

SPECIAL REPORT NO. CAR/KAZ-4

Health Sector Baseline Assessment and  
Technical Assistance Recommendations  
for Intensive Demonstration Site  
South Kazakstan Oblast, Kazakstan

September 1994

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Prepared by:  
Jack Langenbrunner  
Michael Borrowitz

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## **Executive Summary**

Kazakhstan has enjoyed a tradition of universal access to health care services as well as considerable investments in curative medicine, prevention, and water and sanitation. However, over the last 5 to 10 years socio-economic and environmental problems have severely strained both the health of the population and the health care system. Kazakhstan now faces a situation of chronic underfunding for health care services and dramatic inefficiency in how available funds are spent.

Health legislation to decentralize decision-making and emphasize primary care is currently discussed at the republic level, yet few laws have actually been passed. As a result, oblasts are initiating health reform related activities. South Kazakhstan and the city of Chimkent have designed regulations for a state-based health insurance fund, for voluntary insurance companies, and for interactions of a new private sector with the traditional government health sector.

As part of USAID funded contracts, Health Financing and Sustainability and *ZdravReform* Program, Abt Associates provided technical assistance to evaluate the experience of South Kazakhstan and Chimkent city. The team spent ten days in Chimkent city and neighboring rayons to meet with local leadership, insurers, experts, managers, physicians and nurses, economists and decision-makers and to analyze economic and clinical data. This report reflects the development of a initial strategy for Chimkent City and South Kazakhstan oblast.

Recommendations for tasks and activities are presented in detail in chronological order and by topic area for periods through December 31, 1996. Major topic areas include financing, management of insurance organizations and funds, payment methods, primary care services, hospital payment, management and organization, management information systems, cost accounting systems, pharmaceuticals, and quality assurance.

## Background

The country of Kazakhstan has enjoyed a tradition of universal access to health care services, as well as considerable investments in curative medicine, prevention, and water and sanitation.<sup>1</sup> The health of the population has benefitted from this tradition. However, over the last 5 to 10 years socio-economic and environmental problems have severely strained both the health of the population and the health care system.

In terms of financing, there are problems related to both 1) total funding for health care and 2) the efficiency or relative value of the way funds are spent for health care services. The share of the region's GDP devoted to health has declined precipitously since the 1980s—falling from 6 percent of GDP to just over 3 percent for the NIS as a whole. In Kazakhstan, health spending as a percent of GDP was 3.3 percent in 1990, but estimated to have dropped in real terms to 1.6 percent in 1992. This figure is extremely low compared either to OECD expenditures or to other countries with comparable levels of per capita income (OECD, 1993). The economic decline that Kazakhstan (and most other parts of the NIS) has suffered over the past several years further has contributed to reduced locally generated tax revenues.<sup>2</sup> An emerging funding crisis in health services has resulted.

Furthermore, the traditional Soviet approach to health care delivery did not encourage the efficient use of resources by or between providers. This was due in part to a system which allocated resources based on traditional central planning production input measures, such as occupancy and numbers of staff and beds, rather than on the basis of actual services provided, the relative complexity of those services, or (ultimately) changes in health outcomes. For example, hospitals receive budgets based on numbers of beds, which discourages hospitals to decrease excess bed capacity and cut-back on other, associated hospital resources. As a result there are, in general, too many hospitals, too many beds, and too many physicians.<sup>3</sup>

Two additional areas of continuing concern are the bias of curative care over primary care and the efficiency of physicians practicing in the polyclinics. Less than 15 percent of the country's

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<sup>1</sup>This section is summarized from Abt Associates, Evaluation of Health Insurance Demonstrations in Dzheskasgan and South Kazakhstan Oblasts, (under Health Financing and Sustainability contract to USAID), Bethesda, Maryland, May 1994.

<sup>2</sup>A February 1994 report from the federal Ministry of Health stated that economic activity for the country had declined 32 percent in the last year.

<sup>3</sup>Part of this extensive development can be attributed to the relatively high health needs of the population as reflected in higher incidence of morbidity and rates of mortality. Kazakhstan also faces low standard of living conditions, difficult environmental and ecologic problems, low population density and long distances between populated areas, transportation and communication problems.

physicians provide primary care (as compared with about 70 percent in Germany; 56 percent in Canada). Physician-care budgets are developed and are based on capacity of the polyclinic as measured by staff and *potential* numbers of visits. Polyclinics develop by increasing its numbers of low-paid, salaried physicians. The lack of competition, choice, and lack of incentives to increase income tend to encourage physicians to act as indifferent dispatchers referring patients to hospitals (Sheiman, 1992). Referral rates to hospitals appear to run about 30 percent of first visits to polyclinics<sup>4</sup> relative to 8.6 percent in the United Kingdom and 5.2 percent in the United States (Sandier, 1989). Hospital admission rate as a percent of population is 22 for Kazakhstan relative to 16.2 on average for all OECD countries; this difference can be attributed in part by the higher referral rate.

According to Ministry of Health estimates in April, 1994, a relatively high share of resources are allocated to more expensive inpatient care with 64.3 percent in 1990 and 73.8 percent in 1992. A comparative indicator for OECD countries, hospital use plus long-term care, is around 50 percent. There are other health sector problems.

- Most facilities are run-down or dilapidated.
- Low quality care, as measured by outmoded medical practices and equipment.
- Serious shortages of supplies and pharmaceuticals coupled with inappropriate use of drugs (polypharmacy).<sup>5</sup>

The Kazakhstani government has acknowledged the need to reform its system to address these problems. The most recent indication is a report from the Ministry of Health (February 28, 1994), which documented the problems of underfunding and of poor performance in the health sector. The government seeks to: 1) increase the level of resources available for health spending, 2) allocate available resources more efficiently, and 3) relieve government budget pressures and allow for more self-sustainability in financing of care.

### *Health Reform and Health Insurance*

In early 1992, the Parliament enacted a new law on *Protection of the Population's Health*. This law, together with a draft concept and policy paper, envisioned a health system fundamentally different from the present system. The new health law and policy gave priority to primary health care and seeks to change both the management and financing of care. Decisionmaking would be decentralized and private health care and consumer choice would be introduced. It

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<sup>4</sup>Based on analysis and discussions in two oblasts—Dzheskasgan and South Kazakhstan.

<sup>5</sup>Currently, pharmaceuticals are free for inpatient care; outpatient costs are borne by direct out-of-pocket payments. Prices recently have been deregulated creating additional financial barriers.

was expected that the new system would be implemented as soon as possible through a series of laws beginning in 1993 with a law creating a new Health Insurance (HI) system.

A new employer-based payroll tax (contribution) would finance the system, with monies coming from the government for special populations such as the elderly, the unemployed, and the disabled. The insurance will cover a basic package of services. The package is not specified in the draft law, but is to be defined by the Federal Ministry of Health (MOH), then reviewed and modified periodically. Those individuals wishing to have coverage beyond the basic package can purchase additional voluntary insurance.

The draft law submitted by the MOH was amended by the national legislature to specify that a so-called mandatory health insurance (MHI) fund or organization<sup>6</sup> be set-up in each oblast. There will be one organization per oblast and each will be state-owned. Each oblast would develop and manage a separate “off-budget” fund with the special earmarked sources of revenues. The MHI organization will collect contributions, and then allocate them to local health insurance organizations. Once legislation is passed, many other details not specified in the law could be stipulated by Government decree or regulation.

However, as of this writing that law has yet to be passed. It continues to be under discussion by the current Parliament. Nevertheless, a number of local geographic areas have moved forward with changing the financing and structure of health care delivery. The reforms were first initiated in 1989 when the so-called New Economic Mechanisms (NEM) were announced and approved in Moscow under the former Soviet structure.<sup>7</sup> Later, in 1992, the Council of

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<sup>6</sup>Throughout this report, mandatory health insurance “fund” and “organization” are used interchangeably since there is no Russian language counterpart for “fund”.

<sup>7</sup>The NEM provided for greater local autonomy and a number of demonstration sites in each of the republics. The NEM health sector demonstrations included St. Petersburg and Kemerovo in Russia, and 5 different sites in Kazakhstan—two urban rayons and three more rural rayons. The rayons were Abai (Karaganda oblast) Ekibastuz (Parlodar oblast), Talgar (rural rayon in Almaty oblast), Alakol (rural rayon in Taldy-Kourgan oblast) and Jetygara (rural rayon in Koustanai oblast).

The demonstrations are focusing on three areas of change. They include:

- Restructuring of financing—health budgets would be developed differently. A formula of 18 production input categories was replaced by a standard per capita payment based on a mix of measures of resource use and historic trends. Payments were adjusted for by age (adults vs. children) and gender;
- Organization and management restructuring—through greater autonomy and management systems;
- Improved internal efficiency in the delivery of care—through improved payments for services within and across facilities.

By April 1990, the NEM demonstration sites were cancelled under a new Minister in Kazakhstan, but the general principles of NEM took root in an estimated one-third of the country (Ministry of Health, April 1994) in terms of greater flexibility of resource allocation, payment to personnel and some limited management restructuring

Ministers established three oblasts as health sector demonstration areas, extending greater flexibility in terms of financing, payment, and organization of care. These oblasts were Dzheskasgan, South Kazakhstan (including Chimkent), and Kokchetau.

In South Kazakhstan oblast, particularly the city of Chimkent, a number of health reform-related activities have been underway since early 1993.

