



Manas Health Policy Analysis Project

Policy Research Paper No. 29

Evaluating Manas Health Sector Reform (1996-2005): Focus on Primary Health Care

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Executive Summary

- (i) The study objective was to evaluate the primary health care component of the Manas I Reforms and where possible identify the impact of these PHC reforms on health system performance.
- (ii) The study draws on findings of a recent study undertaken for the World Bank to evaluate family medicine (FM) reforms in Kyrgyzstan which employed primary and secondary research, using both qualitative and quantitative methods of inquiry. In addition, the report benefited from detailed discussions with implementers, analysis of Policy Briefs from WHO-DFID Health Policy Analysis Unit as well as reports from the implementing agencies involved in the PHC reforms.
- Kyrgyz Republic inherited a health system based on the Soviet (iii) Semashko Model characterised by centralised and hierarchical organisation; a large provider network with a curative focus, dominated by hospitals and with poorly developed PHC level; parallel health systems for line ministries and large organisations; fragmented delivery model in PHC with a tripartite polyclinic system staffed by narrow specialists which provided services separately for adults, women and children, as well as a large number of vertical programmes delivered by narrow-specialists; absence of family physicians; excess human resources concentrated in cities; inequitable resource allocation based on historic activities and inputs which favoured large hospitals in urban centres at the expense of rural areas; line-item budgeting of provider units and salary based payment systems which encouraged inefficiency and discouraged improved performance; care delivery protocols which encouraged excessive referral to secondary care level, and; limited user empowerment, where the citizens were allocated to doctors and unable to exercise choice of providers.
- (iv) Prior to independence, Kyrgyzstan devoted 3.5% of its GDP to health. This diminished following rapid economic decline—creating a substantial funding gap between the level of financing needed by the health system and the resources available.
- (v) Following independence, Kyrgyz Government sought to introduce multifaceted health reforms centred on developing a strong PHC system to address: organisational complexity; excess infrastructure and human resources; allocative inefficiency and inequities in financing; inefficient service provision; limited incentives and low pay levels for health personnel.

Key Achievements: Organizational and regulatory changes

(vi) From 1992, in collaboration with international agencies, the Kyrgyz Government introduced key legislations to create an enabling environment and establish platforms for systemic, comprehensive and multifaceted health reforms to reduce inefficiencies; enhance equity and access (financial and geographic), and; improve quality. Exemplary collaboration between donor community and the Kyrgyz government led to emergence of an 'operational and informal SWAp'.

- (vii) Despite a highly resource-constrained environment the achievements of FM centred PHC reforms in Kyrgyzstan have been remarkable with expanded scope of services in PHC, enhanced gatekeeping and first contact functions of PHC, substantial secondary to primary shift — leading to enhanced efficiency and effectiveness of the health system.
- (viii) Family medicine is recognized as a specialty in Law. The tripartite system of paediatric, women's and adult clinics have been consolidate into unified PHC centres, many of which have been refurbished and which now provide services for adult men and women and children.
- (ix) New PHC provider organisations, Family Group Practices, have been established with autonomy to manage budgets and contract with the Mandatory Health Insurance Fund, and; Family Medicine Centres comprising FGPs and narrow specialists.
- (x) The scope and content of FGP services have been articulated in law and defined in detail in the State Guaranteed Benefits Package. The gatekeeping function of PHC has been established with FGPs acting as the first point of contact for patients.
- (xi) Limited accreditation has been introduced and a number of PHC and hospital facilities have been accredited.

Financing, resource allocation and provider payment systems

- (xii) Mandatory Health Insurance with co-payments have been introduced: providing additional resources to the health system but also creating a transparent environment as regards payments to health service providers. There is empirical evidence to show that the new system has benefited the poor.
- (xiii) A key achievement is the Single Payer System which has enabled pooling of all sub-national budget funds for health care in the Territorial Department of the Mandatory Health Insurance Fund in a "single-pipe funding" to fund the State Guaranteed Benefits Package.
- (xiv) New provider payment methods have been successfully introduced in the pilot regions for FGPs based on simple per capita mechanism with following expansion to the rest of the republic. Direct and indirect contracts have been introduced for FGPs, including partial fundholding for pharmaceuticals.

Service Provision

- (xv) A State Guaranteed Basic Package defining types, scope and conditions of health care delivery to population of the republic has been introduced. Citizens not covered under the MHI scheme are subject to formal co-payments for referral services in outpatients or hospital inpatient services provided by narrow specialists.
- (xvi) Users now have the freedom to choose their family physicians. Citizens insured under the MHIF receive additional benefits of access to an outpatient drug package which provides certain drugs at reduced rates and lower co-payments for referral services in outpatients and as inpatients in hospital.
- (xvii) There is excellent coverage of immunisation and widespread provision of basic PHC services throughout the country. The scope and content of services have significantly expanded, with increased health promotion services.
- (xviii) Analysis of the MHIF data demonstrates a substantial and appropriate shift from secondary to primary level with a decline in the number of hospital referrals for key acute and chronic conditions typically managed in PHC setting. This finding is critical to demonstrate that changes are having the desired benefits of enhanced care management in PHC setting with reduced referrals to hospital—with consequent improvement in efficiency and effectiveness.
- (xix) Evidence based guidelines have been introduced for 162 common conditions encountered in PHC. This will enhance quality of PHC services delivered, reduce unnecessary interventions and diminish referrals to hospitals.

Resource Generation

(xx) A critical mass of FM specialists and nurses, which meet 60-70% of the numbers needed in Kyrgyzstan, has been trained in short-course retraining programmes.

Key Challenges and Recommendations

(xxi) Family Medicine and PHC reforms in Kyrgyzstan have been highly successful and evolved rapidly. Platforms are in place to accelerate the pace of reforms in second phase of development, particularly to: further broaden the role of FGPs and the scope of services they deliver; introduce more flexible contracts for FGPs with incentives to improve performance, quality, and provide additional health promotion, prevention and extended PHC services; increase remuneration for family physicians and FGP nurses; refine resource allocation mechanisms to reflect need and enhance equity; place more emphasis on evidence-based medicine; change

reporting mechanisms in PHC which reinforce the old tripartite model and hinder unified service provision.

