)
- Zhezkazgan City Hospital 1
- Infectious Diseases Hospital
- Satpaev City Hospital 2
- Balkhash City Joint Pediatric Hospital
- Balkhash City Maternity Home
- Balkhash City Skin-Venereal Diseases Dispensary
- Zhairema Village Hospital
- Priozyorsk City Hospital
- Rural District Hospitals – 15
  (Kenghir, Sary- Kenghir, Karsakpai, Baikonur, Sary-Su, Kairakty, Takly, Amangheldy, Koktal, Koktenkol, Prostornoie, Burma, Sayak, Kounrad, Vostochnyi Kounrad)
Table 3: Rationalization of the Health Care System in Zhezkazgan Oblast, 1994-1997

<table>
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<tbody>
<tr>
<td>All Medical Facilities</td>
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<td>Hospitals</td>
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<td>Polyclinics</td>
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<td>6</td>
<td>4</td>
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<td>Family Group Practices</td>
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<td>Other</td>
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<td>3691</td>
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<td>8339</td>
<td>7593</td>
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<td>1295</td>
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<td>Number of Middle Medical Personnel</td>
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<td>5148</td>
<td>4457</td>
<td>4315</td>
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<tr>
<td>Number of Doctors per 10,000</td>
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<td>31.1</td>
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<td>Number of Middle Personnel per 10,000</td>
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<td>Financing of Health Care in Million Tenge</td>
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<td>Cash Expenditures</td>
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Table 4: Allocation of the Global Budget in First Quarter, 1997

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<td>Family Practices</td>
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<td>51</td>
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<td>Polyclinics and other</td>
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<tr>
<td>Total</td>
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