- The city of Chimkent and three neighboring (more rural) rayons of Tulebash, Pahkte-Aral, and Dzhetissi have designed and developed implementation regulations for a mandatory state-based health insurance (MHI) fund and organization, which will be financed by a proposed 4 percent employer payroll contribution. The MHI model was originally proposed to begin July 1, 1995, though it has been temporarily delayed.
- Private market development of voluntary health insurance (or VHI) companies that provide supplemental coverage for care through increased consumer choice of providers, increased availability of supplies, equipment, pharmaceuticals, and amenities (e.g., private hospital room).
- Interaction of a new private sector with the traditional government health sector, through selective contracting, private pay clinics, direct pay for some services, small-scale attempts at corporatization of hospitals, and start-up of new medical businesses.

#### *Focus and Organization of this Report*

In the spring of 1994, technical assistance was provided under the Abt Associates Health Financing and Sustainability (HFS) contract to evaluate the experience of the demonstration with health insurance in Kazakhstan, specifically in Dzheskasgan oblast and to evaluate plans for initiating a health insurance program in South Kazakhstan oblast. The technical assistance was provided as a rapid response to requests from the central Ministry of Health in the context of the country's deliberation of health reform proposals. The technical assistance also was intended as a "bridge" for related work and activities under the new USAID contract to Abt Associates known as the *ZdravReform* program (or ZRP), a \$44 million, 3-year program. The new ZRP program is intended to provide to all NIS countries—including five Central Asian Republics (CAR)—support across several areas: 1) technical assistance, 2) training 3) grants for innovative ideas and projects, 4) evaluation and monitoring, and 5) dissemination of information and findings.

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approaches.

The Ministry of Finance formally cancelled the NEM altogether in early 1994, for use in development of annual health care budgets. The Minister of Finance cited problems of developing meaningful per capita payments in an overall economic climate of hyper-inflation and unacceptable measures of change in input prices. The decision is currently under protest by the Minister of Health.

Under the ZRP program, a limited number of Intensive Demonstration Sites (IDS) will be identified in the CAR. These IDS areas will be approximately one oblast or two contiguous oblasts in size, in which a comprehensive strategy for collaboration will be developed and implemented with country and local leadership in substantive areas such as financing, payment methods, organizational status, management and information systems, and quality assurance.

This report reflects the development of an initial strategy for one potential IDS site, Chimkent city and South Kazakhstan oblast. On September 2, a team planning meeting was held in Washington with Abt team members both from Bethesda (Langenbrunner) and from London (Borowitz). Planning was coordinated in parallel with Abt ZRP work (Drs. John Novak and Veejay Virma) to develop a baseline survey of consumers, providers, and employers in the oblast. Several days were spent in Almaty before the visit to the oblast itself to meet with Almaty Abt ZRP staff members to finalize plans, to examine new information, and to meet with both USAID representatives and Kazakhstan health sector leadership.

The team spent ten days in Chimkent city and neighboring rayons within the oblast. At each of the geographic sites, the team met with local leadership, insurers, experts, managers, physicians and nurses, economists and decisionmakers. The team also examined clinical and economic data. The team presented the new ZRP program and discussed its applicability to the region as a potential Intensive Demonstration Site. It discussed potential tasks and scopes of work that could be carried out in collaboration with local health and financing sector leaders and actors.

The team has developed several recommendations and action steps that can be used as a strategy for potential IDS collaboration. The team briefed Deputy Minister Kulzhanov's staff and USAID on their return to Almaty. A final report will more fully develop these recommendations and action steps in the next two weeks. A draft is provided in preliminary form in this report.

The remainder of this report is organized into the following chapters. Chapter 2 provides an overview of the current demonstration site. A brief discussion of key events is provided. Key design and implementation issue areas are discussed. It also summarizes and updates recent analysis and findings regarding health care reform activity.

Chapter 3 presents recommendations and action steps that can be used as a strategy for action if the oblast is selected by all appropriate parties as a program IDS.

## **Status of the Current Demonstration Activities in South Kazakhstan Oblast**

South Kazakhstan is the largest oblast in Kazakhstan in terms of population, with about 2.0 million people.<sup>8</sup> About 48 percent of the population lives in urban areas. The city of Chimkent is the oblast center and an industrial area (tires, chemicals, oil refining, non-ferrous metals processing) with approximately half a million residents. There are 20 distinct administrative units—4 towns and 16 rayons—in the oblast. Ethnically, the population is approximately 10 percent Uzbeks, 13 percent Russians, 13 percent other, and 60 percent Kazakh. There is substantial migration activity, both in and out of the country. Germans and Greeks are leaving, and Kazakhs are coming from Iran and Russia. The birth rate in the oblast is the highest in Kazakhstan—22 per 1,000 in South Kazakhstan versus 12 per 1,000 on average for all of Kazakhstan.

### *Health Insurance*

There is activity related to both the creation of a public or para-statal health insurance fund and the emergence of a market for private health insurance. The city of Chimkent and three adjoining rural rayons are preparing to implement an employer-based compulsory or mandatory health insurance (MHI) demonstration in the near future. Statistics for this geographic area are detailed in Table 2.1, located on the next page. Originally scheduled to begin July 1, 1995, the MHI has been temporarily halted by new political leadership.

The fund would be financed through a new payroll tax. Urban areas would contribute through the 4 percent employer payroll contribution. The Estonian model has been discussed as an alternative for rural areas. In the Estonian model financial contribution of family (private) farms is 1 percent of the estimated value of gross output. The MHI organization also would receive capitation payments from the government for non-working populations such as dependents, the elderly, the disabled, and the unemployed. All sources of funds would be co-mingled and used for delivery of services.

An attempt to begin compulsory insurance earlier failed in 1993 and early 1994 when employers refused to make their contributions in the absence of enactment of the Federal law. This also meant, however, that oblast health authorities have a complete set of regulations detailing implementation.

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<sup>8</sup>This section uses information from the May 1994 Abt HFS Health Insurance Demonstration Evaluation report and provides updates with new information and findings.

<b>Table 2.1</b>				
<b>South Kazakhstan Oblast Demonstration Area (1993)</b>				
	<b>Population</b>	<b>Hospitals/FAPs</b>	<b>Beds</b>	<b>MDs</b>
Chimkent	445,600	15/O FAPs	4,165	1,346
<b>Rayons</b>				
Tulebash	89,000	8/40 FAPs	805	158
Pakhta-Aral	74,000	3/41 FAPs	700	165
Dhzetissi	81,000	10/25 FAPs	880	164

The health sector also is characterized by the recent emergence in the last few years of five privately-owned voluntary health insurance (or VHI) companies covering approximately 80,000 individuals. The largest company, Oumit, has provided coverage for 44,000; the remainder of the market has been split among the other firms. Coverage has been usually sold through employer groups to pool risk, though individual policies have been sold as well. The scope of the benefits has been quite variable, from complete coverage to disease-specific coverage. Prices have been based on scope of coverage, income, and relative risk.

These companies have provided additional coverage from the public sector in terms of:

- consumer choice of physicians, hospitals, and specialized care in more sophisticated facilities in other parts of Kazakhstan (e.g., .Almaty) or other countries (e.g., United Kingdom). Hospitals and facilities are under contract with these companies to provide care.
- increased quality and access, through separate and often more rigorous quality assurance standards and review. Coverage further allows additional supplies, diagnostic tests, pharmaceuticals and therapies. Patients can circumvent the public referral structure if desired. Companies also provide separate admission desks in polyclinics and hospitals to assure provider responsiveness.
- increased amenities, such as private hospital rooms and individually-provided meals.

While small in terms of number of covered lives, these companies have had an impact on efficiency in the area through aggressive payment incentives/methods and utilization management.

In August of 1994, the future of a private insurance market was challenged by a Presidential decree imposing a minimum 2 million tenge (\$40,000) capital reserve fund on all insurers. No health insurance companies could meet this requirement. As of this writing, there are no private health insurance companies actively operating in the marketplace, although several indicated that the reserve requirement will be met by the end of this calendar year. A second setback to the private health insurance industry has been a recent State's Attorney's investigation into Oumit business practices, specifically regarding mis-use of funds and non-payment of claims.

Under the original proposed health insurance demonstration, both state-owned and voluntary health insurance companies would participate in administering payments and overseeing management of the new system. A series of insurance intermediaries would be established. These intermediaries would include both the voluntary companies and at least one state-run organization. Intermediaries would be assigned a designated, exclusive geographic area, and receive a capitated rate for each individual in that geographic location. A 3 percent administrative overhead payment would be included. Assignment would be based on company experience and familiarity with the area. Residual areas would be assigned to state-owned intermediaries.

Intermediaries, in turn, would contract with facilities for care and negotiate payment methods and rates. They would be at risk for financing all coverage and payment of a benefit package defined by the oblast health department. At the same time, intermediaries would be awarded an exclusive right to sell supplemental coverage in their designated area as an incentive to accept intermediary roles and risks. The oblast MHI organization would monitor and evaluate intermediary performance. The oblast Department of Health would issue insurance licenses and certificates of accreditation for facilities. Quality assurance would be handled primarily at the facility level through chart reviews and peer review groups; intermediaries would have the option of establishing their own quality assurance staff and process.

### *Management and Organizational Changes*

Changes have been initiated both through the public sector (e.g., the oblast Ministry of Health), and through private market forces. Often these have been complementary.