- (xxii) Minimum quality standards and equitable level of services are established for Kyrgyz citizens. Contracts with the FGPs should now be used to encourage innovation and to extend the scope of services provided in PHC.
- (xxiii) The presence of narrow specialists at FMCs, which can be accessed directly by patients, is a source of inefficiency: hindering first contact, gatekeeping and continuity functions. This is a key barrier to developing PHC. Ideally, all the FMCs should be converted to FGP centres and the narrow specialists who work in these FMCs should either be gradually transferred to hospitals or retrained as family physicians. However, politically this may not be possible to achieve and pragmatic but feasible solutions should be explored.
- (xxiv) Despite the State Guaranteed Basic Package which has achieved universal coverage, major inequities in access to services and funding exist. The next phase of reforms should strengthen the focus on equity by changing resource allocation mechanisms to take into account poverty and health needs and substantially modify the current patterns which favour urban areas and Republican hospitals.
- (xxv) Limited incentives and poor salary levels of health professionals working at FGPs are key problems that need addressing in the immediate term. FGP contracts, which have been successfully introduced in the pilot regions, should be used as a tool to encourage innovation and further improve equity, service quality, efficiency and effectiveness. However, to achieve these objectives there needs to be a move from simple per capita contracts to more sophisticated contracts with explicit quality and performance criteria and commensurate incentives to reward FGPs which achieve these. However, such a shift will require significant analytical and execution capacity at MHIF and MoH as well as more stability in the health care financing
- (xxvi) Although Kyrgyzstan has developed an impressive M&E system within the MHIF, the PHC component of the system needs enhancing and analytic capacity at MHIF further expanded to regularly analyze data to generate timely information to inform decisions.
- (xxvii) The achievements in Kyrgyz Republic are outstanding and one of the most advanced in ECA Region. Strong political support for the next phase of reforms is critical to sustaining and further developing the highly successful reforms.

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Acronyms and Abbreviations

ADB	Asian Development Bank	M&E	Monitoring and Evaluation
СНІ	Compulsory Health Insurance	МОН	Ministry of Health
CME	Continuing Medical Education	NGO	Non Governmental Organisation
CPD	Continuing Professional Development	NHA	National Health Accounts
DFID	UK Department for International Development	OECD	Organization for Economic Cooperation and Development
ECA	Europe and Central Asia	PC	Primary Care
EBM	Evidence based medicine	PHC	Primary Health Care
FD	Family Doctor	PRSP	Poverty Reduction Strategy Paper
FGP	Family Group Practice	SDC	Swiss Development Corporation
FM	Family Medicine	SVA	Semeinaya/selksiya Vrachebnaya Ambulatoria (GP provider unit)
FMP	Family Medicine Physician	тот	Training of Trainers
FMT	Family Medicine Team	TOR	Terms of Reference
GDP	Gross domestic product	UK	The United Kingdom
GP	General Practitioner	US	The United States of America
HIF	Health Insurance Fund	USAID	United States Agency for International Development
JICA	Japanese International Cooperation Agency	WB	The World Bank
MDG	Millennium Development Goals	WHO	World Health Organization
Manas– I	National Health Sector Reform Program (1996 - 2005)	Manas - II	National Health Sector Reform Program (2006 – 2010)

1. The Policy Context

1.1. The Kyrgyz Health System Prior to Health Reforms

Kyrgyz Republic inherited a health system based on the Soviet Semashko model: a centrally managed and integrated public health system in which all the system assets were state owned, health professionals were state employees and access to care was free at the point of delivery. Parallel health systems existed for Ministries of Internal Affairs, Defence, Railways, Labour and Social Affairs and the Ministry of National Security, as well as large enterprises, creating a vast health care provider infrastructure. A parallel public health network, the Sanitary Epidemiological System (SES), existed with a focus on surveillance and prevention but with limited health promotion or education activities.

Six levels of health care providers existed in the delivery system dominated by hospitals: (i) Feldsher-midwifery post (FAP) staffed by community nurse/midwife; (ii) Rural physician clinic (SVA) staffed by non-specialist general practitioners; (iii) Polyclinics, staffed by therapeutists (general doctors) who looked after adults, paediatricians who looked after children, gynaecologists who were responsible for women's health, as well as narrow-specialists; (iv) Basic rural hospitals (SUBs) staffed by rural physicians and narrow specialist; (v) Central district hospitals, and; (vi) Specialists hospitals (women's hospital) and Republican hospitals (in capital city Bishkek) which provided tertiary care services, and specialist institutes.

PHC level was fragmented with a tripartite polyclinic system comprising adult, women's and children's consultation centres and dispensaries for dermatovenereology, narcology, psychiatry and tuberculosis. These polyclinics had a large number of nurses and ancillary staff, who assisted doctors but did not practice independently.

An ambulance network provided out-of-hours care in rural areas, provided home visits, administered treatment and transported ill patients to hospitals.

Administratively, the health system was highly hierarchical and divided into regional administrative units (oblasts), each with its own Regional Health Department (RHD). In large and medium-sized cities a City Health Department (CHD) was responsible for managing medical services. Cities and rural areas were divided into districts (rayons), each served by a rayon hospital, polyclinic and a network of rural SVAs and FAPs. Oblast or city health department chiefs appointed by the regional governor with MoH approval, administered PHC and secondary services for the region. In turn, each central rayon hospital (located in the central town of each district) had a chief physician with responsibility for local primary and secondary health care services.

The structure of the health system, allocation of infrastructure and resources, and staffing levels within the health system were determined by centrally

planned normatives. Line-item budgeting was the provider payment method used to finance health service providers, with funding determined by input and activity parameter: at hospital level according to number of beds and number of staff; and at PHC level according to number consultations and number of staff. This arrangement, while ensuring standards across the country, encouraged expansion of services by increasing inputs at the expense of efficiency and discouraged innovation.

Prior to independence, Kyrgyzstan devoted 3.5% of its GDP to health. The declaration of independence and decoupling from the Soviet Union in 1991 was followed by severe economic and social challenges. Between 1992 and 1995 the GDP of Kyrgyzstan declined by 50%. This led to a severe shortfall in resources pooled for health system financing.

Rapid economic decline further compromised the low level of funding to the health sector with the government able to cover only 45-50% of health system expenditures—thus creating a substantial funding gap between the level of financing needed by the health system and the resources available.

In addition to the funding gap Kyrgyz Government faced key health system problems that needed addressing through health reforms, namely: (i) Organisational complexity; (ii) excess infrastructure and human resources; (iii) allocative inefficiency and inequities in financing; (iv) inefficient service provision; (v) limited incentives and low pay levels for health personnel.

1.2. Key Health System Inefficiencies

1.2.1. Organisational complexity

Presence of multiple health systems with limited integration created significant duplication of services and inefficiency. Up to seven percent of total health expenditures were consumed by services of other ministries.

Structural inefficiencies were exacerbated by four administrative levels rayon, municipality, oblast and republican—with overlapping catchment populations and duplicated provision. Each government level funded its own facilities: republican institutes funded from republican level taxes; oblast facilities funded from oblast taxes; and rayon/city facilities funded from rayon/city taxes. Each level attempted, albeit unsuccessfully, to find resources to keep facilities operational rather than co-operating for orderly rationalisation of the infrastructure or human resources.