Public Sector Initiatives. The oblast Department of Health has initiated several changes. In February 1993, the oblast Department of Health was delegated more autonomy by the central MOH and was re-organized as a new health department. In effect, it was given full authority over all its facilities. This has allowed it to encourage and stimulate facility-level reforms and oversee a series of attempts of limited privatization of facilities.

Hospitals have experienced facility adjustments. In the last year, approximately 1,000 beds were closed; another 300 are proposed for closing this year. Other initiatives are listed below.

- A number of facilities have used the simplified 3-line budgets under the NEM<sup>9</sup> to increase staff salaries, and also to reallocate staff to increase productivity.<sup>10</sup>
- Deputy Administrator positions for economic analysis and finance were created.
- Management and information systems have been developed.<sup>11</sup>
- Modified case-mix systems based on bed-day experience provide administrators information to better allocate resources across departments as well as improve monitoring of care. For example, one hospital uses a DRG-like system of resource-use categories for budgeting and payment purposes.<sup>12</sup>
- Department managers in some facilities have been given budgets with greater autonomy for resource allocation decisions.
- Individual physicians are increasingly profiled to examine relative productivity and quality of care provided.
- One facility, the Phosphorous hospital, has established an outpatient surgery center to move more surgeries out of expensive inpatient areas to same-day treatment.
- Post-acute home care has increased at several facilities.

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<sup>9</sup>The three categories are salary, food, and pharmaceuticals.

<sup>10</sup>At the other end, many hospitals and administrators in this oblast are still bound by 18 budget categories with orders on what to buy and from whom. This results in inefficiency and a gray market of barter to adjust supply and demand of goods across facilities.

<sup>11</sup>In fact, the computerized patient record systems is sophisticated, but may be collecting more information than necessary. It routinely collects 54 data elements. Some elements are not collected in other countries, while elements routinely collected in other countries do not seem to be available (e.g., procedures). Nevertheless, the data collected here could be a potential starting point for development of a standardized data system for admissions and discharges.

<sup>12</sup>The Emergency hospital is very aggressive in terms of some of the policies put in place recently. For example, they allocate resources based on 70-80 cost groups developed from the Medical Economic Standards and lumped into broader categories based on resource use. The categories are broken out according to 1) diagnosis, 2) procedures, and 3) numbers of bed-days. The weights for pay categories are then developed using data on average length of stay (ALOS) and cost information collected since 1992. Departments are given a fixed sum per case based this experience and can keep unused resources when patients are discharged, creating a strong incentive for increased efficiency. Dr. Igor Samchenko, Deputy Administrator for Economics, claims that average length of stay (ALOS) has dropped by 20 to 10.2 days since its implementation.

A number of facilities, such as the Eye Disease hospital and the Emergency hospital<sup>13</sup> have aggressively sought private sector funding and joint ownership. In the former case, 49 percent of the facility is in private or employee hands; a new wing is being built that will be completely owned and operated by private funds. Other hospitals have sought and signed selective contracts with employers, sought tax-deductible corporate donations for new buildings and equipment, and sought out private pay patients generally. The level of these revenues relative to existing budgets vary from 2 percent to an estimated 30 percent for some larger hospitals.

The MOH also wants to start more *rental* or co-operative hospitals in South Kazakhstan; already there are three in Chimkent city (four altogether in the oblast) before it was stopped by the central MOH late last year. The hospitals are or would be owned by the government with workers forming cooperatives, which are then operated as a contract. All unused goods and equipment are sold off initially for funds for cooperative.

Physician and outpatient care are also experiencing changes. South Kazakhstan oblast has developed a range of innovative activities such as the development of primary care physicians (PCPs) and small group practices (or APTKs, the Russian acronym). The city of Chimkent has embarked on an innovative family practice program for physician care. Solo practice and small teams of general practitioners, pediatricians, and obstetricians have moved out of traditional polyclinic structure and into neighborhood offices. These physicians provide care especially suited for families and general primary care. Other NIS countries have been interested in this Western-model of family care (Sheiman, 1992), though this is perhaps the first site to initiate a pilot project. Physicians remain on salary, but design work has started to allow physicians to establish separate private practices. Some dentists have already set-up private practices.

However, there are conflicting reports about the future of this family practice program. On one hand, it is perceived as more expensive than traditional polyclinic practices; on the other hand, there is talk of increased family practice training and extension to more rural areas. More generally, the development of primary care physicians has been hindered by organization and financing problems. The PCPs and APTKs remain under the control of the existing administrative polyclinic structure and are still financed by salaries. In addition, patients do not have choice among multiple providers. These initial changes need to be supported by subsequent changes in payment methods and organization to improve the efficiency of primary care.

A few outpatient polyclinics have been privatized with corporate monies. One example is the Automobile polyclinic. It was originally set up by MOH for auto workers. When the auto industry was privatized, the polyclinic was released from the MOH budget, The clinic leases space from MOH, but generates all funds from employer contracts (no co-pays), private insurance, and direct out-of-pocket. There are 12 employer contracts with about 10,000 employees altogether. The third category is mostly for dental services; the direct pay patient

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<sup>13</sup>The eye disease hospital is a 160 bed hospital specializing in disorders of the eye and related problems. The emergency hospital is a 480 bed hospital so-named because it specializes in acute care medicine, especially for more severe patients requiring intensive care therapies or specialized care such as more sophisticated surgical techniques.

is split 60/40 between provider and clinic. The physician mix includes 3 GPs and 3 dentists of 8 physicians. This mix is much more focused toward primary care versus other polyclinics.<sup>14</sup>

There are about 30 small scale private clinics and physician practices registered with the oblast and accredited by the MOH. Start-up often appears to be slowed by the lack of initial capital for equipment, supplies, and rent.

Pharmacies are undergoing change. A number of pharmacies are either private-owned or joint-stock organizations. However, the pharmaceutical procurement and distribution network appears to remain in the relative stranglehold of Pharmatzia, a state-run monopoly characterized by inefficiency and poor quality products.

Consumer Payments are changing. Co-payments and direct out-of-pocket pay for services at public facilities have been controversial; the policy was recently halted by the State's Attorney. Prior to the State Attorney's action, the use of co-pays was increasing. The MOH was encouraging it as a means of increasing revenues and promoting higher quality care. For example,

- The local Diagnostic Center used co-pays for individuals circumventing the referral system; it charged prices ranging from 20-30 tg. for cardiology tests to 500 tg. for endoscopy.
- In one rural rayon (Tulebash), eleven services had co-pays associated with them: ob/g, cardiology, venereal disease-related, selected injections, and so on. These co-pays were instituted for the most qualified physicians; price lists were developed by the MOH. Payments went to physicians in part (up to 50 percent), as an add-on to their salary. This experiment went on for two years and local administrators claim it allowed for increased choice, increased revenues, increased competition, and physician income. They further claim productivity and quality improved overall.

Training is important to health sector reform. The Chimkent area is notable for its oblast-level "Training Center for Business and New Technology." This is a joint public/private owned center of 30 resident faculty and staff that provide courses in many of the new topics of health financing and management. Coursework covers insurance, health economics and management, claims processing, information systems, and computer skills. Chimkent, in part, has been able to progress in a number of areas because of a trained cadre of professionals now found in oblast leadership positions and facility-level management positions.

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<sup>14</sup> When the clinic was first privatized, about half the staff, including physicians, were fired. Salaries for remaining staff were doubled and annual bonuses are given based on coefficient of participation used by MOH. However, there are problems. For example, employers are paying late or not at all or private insurers, such as Oumit, have not paid claims at all.

Voluntary Insurance and Improved Efficiency. The existing scale of voluntary health insurance is relatively small (< 20 percent of Chimkent city; < 5 percent of the oblast population). Nevertheless, its positive influence on the activity of the public sector is apparent through new methods of performance-related payment, strengthened quality control measures, selective contracting with providers, and increased interest in development and systematic collection of data for management. Voluntary insurance has helped to:

- decentralize decisionmaking. There are cost accounting systems for each department of polyclinics and hospitals that operate under contract with voluntary health insurance. In the Emergency Hospital and Oblast Hospital, computerized systems have been developed to improve hospital operations and payment. More functions are being transferred to the heads of the departments.

In the Emergency Hospital, for example, each head of department controls his or her own budget and is responsible for the effective utilization and creation of adequate incentives for personnel. Each department develops a salary and bonus structure and is responsible for the evaluation of each staff member. This creates the additional incentive for the effective management of existing resources. This has increased pay by 54 percent for physicians on average, and 42 percent and 32 percent respectively for nurses and aides.

- increase productivity. The addition of new resources generally, as well as methods of payment under VHI coverage, has encouraged increased productivity of labor and an interest in greater selective contracting by hospital administrators. In the last quarter of 1993 the Emergency hospital cared for more patients under VHI contracts than for the preceding nine months. Revenues can be pooled with the budget and other sources of funds; these pools can be used for increasing payroll and bonuses.<sup>15</sup>
- increase incentives for gaining skills. Selective contracting with both physicians and hospitals by VHI companies means the more skilled personnel benefit more from VHI contracts. Other personnel may consider improving skills or upgrading qualifications in order to participate.
- encourage other forms of efficiency. Insurance companies set payments based on average lengths of stay in hospitals for each diagnostic group. This creates significant economic incentive and effect. The Emergency hospital has reduced ALOS by two days

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<sup>15</sup> Or, monies can be placed into one whole income and wage fund, which is then distributed on the basis of the wage-rates and adjusted for each staff member's *coefficient of labor* activity composed of several factors including time to perform services, caseload, and level of participation which measures efficiency and more intangibles such as degree of commitment. Poor quality of care, as measured by sanctions, reduce one's individual coefficient.

since it has begun contracting with voluntary insurance companies.<sup>16</sup> The success of payment standards based on ALOS has created further interest in resource-saving forms of medical care, such as day care centers and home care centers.