A highly hierarchical system, with central planning driven by normatives, with an administrative culture prevailed: unable to respond to contextual changes in a timely and efficient manner. Centrally developed normatives limited locally-driven innovation.

1.2.2. Excess infrastructure and human resources

Health system had an excess of hospitals and human resources. Expenses for utilities consumed much of the funding allocated to hospitals, leaving meagre resources for staff, equipment, consumables and maintenance of the infrastructure.

By international standards Kyrgyzstan had a large number of doctors. The number of physicians per 1,000 people at start of transition was 3.2 as compared with the OECD average of 2.1 per 1,000. The number of doctors and nurses declined between 1996 and 2003 but much of the decline has been in the number of nurses.

Although there were an excess number of human resources, in particular physicians, these were inequitably distributed: with high concentration in the capital City of Bishkek and insufficient numbers in rural areas. (Figure 11)



Figure 1. Number of practicing doctors by region

The shortage of health personnel in rural areas has worsened over the last five years particularly in primary care, as medical graduates are unwilling to work in rural areas, and there is no obligation to spend a period in rural areas—as was the case in the Soviet period with a mandatory three-year posting to rural areas.

1.2.3. Allocative inefficiency and inequitable financing

Fragmented revenue collection arrangements for health system financing with each level responsible for providing resources to their own providers led to inequities. Poorer rural areas could only raise limited resources despite having higher health needs, in contrast to urban and better-off areas which had more resources and a surfeit of providers. The prevailing resource allocation system favoured hospitals and urban areas at the expense of primary care and rural areas: resulting in investments poorly targeted to health improvement.

Resources were allocated to providers as budgets according to norms based on inputs and historic activities. Hence, a large number of beds and lengthy admissions at a hospital meant more staff positions and a greater budget and supplier-induced demand.

Line item budgeting provided very limited ability to transfer funds between budget lines. There were no financial incentives to reward good performance and promoted improved efficiency, equity or quality.

1.2.4. Inefficient service provision

The services provided were not user focused. The users were not able to select and register with a named primary care physician, had limited involvement in decision making and were passive recipients of services rather than active participants in the health production process.

A number of problems existed in relation to level of integration and gatekeeping, in particular: (i) Fragmented first contact function at PHC level where users could directly access narrow specialists; (ii) Limited gatekeeping with excessive referrals of patients to narrow specialists at PHC level and hospitals; (iii) Limited integration between primary and secondary care levels with fractured continuum of care; (iv) Predominance of national vertical programmes, such as immunization, which prevented horizontal integration within PHC; (v) Limited capacity at PHC level to resolve problems, leading to a hospital-centric health system; (vi) Limited emphasis on health education, promotion and prevention, and; (vii) Poor diffusion of evidence based care guidelines.

1.2.5. Low pay levels for health personnel

Low salaries for doctors and nurses working in the health system, ranging between 30-40 US\$ per month, have led to difficulties in attracting and retaining health professionals in rural areas. Those working in PHC have lower income levels as compared with those in hospital. Although, family physicians have marginally higher salaries than narrow specialists who work in PHC Centres, the latter have greater opportunity to augment their income through additional private work.

Faced with these challenges, the Kyrgyz Government, in collaboration with the World Bank, World Health Organisation (WHO), USAID, Swiss Development Corporation (SDC), UK DFID, Asian Development Bank (ADB) and Japanese International Development Agency (JICA) set to introduce a comprehensive Health Care Reform Programme to address these issues and develop an equitable and efficient health system providing high quality services.

2. Prerequisites for Primary Care Reform

2.1. Why Primary Health Care?

The WHO World Health Report 2000 identified that many countries fall short of their performance potential in achieving equity, efficiency, effectiveness, and responsiveness of their health systems.¹ One of the reasons for poor system performance is inadequate PHC level which is necessary to achieve key health system objectives and 'health for all'.²

Primary Health Care (PHC) is an effective vehicle to provide cost effective health care "to improve health-care access and outcomes while narrowing equity gaps". ^{3 4 5 6} Scaling-up of health-care systems based on the principles of PHC was recently identified as a key priority for the WHO.⁷

Primary health care is seen as an "integral, permanent, and pervasive part of the formal health care system in all countries." It is seen as the "means by which the goals of health systems are balanced" as it addresses the most common problems in the community by providing preventive, curative and rehabilitative services to maximize health and well-being and influencing people's responses to their health problems. ⁸ PHC integrates the care process to deal with single or multiple health problems taking into account the context in which illness exists and. It is care that organises and rationalises the deployment of resources—basic as well as specialised—directed at promoting, maintaining and improving health.⁹

Vuori describes the constituent components of PHC as: (i) a set of activities, (ii) a level of care, (iii) a strategy for organising health services, and (iv) a philosophy that should permeate the entire health system.¹⁰ As a level of care in the health system PHC is the point of first contact and where 90 per cent of health problems are dealt with. As a strategy primary care envelopes the notion of accessible care relevant to the needs of the population, functionally integrated, based on community participation, cost-effective and characterised by collaboration between sectors of the society. As a philosophy, primary care underpins equitable service delivery to the individual and the society through an inter-sectoral approach.

Although PHC is often equated with a 'gate-keeping' role¹¹ it plays a much more fundamental role than just gate-keeping: it is a key process within health systems, comprising first contact, front-line care, ongoing care, comprehensive care and co-ordinated care'. ¹² ¹³ First contact care is accessible at the time of need; ongoing care focuses on the long term health of a person not on the short term duration of the disease; comprehensive care is a range of services appropriate to the common problems in the population available at the primary care level, and; co-ordination is a role by which primary care acts to co-ordinate other specialist services that the patient may need.

2.2. Advantages of health systems based on primary care

Empirical evidence, derived from both developing and developed countries, demonstrates that health systems which have strong PHC element perform well in relation to health system goals and objectives of health outcomes, equity, efficiency, effectiveness and responsiveness.¹⁴ Robust PHC systems, able to effectively discharge key first contact, comprehensiveness, continuity and co-ordination functions are better able to achieve health system objectives.

2.2.1. Population Health and Aggregate Health Expenditure

Strength of a country's PHC system influences population health outcomes with stronger primary care resulting in better health outcomes.¹⁵ This relationship is significant, even after controlling for determinants of population health at macro-level (GDP per capita, total physicians per one thousand population, percent of elderly) and micro-level (average number of ambulatory care visits, per capita income, alcohol and tobacco consumption). A higher primary care orientation of a health system is more likely to produce better population health outcomes at lower cost and with greater user satisfaction.¹⁶

Absence of PHC is an important factor in determining poor health.¹⁷ Health systems dominated by specialist, such as that in the United States, suffer from higher total health care costs and reduced access to health care by the vulnerable populations.¹⁸ ¹⁹ ²⁰ ²¹The high cost is attributed to proportionately low numbers of primary care physicians and consequent impairment of the gate-keeping function.²² ²³

Services delivered by specialists are higher cost—due to their tendency to use expensive technology and their orientation to curative rather than preventive medicine.²⁴ High-technology medicine pushes up costs of health care expenditure without the visible population level health gain.