- increase consumer choice. Consumer opportunities are generally widened. Patients who have the insurance contracts can choose their own physician and nurse, and can choose the most skilled staff member. This also will help decrease the opportunities for abuse and extortion of informal payments from patients.

Nevertheless, it remains unclear how much of the population will purchase voluntary coverage. For example, in Western and European countries where there are well-developed systems of public health care, voluntary health insurance covers no more than 10 percent of population. Hence, the potential of VHI influence on the effectiveness of the broader health care sector may remain relatively small.

In order to build a system of health insurance in Kazakhstan, it may be necessary to undertake more large-scale measures aimed at increasing the efficiency and autonomy of existing public sector health care facilities. For example,

- Selective contracting found in the voluntary health insurance sector should be extended to all of the public health sector.
- Refined payment methods to hospitals and physicians are important. Budgets for inpatient care, for example, are still based largely on bed capacity which promotes continued structural distortion.

### *Quality and Equity of Access*

The influence of voluntary insurance and changes in the efficiency of management and organization of medical care cannot be separated from its impact on equity of access and availability of medical care. The restrictions on the availability of the medical treatments for those who cannot purchase voluntary insurance may either directly or indirectly influence the efficiency of the health care sector as a whole. Overall, the impact of changes in this geographic area on quality and access are much less clear cut, and potentially will be more controversial in the long-run.

No specific QA processes have been identified for the insurance system demonstration; each intermediary has discretion to initiate its own activities. The accreditation of providers and the licensing of insurers will be carried out by the oblast health department. However, several hundred treatment protocols have been developed and are in use in this oblast, using a mix of

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<sup>16</sup>It was noted by the Deputy Administrator that shortening the mean length of stay in the hospital by one day allows for the care of 48 more patients each month.



central MOH standards and locally-developed standards. The uses of the protocols for payment methods and penalties for poor quality are at the discretion of the facility, and vary by facility. Similar concerns from other NIS countries about updating and maintaining flexibility would apply here as well.

Innovative approaches for more specialized care settings are apparent in this oblast. Examples of these approaches include family practice offices outside the polyclinic, home care services, and new outpatient surgery centers. This can improve both quality and access. In the family doctor demonstration, a substantial shift has occurred in the pattern of relationships between a physician and his/her patients. These free-standing office physicians tend to serve the family as a whole rather than each member of the family (versus in polyclinics where physicians are responsible for adults only; pediatricians care for children). These free-standing office physicians can be in closer contact with their patients because of neighborhood locations. An analysis of this demonstration (Tleunbaev and S. Abseitova, 1994) showed the following comparisons.

- Family doctors make more home visits for children under 1 year (14.6 per 1,000 residents vs. 12.3 by pediatricians in polyclinics).
- Home visits to adults by family doctors is higher (372.4 per 1,000 residents vs. 267.9 visits to internists employed by polyclinics).
- A lowered number of emergency calls for family doctors resulted (3.5 vs. 4.5 per day) which they attribute to closer patient contact.<sup>17</sup>

The South Kazakhstan initiatives for new sources of private funding have allowed the purchase of increased equipment, supplies, and pharmaceuticals. Voluntary insurance companies have increased utilization of technologies, equipment, and supplies. Voluntary coverage was also used to purchase additional pharmaceuticals; separate, private pharmacies were established to serve its covered populations.

Secondly, much of the new private sources of corporate funding for facilities has been invested in new buildings, equipment, and technology. New funds may be used in this way both to improve plant structure and to improve a facility's competitive position for selective contracts and voluntary insurance patients. The use of funds in this way may also reflect less flexibility in use of government budgets for capital improvement or for shifting funds across budget categories.

Other voluntary insurance activities point to improved quality and access, such as 1) increased consumer choice of physicians and hospitals; 2) performance-related payment methods; 3)

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<sup>17</sup> It should be noted that it was not clear what adjustment was made, if any, for relative demographic mix or health status of the compared samples.

tougher requirements for medical staff skills (accreditation); and, 4) information and monitoring systems.

For example, voluntary insurance has encouraged tougher skill requirements for medical personnel. The option to care for patients with the voluntary insurance contracts is now given to the relatively small team of skilled physicians, based on accreditation criteria developed within the hospital. In the Emergency hospital, only 15.5 percent of physicians, 9.4 percent of nursing staff, and 1.1 percent of staff aides had the option of caring for voluntary insurance patients before the effective suspension of VHI companies from the market. Discussions with administrators and other facility decisionmakers have indicated that tougher standards allows progress away from groundless wage-leveling, creates competition among the staff members, promotes the quality of work, and promotes general improvements of skills and qualifications.

Nevertheless, the use of voluntary insurance coverage for some, but not for others, may create a new two-tiered system of access. Providers may have incentives to provide two levels of quality and access depending upon coverage. On one hand, new resources in the health sector may increase availability and quality for all patients, regardless of coverage status. On the other hand, the share of medical resources available for voluntary insurance patients (e.g., bed capacity, physician's time, diagnostic tests, etc) may increasingly diverge over time for private payers relative to public pay patients.

Another potential problem is that the voluntary insurance market is not currently structured to guarantee availability and renewability of coverage regardless of health status. Refusal of sale due to pre-existing conditions such as cancer and tuberculosis encourage risk selection behaviors on the part of insurance companies and further encourage segregation of sick and relatively healthy patients to the public and private covered groups. If a two-level system of care emerges, it would be exactly those sick patients who need care most who would find themselves with poorer quality and access to care.

### *Obstacles to Reform*

A number of obstacles continue to confront oblast leadership.

- Only a small percentage of facilities (perhaps 10 percent) have initiated significant organization and management changes.
- Even those facilities that have made changes are constrained by other, conflicting regulations and policies from ministries and offices of the central government. For example, managers have little or no flexibility to dismiss unqualified and unproductive physicians and other staff due to existing trade union agreements.
- Many changes, initiated under the New Economic Mechanism, have ended or have been curtailed by conflicting laws and decrees over the last few years. Privatization of public

facilities has stopped; use of co-pays has been suspended; selective contracting activity has been restricted to the VHI companies; VHI activity has been suspended at least temporarily; facility budgets for the most part continue to be developed according to production inputs such as bed capacity and numbers of staff.

Absence of an Adequate Legal Framework. In 1992, Section 23 of the new constitution prohibited state-run facilities to charge for services; health care would be free to all in these facilities. This law and subsequent 1) proposals to change the law; 2) policies aimed at circumventing the law due to budgetary pressures, and 3) decrees interpreting and re-interpreting this clause, have created legal ambiguities.

An added dimension is that multiple actors have an interest, sometimes a conflicting interest, in changing the health sector or not changing the health sector. For example,

- The MHI organization and fund is supported by the local and central MOH, but the Minister of Finance at either level and the oblast governor currently do not support the MHI. (As noted earlier, the Ministry of Finance has now formally cancelled the New Economic Mechanism for budget development and allocation).
- Paid services are supported by the local oblast and MOH, but not by the State Attorney.
- Privatization is supported by the oblast MOH, but not by all decisionmakers at the central MOH level. A July 1993 law said that the public sector cannot be part of private companies, but a recent Council of Ministers decree declared privatization to be legal.

These are a few examples of a series of conflicting decrees, prohibitions, cancellations, and legal actions over the last few years that manifest these differing agendas. What emerges is a picture of constant ongoing political factionalism regarding health care reform. This slows down the process of reform, and never allows the testing of new or good ideas for any period of time. Together, these ongoing strictures and changes in policies have created a general context of uncertainty for the oblast in its efforts to make changes and move forward.

## Recommendations and Action Steps

Recommendations for tasks and activities are presented in chronological order, and by topic area (e.g., financing, payment methods, management and information systems) for action steps after January 1, 1995. Action steps are less detailed for later time periods, both because it is more difficult to predict needed activities in later periods, and because the ZRP program should build-in flexibility and re-assess its strategy at periodic intervals.

*October 1, 1994-December 31, 1994*

- 1) Develop a legal framework for demonstrations in Kazakhstan. Currently, there is no workable legal framework for establishing site specific demonstrations.
  - a) A short but effective legal (statutory or administrative) proposal would be drafted and approved.
  - b) Generic criteria for approval, for now and in the future, would be developed, such as: (1) budget neutrality, (2) assurances of no harm to patients, (3) improved efficiency and/or no loss of equity of access, (4) needed time for demonstration.
  - c) A process for approval would be developed, both in terms of local site/Federal interactions and approval of proposed demonstrations at the Federal level.
  - d) A document setting out the design, implementation, and evaluation of the IDS site would be signed by one or more appropriate parties such as the Deputy Prime Minister, Parliamentary Chair, and Oblast Governor, as well as relevant Ministries.

Cooperative efforts with the American Legal Consortium in Almaty could be very helpful in these steps.

- 2) Meet with relevant parties to review, agree and finalize health care financing reform strategy in South Kazakhstan IDS. At a minimum, the MOH and MOF Ministries at the local oblast and the federal level must review and consensus must be developed prior to development of an MOU or legal document.
- 3) Establish baseline surveys and information on consumers, employers; providers and facilities. This information could be used to:
  - a) Establish a baseline against which to measure subsequent changes both in the oblast and also across oblasts.