There is recent strong evidence demonstrating that to show that a higher ratio of primary care physicians to population results in lower mortality rates overall as well as for heart disease and cancer. A higher ratio of specialists to population does improve mortality rates.²⁵

2.2.2. Equity and Access

Within a developing country context, there is evidence to support that expenditure on PHC is more pro-poor than aggregate expenditure that includes hospitals. Expenditure on PHC has a desirable distributive impact, benefiting the poorer segment of the population proportionately more than the richer segment.²⁶

An orientation towards a specialist-based system enforces inequity in access.²⁷ In contrast, there is general agreement that expenditure on PHC

improves equity.²⁸ Diminished access to family physicians results in worsening health status of citizens.^{29 30}

2.2.3. Quality and efficiency of care

Studies which compare care delivered by family physicians to that delivered by specialist, show the quality and health outcomes to be of equal even when family physicians substitute for secondary care specialist.³¹

Family physicians are more likely than specialist to provide continuity and comprehensiveness which help improve health outcomes.³² Improved access to FPs and the gate keeping function they exercise have added benefits such as diminished hospitalisation^{33 34 35}, less utilisation of specialist and emergency centres^{36 37} and reduced risk of being subjected to inappropriate health interventions.³⁸ Evidence from a systematic review suggests that broadening access to FPs in primary care can reduce demand for expensive, specialist-led, hospital care.³⁹

2.2.4. Cost effectiveness

In low-income settings, PHC is more cost effective than other health programmes.⁴⁰ Selected primary care activities such as infant and child health, nutrition programmes, immunization and oral hydration are 'good buys' when compared with hospital care⁴¹ and that interventions deliverable in primary care facilities could avert a large proportion of deaths.⁴² Even in resource poor settings it is possible to implement and sustain basic PHC services.⁴³

Shifting care across specialist-family physician and secondary-primary care boundaries has been shown to be cost effective without adverse affect on outcomes.^{44 45 46 4748 49 50}

2.2.5. Patient satisfaction

The Euro barometer survey of citizens of 15 EU Member States shows that countries with strong PHC systems tend to have higher public satisfaction with health care.⁵¹ Patient satisfaction with family physicians is strongly influenced by the mode of care delivery, physician style, availability of out-of-hours care, having a named physician, continuity of care and provision of routine screening.^{52 53 54 55}

2.3. Why PHC centred reforms in Kyrgyzstan?

Many of the inherent challenges faced by the Kyrgyz Health System can be addressed if a strong PHC system can be established. In particular, the empirical evidence for PHC effectiveness suggests that health system objectives of improved equity, efficiency, effectiveness and responsiveness can be enhanced with a shift in emphasis from secondary care to PHC.

3. Primary Health Care Reforms in Kyrgyz Republic

In 1992, the Kyrgyz Government introduced a number of key legislations to establish platforms for systemic and holistic health reforms with objectives to: (i) Reduce inefficiencies; (ii) Improve equity and access (financial and geographic), and; (iii) Improve quality.⁵⁶

In 1994, Kyrgyz Government endorsed the 'Health for All Policy' followed by a Memorandum of Understanding between the WHO Regional Office for Europe and the Kyrgyz Ministry of Health to implement a comprehensive Health Care Reform Programme named Manas Health Programme. The same year, in line with the Manas Programme, the Government agreed to implement a Health Insurance Demonstration Project in the Issyk-Kul region supported by ZdravPlus funded by USAID.

In 1994, the Kyrgyz Government approved the National Health Policy, which, amongst others, aimed to: (i) Develop a unified health financing system; (ii) Establish a family medicine centred primary care system; (iii) Downsize the hospital sector through rationalization of a) rural hospitals (SUBs) by closing down, transforming into outpatient facility, or reducing number of beds, b) specialty hospitals by merging with general hospitals, and, Republican Institutions following a detailed study; (iv) Create more equitable resource allocation systems to address the regional and urban/rural inequities which existed.

In 1996, the Kyrgyz Government approved the Manas Health Care Reform Programme and in 1999 revised its Health for All Policy. In 1997, the Mandatory Health Insurance (MHI) scheme was introduced and the autonomous Mandatory Health Insurance Fund (MHIF) established. The MHIF became an agency of the MoH at the end of 1998. The Law on Health Financing was introduced to develop a Single Payer System which integrated: "financial resources for health care from state budget revenues and mandatory health insurance contributions for the purpose of a single-pipe funding of public health services, curative medical services and pharmaceuticals." ⁵⁷

The financing reforms aimed to improve allocative and technical efficiency by changing the provider payment systems based on line-item budgeting to capitated payment to newly established primary care organisations—family group practices (FGPs), case-based payment to hospitals and fee-for-service payment to outpatient specialists.

Changing payment systems required organisational and legal changes, which included: (i) creating providers with increased managerial autonomy, such as stand-alone FGPs or autonomous hospitals able to contract with the MHIF; (ii) Restructuring of PHC to develop FGP units and larger PHC centres with FGPs as structural units; (iii) Rationalization of outpatient polyclinics (for children, adult and women consultation) by establishing multi-profile policlinics, as a first step, to establish FGP centres; (iv) Defining an essential

package of services to be provided by FGPs, and; (v) Developing a referral and counter-referral system.

Official co-payments were introduced with the Single Payer reforms for: (i) Specialist outpatient care both in Family Medicine Centres and Ambulatory-Diagnostic Departments; and (ii) Inpatient care in hospitals.

The Oblast Health Departments were abolished by the Government Resolution in 2000. Abolishment of Oblast Health Departments was part of administrative reforms implemented in the KR., and the responsibility for overseeing oblast health activities has been taken up by an Oblast Health Committees.

Oblast health administrations were abolished in 2000 according to the Kyrgyz Government Resolution. This became a part of administrative reforms implemented in the Republic. Coordination of health organizations at oblast level was imposed on Oblast Coordination Councils.

Two key laws were enacted in 2003; "On the Single Payer System in Health Financing of the Kyrgyz Republic", and; "On introducing amendments and additions to the Law of the KR "On Health Insurance of Population of the KR" stipulating payment of insurance premiums from the republican budget for mandatory health insurance of pensioners. In the same year the "Concept on health financing system reform in the Kyrgyz Republic up to 2006 and health care development up to 2010" was adopted.

The changes in the Laws created an enabling environment for PHC reforms to be introduced, initially as a pilot in Issyk-Kul, and then rolled out to the rest of the country.