- b) Be used to collect and develop information not currently available for use in subsequent TA activity, e.g., informal, out-of-pocket payments, employer attitudes toward financing reforms, etc.

This activity is already well-underway.

- 4) Assessment of training needs/increased training activity. An assessment of training needs in South Kazakhstan oblasts could be performed by the *ZdravReform* Almaty office. The assessment would be performed with an eye to having this oblast designated as an IDS in the next 1-2 years.

Training needs are less dire in Chimkent, relative to other parts of the CAR, because a small cadre of several dozen professionals. However, Chimkent still has considerable needs.

- a) The Chimkent Oblast Training Center for New Business and Technology could be considered as a central training center for the Central Asian Republics in the areas of health insurance, marketing, claims processing, business management, actuarial and estimation techniques.
  - (1) The Center could be used to begin training individuals from these two oblasts, or from the federal MOH as needed.
  - (2) A visiting professorship program at the Center could be established to bring in Western-based experts on a variety of health reform-related disciplines.
  - (3) The Center could be an applicant for a new grant under the NIS/Abt Grants program to establish such a visiting professorship program or to initiate another special program.
- b) The training activities for primary care physicians in Almaty and Chimkent should be assessed in the context of possible development of new financing and payment reforms that would promote primary care. Training programs that emphasize clinical work could be used as a base for collaboration in other areas such as, information and management systems, quality, payment incentives, managing risk, etc...

- 5) Hold CAR conference on management and information systems in Chimkent/South Kazakhstan oblast.
- a) The conference would bring together experts to present, learn from, and compare model systems now in place in the CAR. Systems would include clinical, financial, and administrative.
  - b) The representatives would include facility representatives (e.g., Oblast Hospital and Phosphorous Hospital), local software vendors (e.g., ProbeTec), other developers from the Oblast Center on new Business and Technology and from the Ministry of Commerce, and MOH representatives from CAR countries.
  - c) USAID/Abt Associates would have at least one cost accounting and systems expert attend the conference.

- (4) An earmarked Value Added Tax (or VAT), such as a national sales tax. However, a VAT tax is usually considered regressive.
- (5) A restructured, graduated income tax schedule with an earmarked portion going to health care. A payroll tax is less likely to have as much fluctuation as taxes from residual income. On the other hand, wages tend to lag the rest of the production resource cost items and also consumer prices in terms of inflation.
- (6) Have the government specify a set of services to be provided through compulsory insurance. Groups of providers or insurance organizations could then try to obtain the best prices from providers for the set of specified services. The insurers or providers would market coverage for the services to consumers through their employers.
  - (a) Providers/insurers would compete on the basis of price, quality, and access to services.
  - (b) Consumers would have a greater role in determining how much of income and GDP is spent on health services by influencing their employers to choose the price and quality combination that best meets their needs.
  - (c) Private provider groups and insurers may be more innovative because they must respond to consumer demands.
  - (d) Higher and lower-wage workers, however, would pay the same amount for some defined set of benefits. This is not only inequitable, but also could hurt some low-wage employment.
- (7) The payroll contribution could be split among employers and employees. For example, a 3 percent employer payroll tax and a 1 percent employee payroll tax. This would:
  - (a) involve citizens more actively in their health care costs.
  - (b) free-up funds for needed capital formation.
  - (c) the new 1 percent payroll contribution *from employees* could be considered for individuals in upper-income brackets *only* (e.g., managers of state-run enterprises, banks, insurance companies, etc.). This would improve equity and act as a needed first step in consumer involvement in the health sector.

- (8) Other activities to develop in collaboration with health and financing sector leadership.
- 3) Provide technical assistance to implement and update the use of capitated payments (l-line budgets) to begin immediately.
  - a) The unpredictability of the capitated rates, by being based on annual legislated appropriations, could create problems for the MHI organization's ability to predict and manage its use of funds prudently and maintain solvency in the future.
  - b) The federal and central oblast must commit to a fixed per capitated payment rate for its coverage of non-workers, unemployed, elderly, and disabled groups.
  - c) Basic *real* rate must be fixed in a formula and not change in future years.
  - d) The formula should be risk-adjusted and based on expected utilization needs (e.g., disabled, elderly vs. others); at a minimum there should be age and sex adjustments.
  - e) There should be a formula or method developed to allow the formula to be updated for changes in (1) population, (2) demographic composition such as aging, (3) inflation, (4) urban/rural population patterns, (5) practice patterns and new technology, (6) unforeseen epidemiologic events, (7) other factors as appropriate.
- 4) Develop a health input price index usable at the oblast level.
  - a) Health price input indexes should be developed by oblast (or even more refined as necessary) for use in updating sources of revenues into the MHI fund and in updating the payment of funds to providers.
  - b) Currently, a general consumer price index is available, but this evaluation has not yet identified adequate price indices for the health sector. Further work could be problematic given that market-based prices often do not exist; nevertheless, it is an important component of developing a workable health insurance system.
- 5) Provide technical assistance to diversify sources of public financing. There are several general financing options which could be considered immediately as *alternatives* to a new payroll tax.

- a) Alcohol and tobacco taxes are already substantial, but should be doubled, and used for health care services; this should be done at the national level immediately.
  - b) All sanatoria in the oblast should be sold to private sector interests. The profits should be used for pharmaceuticals or other needed items.
  - c) Other activities as developed in collaboration with local health financing sector leadership.
- 6) Develop a usable co-payment structure for public facilities.
- a) The structure should be based on existing cost recovery fee experience in South Kazakhstan oblast for private pay patients and patients paying fees for outpatient fees.
  - b) The structure could use available data from informal payments, national statistics on income distribution, and the Abt Associates baseline survey on costs and utilization.
  - c) The structure will incorporate the Barnum/Kutzin principles: (1) prices should not limit access, (2) should provide proper signals for use of services by facility, (3) prices linked to quality of care (e.g., go to local facility), (4) subsidized for inadequate consumption otherwise, (5) prices should adjust for changes in economy (e.g., inflation adjustment).
  - d) Design and recommend a cost recovery structure for an experimental site. For example, nominal, flat co-payments, might be started at the outpatient and inpatient facilities in Chimkent first; these co-payments could actually be collected and retained by the facility *specifically* for purchase of needed items such as equipment, supplies, and pharmaceuticals.
    - (1) If the co-payment amount in Chimkent only were set at 10 tg. for an inpatient admission, and 5 tg. for an outpatient visit, new revenues of at least 20 percent are estimated by the HFS report (May 1994) relative to current budget. These estimates include the waiving of co-payment for low-income groups and special populations (e.g., disabled), and waiving the payments for any type of preventive services.
    - (2) These changes are consistent with Deputy Minister Khulzanov's interests.

- 7) Provide technical assistance to generate savings and estimate costs through efficiencies and benefit package design.
  - a) Actuarial and estimation techniques assistance would be used to develop an improved benefits package that would eliminate services that are not cost-effective. Examples of services include mandated annual x-rays, physiotherapy services, adult dental benefits, and sanatorium stays.
  - b) Benefit packages could be expanded to include services not currently provided.
  - c) Spending could also change due to changes in delivery of care such as decreased average hospital stays and increased use of home care.
  - d) Options would be developed; changes in spending would be estimated.
  - e) A final package could be decided upon by policy makers.

#### Management of Insurance Organizations and Funds

- 1) Provide technical assistance in organizational management, financing, and actuarial science to assess organization and financial structure, conduct and performance of public Mandatory Health Insurance (MHI) fund. This assistance must be undertaken in the context of issues identified under the ZRP Program and under the HFS contract. For example:
  - a) The MHI organization should not face disincentives for building reserve funds over time. One possible example of a disincentive is a current federal legal interpretation that the Fund must pay 30 percent profit tax on surplus health care revenues at the end of the year.
  - b) Management of the MHI fund organization should consider only health insurance coverage, and not life, property or other types of insurance; there is a risk of shifting public fund revenues to cover claims of non-health insurance subscribers.
  - c) Fund revenues should be allocated in the future along four types of separate accounts or funds: payments to providers; a reserve fund; fund to promote preventive activities; and, administrative expenses.