Kyrgyz Republic has adopted a comprehensive and multifaceted approach to development of PHC. Following successful pilot in Issyk-Kul the PHC reforms have been rolled out throughout the country. In this development process, the Kyrgyz Government has enjoyed strong support from donor agencies and development partners such as the World Bank, World Health Organisation (WHO), USAID, Swiss Development Corporation (SDC), UK Department for International Development (DFID), Asian Development Bank (ADB) and Japanese International Development Agency (JICA) to introduce a comprehensive PHC reform programme to address key problems and develop an equitable and efficient health system providing high quality services. So far, the collaboration between the Kyrgyz Government, development partners and implementing agencies (such as Abt Associates and STLI) has been exemplary, evolving into an 'operational SWAp' with the partner organisations closely coordinating to ensure complimentary inputs and reduced duplication. (Box 1)

Box 1: Summary of Key Contributions of Development Partners and Implementing Agencies

The World Bank has supported two large health sector development projects with a focus on health financing, restructuring service delivery, public health

WHO has been providing support to the Kyrgyz Government to develop Manas Health Strategy, training key policy makers and, through the DFID-WHO Health Policy Analysis Unit, providing analytical support to the MOH enhance evidence based decisions.

USAID has financed two large health reform projects in Central Asia, implemented by Abt Associates, as well as providing support to initialitives led by AIHA to establoish a Rectors Council to reform medical training in Central Asia.

Abt Associates, with USAID funding, has been implementing a multifaceted reform programme in Central Asia and have supported the design and implementation of the Health Insurance System, have supported training of PHC physicians and nurses, and have implemented advocacy and social marketing programmes to raise awareness amongst the citizens.

STLI have led the raining of PHC physicians and nurses through design of curricula, training of trainers and mentoring local trainers to train PHC professionals. In addition, STLI have supported development of Evidence Based Guidelines in PHC.

SDC have supported highly successful community-focused development programmes in PHC with a particular emphasis on participatory planning and health promotion.

UK DFID is financing, amongst others, Human Resources in Primary Care Project as well as the WHO-DFID Health Policy Analysis Unit Project.

3.1. Organisational Changes

The restructuring of PHC began in 1995 in Issyk-Kul region with the retraining of PHC team members, refurbishment and equipping of FGP centres, and establishment of FGPs throughout the rural community. The reforms were supported by USAID and implemented as part of the ZdravReform Project, led by Abt Associates. By 1996, enough FM teams had been trained for 83 FGP centres which began an enrolment campaign to register patients. The PHC reforms covered rural as well as urban areas. In urban areas the rationalisation of the tripartite polyclinic structure into unified and integrated polyclinics staffed by FGPs began in 1996.

In 1996, the Kyrgyz Government secured World Bank assistance to support the implementation of the Manas Health Care Reform Programme. The fouryear Health Sector Reform Project (1996 and 2000) was designed to extend the PHC reforms to Bishkek and Chui regions. In 1997 and 1998 the PHC reforms supported by USAID and the World Bank were rolled-out to Chui, Jalalabad and Osh regions and Bishkek City. Between 1998 and 1999 the FGP practices in Chui region and Bishkek City began an enrolment campaign. In 1998, partial fundholding was introduced in 14 FGPs in Issyk-Kul region and per-capita payment scheme introduced to FGPs in Bishkek City. In 1999, under the Social Sector Reform Project, the Asian Development Bank (ADB) further extended the PHC reforms to two southern oblasts.

In addition to the FGP Centres, as a compromise, Family Medicine Centres (FMCs) were created to enable the narrow specialists working in urban polyclinics to remain at PHC level. In remote rural areas, FAPs (feldsher-obstetrical ambulatory points), were established to serve populations of between 500-2000 people.

FMCs are large outpatient health facilities staffed by 10-20 specialists. Their scope of services ranges from general care to specialized care and instrumental diagnostics, thus combining primary care services and secondary outpatient care. FMCs are staffed by narrow specialists but also incorporate FGPs.

FGPs are the main providers of PHC, and usually consist of three to five doctors comprising physicians, paediatricians and obstetrician-gynaecologist, three to five nurses, and a practice manager although these numbers vary by region and FGP. The physicians who work in FGPs are those which have been (or are being) retrained as family physicians. There are two organizational forms of family group practices (a) freestanding and autonomous; (b) a unit within FMC. FGPs have to meet licensing and accreditation criteria before they can be contracted by the HIF.

3.2. Changes in Financing, Resource Allocation and Provider

Payment Systems in PHC

As well as regional inequities in resource allocation to regions Kyrgyz health system had significant allocative inefficiency by level of care. In 1994, 7% of the total health care budget was allocated to PHC, increasing to 10.3% in 1995 as compared with 71.7% allocated to hospitals. By 2003, share of PHC had increased to almost 25%, while that for hospitals declined to 56.8% of the total health expenditure. (Figure 2)





Source: Ministry of Health, Health Insurance Fund

Single Payer Reforms were introduced—addressing the fragmentation that existed—following successful pilot in Issyk-Kul. The MHIF and its Territorial Departments now contract PHC providers and pay them for the services they provide to insured persons and those in exempt categories. The MHIF uses payroll tax revenues collected at national level and the TDMHIF uses tax revenues collected at local level.

The payment mechanisms for primary care physicians vary. Those who work in regions that are not part of the FM pilots are paid by salary. The FMCs and FGPs (including FAPs) are paid a capitation fee per user registered with them from TD-MHIF. The per capita fee covers FGP team salaries, basic medical equipment and drugs. A planned move to partial fund-holding is currently being discussed (where family physicians will be given budgets to purchase specialist outpatient services).

The Programme of State Guarantees, also known as the State Guaranteed Benefit Package, for the entire population was introduced in 2000. The Package defines the health services and entitlements of various categories of the population. The Programme of State Guarantees provides free PHC services for all citizens, regardless of their insurance status and enrolment. Referral care for outpatient specialist care and hospital care is provided against co-payment with the exception of certain exempt categories. Citizens not covered under the MHI scheme are subject to higher co-payments for referral services than insured patients.

Citizens insured under the MHIF receive additional benefits of access to an outpatient drug package which provides certain drugs at reduced rates.

The pooled oblast budget funds pay for the full costs of care for persons who are in exempt categories and who do not need to contribute co-payments towards services. The complementary package is funded by the payroll taxes collected by the Social Fund and transferred to the MHIF, and transfers from the Republican budget to the MHIF. (Figure 3)



Figure 3. State Benefits Package

Source: Kutzin, 2003

In line with the Single Payer Reforms, official co-payments were introduced gradually in four waves: initially in Issyk-Kul and Chui in 2001; Talas and Naryn in 2002; Jalalabad and Batken in 2003, and; Osh city and oblast as well as Bishkek City in 2003/04.