This approach would allow spending to be more predictable, transparent, and controllable. Specific allocation shares could be approved by the local administrator (or later by the oblast MHI fund). Purchases of drugs and medical equipment, subsidies to medical facilities and so on would be limited to the fund for payment to providers;

- d) Insurance organization administrative costs should moderate over time. The current 3 percent administrative standard on MHI organization payment in South Kazakhstan oblast to intermediaries may be too low for the initial start-up phase, given the need for higher up-front capital costs and higher collection costs. A preferred approach could be to: allow administrative costs to approximate 5 percent-7 percent in the first few years. This could be lowered to 3 percent in later years.
- e) Use of available (temporarily free) MHI funds for outside liquid investments should be limited to the reserve fund and the preventive measures fund.
- f) The oblast government should prepare to extend the MHI organization and fund to the entire oblast. A broader geographic base would have several advantages:
- (1) Employers are spread unevenly across rayons of the oblast. Some rayons will have difficulty raising enough funds to cover medical benefits of their residents. This would increase the fairness of the system.
  - (2) A large portion of industrial enterprises face substantial financial problems, at least in the short run. Central reserves would be useful as a subsidy to local MHI schemes.
  - (3) All residents of the oblast should receive a more or less similar package of basic medical benefits. In order to achieve this, an oblast program of MHI benefits should be developed and implemented.
  - (4) A broader population base decreases the potential for risk selection by competing insurers (especially if multiple, competing insurers develop within an area or if intermediary areas become relatively small). A weighted or risk-adjusted capitation formula can better assure competition on price and quality, not risk selection.
- g) The MHI should be developed both “top-down” and “bottom-up”. Local initiatives must be combined with standard setting and regulations at the oblast level. An oblast-level MHI organization must provide the ground rules,<sup>18</sup>

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<sup>18</sup>The oblast MHI organization also should act as regulatory body. It works out the rules of MHI for the entire oblast which might include:

- a procedure of collecting payroll contribution;
- weighted capitation formula for allocation of MHI contributions to insurer;
- a capitation rate of budget allocations for non-working population;
- methods of payment to medical care providers;
- rates of payment differentiated for the types of providers;

develop an accurate capitation formula,<sup>19</sup> assure that standards are met, and serve as the “backstop” for financial viability.<sup>20</sup>

- 2) Provide technical assistance for organizing and implementing the series of insurance organization intermediaries. This assistance must be undertaken in the context of issues identified under the ZRP Program and under the HFS contract. For example:
  - a) The MHI Fund should *guarantee* insurance intermediaries timely and adequate sources of funding, regardless of compliance rates. The current demonstration design in South Kazakhstan does not assure full or timely payments to intermediaries. If participation and compliance rates drop, payments are allowed to lag indefinitely as intermediaries use reserve funds.

Inadequacy of funding at the MHI Fund level should not be at the expense of private intermediaries and steps should be taken to assure continual Fund solvency. This is especially crucial in the early phases of the demonstration. Several options include:

- (1) A government reinsurance fund paid for through a small set-aside from general HI funds.
- (2) Reserve requirements set and maintained from the outset.
- (3) Initiation of collection of funds for some period prior to use of funds

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- the market structure of MHI (e.g., single or multiple purchasers in each area; state-owned, joint-ventures or commercial insurers);
  - interaction between MHI and other types of insurance (can insurers take up voluntary health insurance or life insurance?);
  - medical standards which specify requirements for the process and the outcome of diagnostic and curative work;
  - the procedure of forming and allocating reserves the use of temporarily free money; and,
  - licensing of insurers which don't comply with the rules of MHI.

<sup>19</sup>This implies setting fixed rates of capitation allocations for the local insurers, using demographic variables (e.g., age and sex), clinical variables (e.g., diagnosis), and perhaps prior use of services (see, for example, report of White House Task Force on Risk Adjustment, January 1993).

<sup>20</sup>This implies use of the oblast MHI reserve fund to support local insurers when they encounter financial problems due to excess of actual over predicted expenses. The allocation process should secure financial viability and at the same time encourage insurers to be cost-effective. Insurance liability can fluctuate significantly on a year-to-year basis, even for large funds like the U.S. Medicare program which covers 35 million individuals. Insurers should be protected against the major portion of unexpected losses (say 90 percent), and should be responsible for the rest.

(e.g., 3-6 months) to assure solvency and timely payments.

- b) Intermediary assignments should be re-bid by geographic area every 2-3 years. Awards should be given to the lowest bidder.
  - (1) Bids could be provided for both administrative and health care services costs. This could create incentives for utilization management by the intermediaries.
  - (2) The state and private intermediaries would both compete for geographic areas.
- c) The management of VHI intermediaries in South Kazakhstan oblast should include a state-backed solvency/reserve fund. The VHI intermediaries are relatively small organizations (currently 15,000-40,000 VHI subscribers), with largely untested staff and expertise. The risk of poor management and subsequent insolvency, especially in the early years, may be significant.
- d) Either the Mandatory Health Insurance Fund organization or the intermediaries should promote further changes in the organization of care that would increase both competition and consumer choice. This could improve both resource allocation and provider performance. There are several steps which might be considered:
  - (1) Encouraging legal formation of new medical groups within the framework of the MHI Fund and VHI policies.
  - (2) Restructuring polyclinics into more autonomous group practices of physicians who are paid on a capitation basis.
  - (3) Initiating competitive contracting with providers for specified services, through open bidding and negotiation of payment rates. For example:
    - (a) Selected inpatient services can be contracted with polyclinics.
    - (b) Selected hospitals can have contracts for specialized services currently provided by all hospitals (as long as services are not dependent upon guaranteed transportation such as emergency care).
    - (c) Selective contracting can promote both economies of scale (efficiency) and improved quality (specialized centers of care).
- e) The VHI and intermediary organization should place an immediate emphasis on improved utilization management. This is pertinent to the South Kazakhstan

oblast demonstration. There is some evidence that this has already begun in selected areas, such as the NEM-related policies of the Emergency hospital and Phosphorous hospital, and the use of DRG-like payments by Oumit. The MHI and local oblast Department of Health could further facilitate this process by:

- (1) Developing and sharing optional strategies for implementing more cost effective practices of care.
- (2) Encouraging the development of standardized (i.e., comparable), routine, ongoing evaluation and monitoring activities for such indicators as:
  - (a) occupancy rates;
  - (b) average lengths of stay by disease category;
  - (c) referral patterns, such as polyclinics to hospitals, from GPs to specialists, from hospitals in the demonstration area to outside hospitals;
  - (d) physician prescription patterns and referral rates;
  - (e) use of specialists' time in polyclinics and hospitals with the objective of improved sharing of functions; and
  - (f) appropriateness of hospital admissions generally.

This will improve both efficiency and quality. Incentives could be developed to encourage these activities, such as bonuses paid out of revenues from penalties, or by developing a special set-aside fund within the MHI Fund organization for carrying out these functions.

- 3) Provide technical assistance for private Voluntary health insurance to both 1) encourage its development and 2) assure an adequate legal and regulatory framework that will protect public use of funds and consumer interests. This assistance must be undertaken in the context of issues identified under the ZRP Program and under the HFS contract. For example:
  - a) Combine mandatory and voluntary health insurance (VHI) under the Mandatory Health Insurance Fund demonstration. This will supplement available MHI contributions with private financial resources, and will increase consumer choice (e.g., additional services not in benefit package, better hospital room).

- b) Closely manage voluntary insurance to assure that mandatory funds do not shift to private pay patients. This should be carried out by the local administration. Several areas of regulation should be considered:
  - (1) Clarify specification of the share of medical resources available for voluntary insurance patients (e.g., bed capacity, physician's time, diagnostic tests, etc).
  - (2) Separate accounting by the VHI intermediary organization on mandatory and voluntary health insurance by categories such as (a) insurance contributions, (b) payments to providers, (c) formation and distribution of reserve funds, (d) use of temporarily available funds, and (e) income distribution. These measures can help prevent use of public money for private, commercial purposes.
  - (3) Eliminate duplication of coverage. Medical benefits covered by mandatory insurance should not be covered by voluntary plans; there should be clear cut specifications by diagnosis, age, and sex categories.
  - (4) Avoid complementarity of coverage that could induce greater demand of services paid for by the public fund. For example, coverage by VHI's of polyclinic co-payments could increase patient willingness to seek more visits or tests than otherwise necessary.
- c) Develop regulations governing the market for private health insurance.
  - (1) Standardized VHI medical benefit packages promote informed consumer choice based on comparable price and quality.
  - (2) Include provisions that guarantee availability and renewability of coverage regardless of health status; eliminate refusal of sale due to pre-existing conditions such as cancer and tuberculosis encourage risk selection behaviors.
  - (3) Payout-revenue ratios should be closely audited and monitored. These ratios are now established by regulation at .9 for South Kazakhstan oblast.
- d) Do not constrain VHI market areas for coverage of policies to intermediary-defined geographic areas only. All VHI companies should be allowed to sell policies anywhere. This will encourage competition, lower prices, and encourage greater availability of coverage.

## Payment Methods

- 1) Develop a capitated payment system for primary care and case-based payment system for the hospital sector. This approach should be utilized at the least for patients under the responsibility of the government health sector.
  - a) There are two principal models of payment methods for the primary care sector: fee-for-service using a fee schedule (e.g., German model) or capitation (e.g., English model).
  - b) Although fee-for-service may provide the most direct incentive to increase productivity of primary care, fee for service is a system fraught with problems. Several include:
    - (1) There is a strong incentive for the over-provision of health services. Given the scarcity of health resources, it is important to use those resources in the most cost-effective manner. The goal is not to increase the number of services, but to provide the minimal amount of appropriate services.
    - (2) Fee-for-service is difficult to administer. It requires the development of a fee schedule and a complex administrative system of billing. Given the scarcity of resources, it may be inappropriate to set up a system where a significant proportion of scarce health care budget would be devoted to administration.
    - (3) Fee-for-service requires a complex administrative oversight system to regulate physician behavior. Using the billing system, physicians need to be profiled to monitor the over-provision and appropriateness of services. Given that the MHI has not yet been established, it may create too large a burden on the MHI in the short-run.
  - c) For these reasons, a number of countries, including the U.S., have come to recognize that the more appropriate method to pay primary care physicians may be capitation.

## Primary Care Services

- 1) Encourage three potential loci for innovation:
  - a) Creation of APTKs.
  - b) Creation of PCPs outside of the polyclinics.

- c) Creation of private practitioners either as a group or as solo practitioners.

Collectively, these types of organizations can be referred to as Primary Care Units (PCUs).