The Ministry of Health now sets the level of co-payment based on the copayment policy enacted in 2003.⁵⁸ Co-payment levels for specialist outpatient care vary by type of service provided. For inpatient care patients pay a flat fee per admission. The level of co-payment depends on the insurance status and the service provided. For instance admissions for surgical interventions attract higher co-payment than for diagnosis and treatment. Co-payments made by insured patients, for services (such as outpatient specialist and inpatient care) when referred, are lower than payments made by uninsured patients. Patients who use outpatient specialist and inpatient care without referral make higher co-payments than patients with referral.

Some population groups are fully or partially exempt from paying copayments. Providers receive a higher fee from the MHIF for treating exempted patients. This way, they do not have incentives to favour patients who can afford co-payment. These population groups include low-income pensioners, cancer patients, tuberculosis patients and World War Two veterans. Hospitals set aside a reserve fund to provide exemptions for those who cannot pay.

In addition to the official out-of-pocket payments there are semi-official user charges for consumables (e.g. drugs and medical supplies), unofficial user fees or under-the-table payments, fees charged by private providers of health services for goods and services (the largest category of which are pharmaceuticals). Collectively these constitute over 50% of the total health expenditure.

3.3. Changes in Service Provision

In addition to the State Guarantees, which specify core services to be delivered to the population, there has been a positive movement to enhance the quality of services through development and implementation of evidence based care guidelines. The guidelines also help coordination of primary and secondary care levels by defining thresholds for referrals.

The rationalisation of the tripartite polyclinic structures into unified FGPs and FMCs has created an enabling environment for delivering holistic care for patients, health promotion and prevention activities. The changes in service provision will be analysed in detail in the next chapter.

3.4. Development of Human Resources in PHC

3.4.1. Training of family physicians

Family medicine (FM) was established as a specialty in Kyrgyzstan in 1997 as part of the PHC reforms and FM training has been successfully introduced in Kyrgyzstan since 1998.

National efforts, supported by international technical assistance, aimed to institutionalize FM training at five levels: (1) undergraduate training for medical students; (2) post-graduate training—a two-year FM residency for doctors graduating from medical school; (3) Retraining programme for physicians practicing as general practitioners; (4) continuing medical education (CME) for FM teachers, and for practicing family doctors and nurses (5) and a bachelors degree program for PHC nurses.

Several short training programmes were developed initially to start the process of training in FM. These short programmes were gradually extended as retraining courses and specialist FM residency programmes for doctors and a Bachelors programme for nurses.

A one-year training of FM trainers (TOT) programme was introduced in 1997 comprising both theoretical and practical elements and delivered initially by US-trained family physicians and supported by USAID and the World Bank. The trainers have been trained at the Centre for Continuous Medical Education in Bishkek. Most of the trainers who have completed training now work either in the national network of Family Medicine Training Centres associated with the Centre of Continuous Medical Education or for the Kyrgyz Medical Academy. By 2003, a total of 63 doctors were trained as FM trainers.

An excellent four-month programme to retrain doctors working in PHC as family physicians was introduced in 1998 with support of USAID (through Zdrav Health Reform Project) and the World Bank. The programme is practical in focus and the training content reflects local needs: and was developed with considerable input from local trainers with mentoring by US trained family physicians. The training is delivered mostly by local FM trainers but with occasional direct involvement of US-trained family physicians. In addition, a two-month retraining programme has been developed for nurses.

In 1998, separate FM residency programmes started at both the Kyrgyz State Medical Academy and at the Centre for Continuing Medical Education in Bishkek. Both of these programmes relied heavily on specialty rotations in hospitals and had a high dropout rate. In 2001, with the help of ZdravPlus and AIHA, these two institutions created a joint national FM residency programme in Bishkek. The programme is designed for 50 residents per year. In both 2003 and 2004, 42 residents graduated from the programme. The number of new applicants to the programme has declined since then, probably due to the low status of family physicians, and uncertainty around adequate income levels on graduation from the programme. The residency training programme was expanded to Osh in September 2004 and has 23 residents in the first class: equal to that in Bishkek.

To date, over 2,200 doctors have been trained as FM specialist in the fourmonth retraining programme for doctors who work in PHC. The training, which began in Bishkek, Issyk Kul and Chui regions in 1998 have been successfully expanded to Osh, Batken, Jalalabad, Narin and Talas regions and is projected to reach over 2,700 family physicians and 4,000 nurses by the end of 2005. (Figure 4 and Figure 5)



Figure 4. Number of Doctors Retrained as FM Specialist

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Figure 5. Number of Doctors Trained as FGPs (Cumulative) by region

By the end of 2004, around three fourths of the primary care physicians and nurses in the country were retrained as family physicians and FM nurses. The focus of training in FM is now shifting to improving and expanding a national continuing medical education programme (CME) for family physicians and for FM nurses. The 1000 doctors and 1400 nurses currently involved with the CME system receive ongoing training on an annual basis from the FM trainers associated with the Centre of Continuous Medical Education. This new CME system, which began in Issyk-Kul Oblast in 2001, was expanded in 2004-2005 to include 3 pilot rayons in Osh and Chui Oblasts, and all the FGP doctors in the other oblasts. In 2005, a similar CME program will begin for the FGP doctors in Bishkek and Osh cities.

3.4.2. Training of nurses

Retraining nurses in family medicine started in 1998. Nurses are a critical part of the new FGP model, which encourages teamwork and a broader role for FM nurses. Prior to introduction of FM reforms the nurses had a very basic role—acting as assistants to doctors with very limited competence level and had very little motivation or incentives for independent practice. They did not have access to basic equipment that would allow assessment and preparation of patients independently prior to their consultation with doctors or performing triage function. However, the training programs aim to improve the competence base of nurses to enable them to extend the scope of services they provide as part of the FM team.

A one-year training of nurse trainers began in 1997. The training is delivered at the Kyrgyz Postgraduate Medical Institute and is supported by ZdravPlus Project funded by USAID. By 2003, 64 nurses were trained in program as FM nurse trainers. As with the TOT programme for FM doctors, TOT program was extended to nurses from the neighbouring countries to train eight nurses from Tajikistan, six from Kyrgyzstan and three from Uzbekistan. In 1998, the Postgraduate Medical Institute began a programme to retrain nurses working in PHC level as family nurses to work in FGPs. The FM nurse trainers who have been trained work in Family Medicine Training Centres in regions and are involved in the programme of retraining FGP nurses in villages and cities. Between 1998 and 2004 a total of over 3,200 nurses have been trained as FM nurses. (Figure 6) The cumulative target, by the end of 2005, is to train 3,700 nurses.