- 2) Establish free choice of primary care physicians.
  - a) Each family should enroll with a primary care unit (PCU) during an open enrollment period. At this point families could obtain information about different primary care units.
  - b) Families would chose their own doctor(s) with an option to change in six months.
  - c) Large employers should be encouraged to hold health fairs where Primary Care Units would be present.
- 3) Provide technical assistance to base the initial risk adjustment for the capitation formula on historical utilization.
  - a) In the polyclinics, this would based on the traditional categories (under 1, 1-14, 14-16, adults, and chronic patients).
  - b) One crucial question is what should be included in the capitation formula. In the long-run, hospitalization could be included in the capitation formula. However, given the complexity of establishing primary care units, fundholding should be considered only after the primary care system and new hospital payment systems are in place. In the first years, the capitation payment should include only outpatient care. Thus, the capitation rate would include consultation with other specialists, diagnostic and laboratory tests, and simple procedures. In subsequent years, the capitation formula could be expanded to include hospital care.
- 4) Provide technical assistance to initiate activities to restructure polyclinics into APTKs, PCPs, or private practitioners.
  - a) In year 1, emphasis should be placed on transforming adult and children polyclinics into small multi-specialty group practices that could still be located within the polyclinics.
  - b) APTKs could be economic entities operating under the administrative framework of the existing polyclinics.

- 5) Provide technical assistance to allow APTKs to use the remainder of their budget to re-invest in the practice organization and to pay bonuses.
  - a) This would stimulate performance-related pay because APTK income would depend on the number of patients enrolled in their group.
  - b) A specialist should develop detailed rules for how APTKs could use unspent funds.
  
- 6) Develop through the grants program a revolving capital fund for start-up of new private physician practices, PCPs, APTKs, and clinics.
  - a) There are several physician groups that would like to start private clinics and offices. However, too often there is no capital for supplies, equipment, and rental.
  - b) The constitution is clear in supporting expansion of new private facilities; it is less clear regarding privatization of existing facilities. Preference should be placed with new, start-up practices.
  - c) The fund could be controlled by either private or non-profit groups, such as the primary care physicians cooperative.
  - d) Low cost loans could be made available to promising individuals and groups.
  - e) Preference could be given to new enterprises providing part of their care to the poor or underprivileged.
  
- 7) Provide technical assistance to establish a regulatory framework for PCUs to increase choice and competition while assuring high quality care. Some areas to be considered include:
  - a) Maximum list size: There should be a maximum list size established for primary care groups receiving funds from the MHI on the order of 2000 patients. Guidance for list size should be developed in consultation with currently practicing PCPs and accepted practice in countries with well developed primary care systems such as the United Kingdom.
  - b) Referrals: PCUs would have the right to refer their patients to any accredited specialist and/or hospital.

- c) Co-payments: primary care units could be allowed to charge co-payments. The co-payments would cover a range of services such as physiotherapy, check-ups, administrative visits to the physicians.
- d) Special payments for priority services: There should be special payment methods established for services such as preventive care. The oblast MOH working with the national MOH should establish minimal standards for preventive care. These standards should be based on guidelines in North America, Europe, and the World Health Organization. Once these guidelines are established, there are two potential methods of payments.
  - (1) Incentive payments for reaching preventive care targets: e.g., special payments for reaching 90 percent immunization coverage.
  - (2) Fee-for-service payments for preventive care with based on a fee schedule.
- 8) Develop and foster training in management and organization related to primary care, especially in collaboration with more clinically-based programs outside the ZRP program.
  - a) An on-going training program in primary care would accelerate the development of PCUs. Internists, pediatricians, and gynecologists would be trained in outpatient management of major illness.
  - b) A retraining program for specialists also would be useful. While APTKs can be seen as a transition step in creating primary care physicians, physicians should be encouraged to move beyond APTKs into true primary care physicians.
  - c) An expert in primary care should be sent to assess management and organization training needs in primary care.
  - d) Active collaboration should be established with national clinically-based training centers in primary care in Almaty.
  - e) Active collaboration should be sought with the British Overseas Development Association's Know-How Fund to train primary care physicians.

### Hospital Payment

The goal is for hospitals to be paid on a performance-related, per-case basis adjusted for severity. The cases would be referred by any PCU operating in the demonstration area. Technical Assistance could be provided to achieve the following action steps:

- 1) Allow hospitals to accept referrals from any area in the demonstration site.
- 2) Evaluate the use of existing case-based systems for possible application for other hospitals.
  - a) The 70-80 groups developed at the Emergency hospital (see Chapter 2) is one example; there may be others either in the oblast or other oblasts (e.g., Dzhzeskasgan) in Kazakhstan.
  - b) Medical Economic Standards should not be used to form the case-based pricing system, at least until they can be more thoroughly evaluated.
- 3) Allocate funds to hospitals using a global budget, based on historic budgets, in the first half of the first year.
  - a) Hospitals would receive a global budget based on their historical budget. Hospitals, on average, would receive approximately 70 percent of the health budget.
  - b) The budget would be a lump-sum payment and not based on the 18 chapters.
- 4) Beginning in the second half of the first year, allocate funding to hospitals based on number of cases treated in the first half of the year, adjusted for severity.
  - a) Each clinical department in the hospital would develop 5-7 simple severity-based cost bands.
  - b) A specialist could help develop a simplified severity adjustment system that could be used to adjust global budgets to hospitals.
- 5) Under the Auspices of the MHI Fund, develop a capital fund to provide low-interest loans to hospitals to develop new services and to encourage competition among hospital providers.
- 6) Through the grants program develop a revolving capital fund for start-up of new private and/or non-profit autonomous hospitals.
  - a) There are several organizations that may want to start new hospitals, or new and legally separate wings of existing hospitals. However, there may be a shortage of capital for supplies, equipment and rental.

- b) The constitution is clear in supporting expansion of new private facilities; it is less clear regarding privatization of existing facilities. Preference should be placed with new, start-up practices.
  - c) The fund could be controlled by either private or non-profit groups, such as a local hospital association.
  - d) Low cost loans could be made available to promising groups.
  - e) Preference could be given to new enterprises providing part of their care to the poor or underprivileged.
- 7) Closely regulate prices of monopolistic providers. For example, the Eye Disease or Ophthalmological hospital is the major provider of eye services in the entire oblast. The MHI should closely regulate the prices of services where there is little competition.

#### Management and Organization

- 1) Develop a legal framework for autonomous status of health care facilities.
  - a) Ideally, the framework should be based on existing legislation for health care reform and oblast legislation for local autonomy.
  - b) It should be coordinated within the general framework of the demonstration initiative itself.
- 2) Provide training to promote management of productivity and performance of hospitals.
  - a) Health policy decisionmakers and hospital managers in Kazakhstan acknowledge the excess supply in medical facilities. This is in part a problem of Federal labor requirement standards, the lack of management autonomy, and general management skills.
  - b) Technical assistance could be provided for training and management of facilities, including: development of new labor standards, setting utilization targets, comparing performance by department and across departments, monitoring performance, an use of cross-hospital comparisons of the impact of managing productivity.

- 3) Evaluate recent activities in CAR (e.g., Kyrgyzstan IDS in Karakol) on unit costing systems, and develop new management structure that incorporate objectives of better monitoring costs and improving quality of care.
  - a) New by-laws that are consistent with current law could be drafted.
  - b) This could improve services and promote facility autonomy.
  
- 4) Link management reforms with development of facility-level quality assurance programs. Focus should be on:
  - a) Internally consistent and appropriate payment incentives.
  - b) Adequate measures and data collection for monitoring.
  - c) A continuous “loop” of information for ongoing change and improvement.
  
- 5) Assist in decentralization/privatization of limited number of facilities.
  - a) Again, a legal framework is necessary to promote the privatization of facilities.
  - b) Facilities could have the option of becoming either non-profit or for-profit entities.
  - c) Each institution could establish a board of governors (consisting of prominent members of the community, representatives from the largest employers, a representative for the doctors, a representative from the city and oblast government). The hospital administrator would be responsible to the board of governors.
  - d) Technical assistance could be provided to:
    - (1) Identify and delineate steps to permit an initial phase-in period.
    - (2) Develop legal flexibility to allow facilities to implement certain policies immediately (e.g., hire and fire physicians).
    - (3) Delineate tax responsibilities under various legal categories.
    - (4) Develop limited financial projections in phase-in period to adjust to new payment incentives.
    - (5) Develop rules and flexibility regarding private vs public pay patients.

## Management Information Systems

- 1) Design a model hospital information system in oblast.
  - a) Computing facilities in Chimkent city are superior relative to other oblasts in Kazakhstan, particularly in some hospitals, such as the Eye hospital, the Oblast hospital, and the Emergency hospital. Each of these hospitals has developed systems and is in various stages of development of data bases. They have capable programmers who can develop customized programs.
  - b) However, the approach to information systems has been institution-specific, with little effort to coordinate activities.
  - c) There is the tendency to over-collect information, subsequently leading to sub-optimum use of computing resources and also complicating the program.
  - d) Technical assistance would help to identify areas of needs for information, to identify how to efficiently way to collect data, and to recommend means of analyses.
  - e) A model for medical information systems could be created to include a standardized procedure-coding system for all in-patient and out-patient services.
  - f) The MIS conference proposed for 1994 (see above) could be the opportunity to coordinate information systems and to agree on standards for coding and information needed for the MHI and the demonstration area generally.
  - g) Technical assistance can be provided for one or two hospitals in setting up hospital information systems or improving the currently used systems.
  - h) Some support in hardware and software provision also could be considered.
  - i) Managers in charge of information system development could be trained on the concepts of health information systems and effective use of information for management decisions.
  