Figure 6. Number of nurses trained as FM Nurses (cumulative)

The nurse training started in Issyk Kul and Chui regions and gradually extended to others. The trained nurses are well distributed in all the regions. (Figure 7)

Figure 7. Number of Nurses Trained (1998 to 2004 by region)



The increase in the number of FM specialist and the number of trained FM nurses is against a backdrop of declining number of physicians and nurses in Kyrgyzstan as a whole.

3.5. Development of Professional Associations

The Association of Family Doctor Groups and the Association of Hospitals were established in 1997. The Association of FGPs have a limited role licensing and accreditation activities but play an important advocacy role to inform key stakeholders at different levels on the benefits of reforms. The Association of Family Doctor Groups is active in lobbying parliamentarians.

The FGPA closely cooperates with the MoH in development of health laws and participates of issues related to activities of PHC providers. And also plays an important role in disseminating information on health reforms to family physicians and FGP nurses by training health facilities staff, through their web-site, bulletins and other publications, as well as conferences.

In 2003 the FGPA became a member of the World Family Doctors Association (WONCA).

3.6. The Population Link

As a result of the PHC reforms, the citizens, who were previously assigned to a district physician according to their place of residence, now have a choice of family group practices in urban areas but in rural parts, due to a limited number of providers they are assigned to a FGP within the rayon catchment boundaries. Citizens can change practices at each annual registration period. Practices which attract more patients receive more capitation funds, and hence have an incentive to provide high quality and user friendly services to attract users.

There are good examples initiatives which have succeeded in engaging the community at local level in decision making related to PHC. For instance, the Kyrgyz-Swiss Health Reform Support Project has undertaken studies to ascertain user perspectives on health care services⁵⁹, co-payment policy⁶⁰, as well as access and quality of PHC.⁶¹ The Kyrgyz-Swiss Health Reform Support Project has successfully developed a model which aims to empower communities to take control over various social, economic, and medical determinants of health in order to improve health status. The project builds community participation in decision making and priority setting. This model of health promotion through community action (Jumgal Model) enables rural communities themselves analyse their health priorities and establish health committees to work voluntarily to improve health in their villages. The model has established a process whereby the health problem in the village by people themselves, facilitated by trained FGP/FAP staff, then through community action involving the health committee to address these. Several health promotive activities have been successfully implemented.⁶²

The organisational and PHC reforms have also led to more inclusive decision making in the health system. Now, within each region, there are a large number of stakeholders involved in decision making, including: (i) The oblast governor; (ii) Oblast Supervisory Board; (iii) Territorial Department of the Mandatory Health Insurance Fund (TD-MHIF); (iv) Oblast Merged Hospital

(OMH) responsible for inpatient care; (v) Outpatient Department (OPD) of the hospital; (vi) Oblast Sanitary Epidemiological Service (SES); (vii) Oblast Health Promotion Centre; (viii) FMC, and; (ix) Oblast Medical Information Centre.⁶³

At the rayon level a similar stakeholder grouping exists with: (i) an Akim (head of the rayon); (ii) Territorial Hospital (TH); (iii) OPD; (iv) FMCs including FGPs; (v) Rayon Sanitary Epidemiological Services; (vi) Rayon Health Council, which is a grouping of the Village Health, and; (vii) Councils Interdepartmental emergency and anti-epidemic commission.

At the village level the key stakeholders involved in decision making comprise: (i) the head of a group of villages (Ayil Okmotu); (ii) FGPs which have direct contracts with the TD-MHIF; (iii) FAPs, staffed by feldshers and/or nurses/midwives; (iv) Village Health Councils in Naryn oblast.⁶⁴

4. Impact of PHC Reforms on Service Delivery and Health

System Objectives

4.1. Access to Primary Health Care

4.1.1. Coverage

As a result of the health reforms coverage and access to PHC has increased. The State Guaranteed Benefits Package offers free PHC services for all citizens, regardless of their insurance status and enrolment, as part of the. Citizens that are insured under the MHIF receive additional benefits at PHC through access to an outpatient drug package which provides certain drugs at reduced rates. Additionally, insured people get lower co-payment for referral care.

The MHIF coverage has expanded since 2001 and now covers around 80% of the population.

In 2003, 98.2% of the population was enrolled with a FGP although the enrolment rate varied by region. (Figure 8)



Figure 8. Number of people enrolled with FGPs by region in 2003

Although in 2003 around 18% of the population had no health insurance, almost 100% of the population insured by the MHIF were registered with an FGP.

Between 2001 and 2003, the number of persons registered per FGP increased from 6,200 to 7,900. In the same period, the number of family physicians and nurses per FGP increased from 3.1 to 4 doctors and from 1.2 to 1.4 nurses.

4.1.2. Accessibility

There is good accessibility to PHC centres except in rural and mountainous areas where access can be very difficult. Primary health care facilities are located close to patients' homes, with a median distance of 1-2 km. For most patients (73%) the travel time to the nearest health facility is less than half an hour.⁶⁵

Examination of utilization patterns by socio-economic status reveals that the equality of utilization rates of primary and outpatient specialist care has significantly improved over the 2000-2003 period. Figure 9 below summarized this finding. The dark line shows the distribution of outpatient visits (primary care + outpatient specialist care) by expenditure quintile. It shows that in 2001, the richest 20% of the population used outpatient services twice as frequently as the poorest 20% of the population. There was significant socio-economic inequality in the distribution of utilization. By 2003, the overall visit rate has dropped but it dropped uniquely among the richer half of the population. The poorest quintile experienced no change in their rate of visits, and we see a significant increase in visit rate for the second income quintile. On the whole, the distribution of utilization is showing a remarkable increase in socio-economic equality over the time-period. (Figure 9)



Figure 9. Distribution of visits (primary care + outpatient specialist)

Source: Jakab et al. 2005. (Jakab et al.2005 "Who benefits from the Kyrgyz Single-Payer System: Analysis of the incidence of Public Expenditures" Forthcoming)

4.1.3. Affordability of health care

A key feature of the Kyrgyz health reforms is that primary care is free for all Kyrgyz citizens regardless of their insurance status. This policy is a great contribution to an affordable health system. People, however, have to pay a co-payment for outpatient specialist care provided in FMC's and hospital outpatient departments. Insured citizens receive drugs in the Additional Drug Package at a lower price if purchased in those pharmacies that have a

contract with the MHIF. In this section, we examine how these changes in the price of care have affected affordability of primary care.

In the early transition phase, there was no significant evidence that informal payments were widely used in primary care settings. In recent years, however, there is increasingly stronger anecdotal evidence that informal payments are on the rise in primary care, in particular, in urban areas.

We examine this claim using household survey data from 2000 and 2003. Figure 10 below summarizes our findings. The amount paid per outpatient visit is very low. In 2000, 30 soms were paid on average for a visit which increased to 50 soms or by 37% by 2003. This amount includes both informal payment as well as formal co-payment for specialist care. This amount is low and is unlikely to be a deterrent to using primary care. The growth rate is significantly below the overall growth in out-of-pocket payments over this time-period which amounted to 50%.