- 2) Develop a medical information system for the MHI. This would include the development of:
  - a) A uniform reporting system for claims;

- b) A standardized set of information that could be used for payment and for quality assurance;
- c) An oblast-level reporting system for vital statistics that is not disrupted, but, in fact, enhanced. Key statistics such as infant mortality, mortality, cause of death, cause of hospital admission, should be closely monitored;
- d) Periodic health care utilization survey, to follow-up the base-line survey on utilization currently under development under the ZRP program.

### Cost Accounting Systems

- 1) Establish a cost accounting system to support and sustain reform initiatives.
  - a) This system would track resource utilization and costs for individual services and patients.
  - b) Para-clinical services, such as EKGs, lab tests, etc., would be costed, and prices developed.
  - c) Prices would also be developed for general overhead and included in the rent.
  - d) Prices would be charged to PCUs.
  - e) Technical specialists in cost accounting and health information systems should aid the polyclinics in developing an internal accounting system and a medical information system.
- 2) Move away from techniques that rely on budget allocations, labor value normatives, and time and move toward a system that reflects true costs of producing services. Western-methods and specialists could be sent to help teach new concepts and methods and incorporate techniques.
- 3) Develop and spreadsheet for unit costing, with a detailed manual to be used by accountants in facilities. A manual would need to be developed and translated into Russian.
- 4) Initiate a training program at the New Business and Training Center in the new accounting system and the spreadsheet model.

- 5) Health care facilities should be trained in constructing a business plan.
  - a) This activity would be useful in conjunction with the move towards autonomous status.
  - b) This document should comprise at least the following:
    - (1) The objectives of the organization, expected types of services offered, and expected mix of patients.
    - (2) A review of services that they do offer to inform the primary care units and patients.
    - (3) Realistic targets that the provider should aim for and that can be monitored during the year covering: forecast activity, forecast budgets for departments, forecast of end of first year position.
  
- 6) Develop annual auditing and reporting mechanisms.
  - a) Mechanisms for auditing the providers' financial accounts should be agreed upon between the Ministry of Health, the providers, and the health insurer (MHI).
  - b) These mechanisms could include the presentation of annual reports and accounts in the style of a private company.

### Pharmaceuticals

- 1) Refocus responsibilities of Pharmatsia towards regulation and management of product safety and effectiveness.
  - a) Its stronger regulatory presence can end widespread practices of selling products which are harmful, ineffective, and/or sold after marked expiration dates.
  - b) It should assure only accredited public and private pharmacies sell pharmaceuticals generally.
  - c) In effect, Pharmatsia would come to resemble more of an organization like the U.S. Food and Drug Administration which assumes a narrow but essential position in the pharmaceutical development and distribution process.

- d) At the same time, eliminate its role as buyer and distributor. A private procurement and distribution network should be fostered.
- 2) Allow Pharmatsia to oversee development of Kazakhstani pharmacopia of approved pharmaceuticals.
    - a) The Pharmacopia should contain a coding system that can be used by health facilities to track pharmaceutical utilization.
    - b) The coding system might be based on the old system used in the former USSR.
- 3) Provide technical assistance in purchasing pharmaceuticals on the International Market. Emphasis should be placed on methods that would increase market power to obtain lower prices.
- 4) Improve pharmaceutical prescribing. This objective could be met through:
    - a) Development of a restricted formula based on the WHO essential drug list.
    - b) Analysis of prescribing practices in an attempt to encourage cost-effective use of pharmaceuticals.
    - c) Technical expertise should be provided on analysis of rational prescribing and methods for altering physician prescribing patterns such as profiling, restricted formularies, and drug newsletters.
- 5) Privatize pharmacies in the demonstration area, but develop a parallel accreditation process with substantial fines for selling outdated products and engaging in other practices potentially harmful individual and public health.

#### Quality Assurance

- 1) Assess the Medical Economic Standards currently in use to determine use for quality assurance activities. This activity could include:
  - a) Assessment of effectiveness of health care practices for major conditions. Emphasis would be placed on how practices differ from accepted practice in the West and how clinicians make assessments of effectiveness.

- b) A quality expert could conduct seminars on the development of practice guidelines used in the United States and Europe such as those developed by the Agency for Health Care Policy and Research (AHCPR), the RAND Corporation, and the Effective Health Care Bulletin. Particular emphasis should be placed on how practice guidelines used in the West differ from Medical Economic Standards.
  - c) Recommendations would be developed for improving medical practices to encourage cost-effective health care. Particular emphasis should be placed on linking medical practitioners into accepted Western medical practice based on evidence.
  - d) Adapting the quality standards of the Medical Economic Standards into a method for analyzing the appropriateness of hospital discharges.
- 2) Develop a strategy to implement insurance-based QA system that complements payment reforms. Examples of systems to analyze include:
- a) Physician and polyclinic referral rates;
  - b) Inappropriate admissions;
  - c) Early discharges;
  - d) Referral rates out of the demonstration area; and,
  - e) Establishment of standards needed for macro-level analysis of insurance data.
- 3) Provide technical assistance to facility departments to set-up an internal QA plan.
- a) The goal is for physicians, departments, and hospitals to see continuous quality improvement as part of their mission rather than as externally derived rules.
  - b) Quality assurance program should be linked with changes in management.
- 4) Establish an accreditation committee that is independent of the MHI.
- a) This will increase both independence of review and flexibility in updating standards. It should be composed of independent experts and funded jointly by the MHI and the health care facilities.

- b) It would be funded out of fees it charged to facilities for accreditation review.
- 5) Establish the specific standards used by the accreditation committee(s), with the help of one or more experts in the next six months.
- a) Emphasis should be placed on developing both facility-wide standards and department-specific standards.
  - b) Accreditation procedures need to be established for primary care units.
- 6) Establish a general statistics office to track all public health statistics.
- a) These measures could include mortality, infant mortality, patterns of infection, analysis of autopsy data, etc.
  - b) These statistics should be sent to all health facilities on a monthly basis.

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Financing

- 1) Provide technical assistance to implement new sources of revenue financing that provide alternatives to current payroll tax. Conduct evaluation of the compliance, revenues, and overall impact.
- 2) Evaluate use of new health price index.
- 3) Provide technical assistance to implement and evaluate use of co-payments. Conduct evaluation based on changes in revenues, consumer demand, and quality indicators.
- 4) Provide technical assistance to implement refined benefit package.

Management of Insurance Organizations and Funds

- 1) Provide technical assistance to extend MHI to the entire oblast area.
- 2) Provide technical assistance to refine and implement an accurate capitation formula for use by the MHI. Specific changes would be based on international experience, data collection and design, and analysis of the early experience in the demonstration area.
- 3) Implement changes in the MHI organization and/or intermediaries to increase competition and consumer choice. Specific recommendations would follow from the technical assistance and options developed in the previous year; these could include:
  - a) Encouraging legal formation of new medical groups within the framework of the MHI Fund and VHI policies.
  - b) Restructuring polyclinics into more autonomous group practices of physicians, paid on a capitation basis.
  - c) Initiating competitive contracting with providers for specified services through open bidding and negotiation of payment rates. For example:

- (1) Selected inpatient services can be contracted with polyclinics.
  - (2) Selected hospitals can have contracts for specialized services currently provided by all hospitals (as long as services are not dependent upon guaranteed transportation such as emergency care).
  - (3) Selective contracting can promote both economies of scale (efficiency) and improved quality (specialized centers of care).
- 4) Implement standardized (i.e., comparable) systems for routine, ongoing evaluation and monitoring activities for such indicators as occupancy rates, average lengths of stay by disease category, referral patterns, physician prescription patterns and referral rates.

#### Payment Methods

- 1) Refine the initial risk adjustment for the capitation formula for PCUs.
  - a) The capitation formula should be further subdivided into the following age/sex bands: 0-1, 1-4, 5-9, 10-14, 15-25, 25-40, 41-65, 65-75, 75-85, >85.
  - b) A specialist should help the oblast Ministry of Health calculate the capitated payment. The planned survey on health expenditures would aid in calculating the capitated payment.
- 2) Develop method for adjusting capitation formula for high utilization individuals.
- 3) Pay hospitals on a per-case basis. Prices for the cases would be developed by the MHI using the costing data collected by the hospitals in the first 9 months of the experiment.

#### Quality Assurance

- 1) Establish accreditation process and standards for hospital facilities.
  - a) Accreditation process should review established basic standards for facilities. Particular emphasis should be placed on hygiene, and inspectors should be sent on a monthly basis.

- b) Each hospital department should be accredited yearly. If the MHI identifies problems in specific departments (e.g., high readmission rates), the accreditation committee should be notified and it should review that department.
- 2) Establish accreditation process and standards for primary care units.
- a) The MHI should set up an independent accreditation committee to license and accredit Primary Care Units.
  - b) The accreditation process would occur yearly.
  - c) A donor organization specialist should work with the new independent medical society to develop an accreditation committee independent of the Ministry of Health and the mandatory health insurance (MHI) company.
- 3) Develop and QA methods that encompass outcomes-based surveillance across facilities and areas.
- a) Patient record reviews may become very cumbersome and expensive for the MHI and VHI companies in a large geographic area.
  - b) Excellent computer and information systems are already in place for some shifting to this approach.