On the other hand, outpatient drug expenditures show a more marked increase over this time-period. In 2000, individuals paid 50 soms on average for a prescription and this amount has increased by nearly 60% to 80 soms by 2003. As discussed by Jakab and Temirov in HPAP Policy Research Paper #29, expenditures on pharmaceuticals are the fastest growing component of out-of-pocket health expenditures. Although the 50-80 soms per prescription does not appear large, for households with chronically ill members, the costs can be a high financial burden. This issue merits further investigation. (Figure 10)



Figure 10. Out-of-pocket payments per visits and per prescription

Source: HBS 2001, KIHS 2004; WHO staff calculations

4.2. Primary Health Care Service Delivery

A recent evaluation of FM reforms in Kyrgyzstan funded by the Word Bank which surveyed 100 PHC units and 200 doctors in Issyk-Kul, Bishkek and Osh regions (advanced, intermediate and early reform regions).⁶⁶ The study found

that all the FGP units surveyed provided general medical services, general paediatric services, paediatric development checks and immunization with around 90-98% providing antenatal, family planning and health promotion services. Immunization services for triple vaccine, oral polio and measles vaccine were provided in all the PHC units surveyed and all the practices reported having appropriate cold chain facilities.

Over 90% of the FGPs surveyed provided services for common chronic conditions: namely, diabetes mellitus, asthma, chronic heart disease and hypertension. The FGPs in advanced reform region were more likely to provide mental health services (88%) in comparison with intermediate and early reform regions. This difference was statistically significant. Almost all the FGPs provided services for managing acute respiratory and diarrhoeal illness. Around 80-90% of the FGPs provided services for tuberculosis and sexually transmitted illness but only around 30-40% provided services for HIV patients.

Essential medical equipment, commonly used in PHC, was present in most FGPs. Most FGPs had essential drugs used in the management of acute emergencies commonly encountered in PHC.

Evidence-based clinical guidelines on management of common conditions and guidelines for Integrated Management of Childhood Illness and Directly Observed Therapy for tuberculosis were more likely to be used in FGPs from advanced reform region as compared with intermediate and early reform regions.⁶⁹

4.2.1. Task Profile of Doctors Working in Primary Care

Family physicians and doctors working in PHC did not frequently perform many procedures commonly done by family medicine specialists in Western European countries and North America. In Kyrgyzstan these procedures were done by narrow specialists such as ENT surgeons, general surgeons, orthopaedic surgeons, and ophthalmologists. Family physicians and PHC doctors in Issyk Kul were more likely to use medical equipment as compared with family physicians from less advanced reform regions.⁶⁹

4.2.1.1. First contact management of commonly-encountered

conditions

The PHC doctors interviewed were presented with a list of 27 health problems commonly encountered in PHC and for which the family physicians would be expected to act as the first contact point and manage the problem. The family physicians in Issyk Kul acted as the first point of contact and managed these problems more frequently than those Bishkek and Osh regions. These differences were statistically significant.⁶⁹

4.2.1.2. Health Promotion and Disease Prevention

Assessment of the extent and nature of involvement of PHC physicians in health promotion and disease prevention showed differences between regions with doctors in Issyk Kul more likely to be involved in health promotion and disease prevention activities as compared with those from Bishkek and Osh.

Family physicians from Issyk Kul and Bishkek (80-85%) were more likely to be involved in opportunistic health promotion activities as compared with PHC doctors from Osh (50-55%) and these differences were statistically significant (p<0.001).

As regards health education and prevention activities for children, there was a statistically significant difference (p<0.01) in the proportion of doctors providing immunization and developmental surveillance activities: with over 90% of the doctors participating in Issyk Kul and Osh and only 50-60% in Bishkek—presumably reflecting the reluctance of the retrained therapeutists and gynaecologists to look after children when sub-specialists are readily available.

The proportion of PHC doctors providing family planning, antenatal and intrapartum care varied. Family physicians from Issyk Kul were more likely to provide these services than those from Bishkek and Osh. The difference between Issyk Kul and Bishkek was statistically significant. (p<0.01) Only a small proportion of doctors (30-45%) provided intrapartum care.⁶⁹

4.2.1.3. Chronic Disease Management

Family physicians from Issyk-Kul were more often involved in managing 17 common chronic conditions, which are frequently managed in PHC setting in OECD countries, as compared with doctors from Bishkek and Osh. The differences in involvement were statistically significant (p<0.01). These conditions included, inter alia, ischaemic heart disease, heart failure, diabetes mellitus, chronic bronchitis, pneumonia, rheumatoid arthritis, depression, cerebrovascular accident, ulcerative colitis and peptic ulcer disease.⁶⁹

4.2.1.4. Job satisfaction

A large majority of the doctors interviewed strongly or more-or-less agreed that they were interested in their work and also found real enjoyment. This proportion was similar for family physicians in Issyk Kul and doctors from Bishkek and Osh and differences were not statistically significant.

Only 30-50% of the doctors surveyed thought the degree of effort and the reward corresponded. A similar proportion thought that much of their effort was wasted. A large majority of the doctors strongly or more-or-less agreed with the fact that their work is overloaded with unnecessary administrative duties. Most of the doctors, if they had the opportunity, would leave their posts and would do non-medical work.⁶⁹

4.3. Impact of expanded service delivery on PHC functions

The available Health Insurance Fund data, for the period 2001 to 2003, on referrals and admissions were analysed, to explore whether Family Medicine Centred PHC has attained or improved key functions, such as: first contact management of patients, gatekeeping, comprehensiveness and continuity.

4.3.1. First contact and gatekeeping functions

The analysis focused on the aggregate number of referrals by FPs to hospital outpatients (as a proportion of total referrals) and 'avoidable hospitalizations' for common acute clinical conditions, which are expected to be managed in PHC setting by family physicians—for instance, admissions for acute ear nose and throat (ENT) problems, urinary tract infections (UTI) and lower respiratory tract infections in children (LRTI).

The results clearly point to enhanced gatekeeping and first contact functions of PHC as a result of introduction of family medicine and a substantial secondary to primary shift. In the period 2001 to 2003, the number of referrals per person registered with FGPs, and the FGP initiated admissions declined as a proportion of total hospital admissions, indicating enhanced gatekeeping function. (Figure 11 and Figure 12)

Figure 11. Number of hospital referrals per person registered with FGP



Figure 12. FGP initiated admissions as a proportion of total hospital admissions (2001-2003)



In the same period, the number of hospitalisations for patients registered with FGPs as compared with total fell: indicating enhanced capacity of FGPs to resolve problems at PHC level. (Figure 13)

Figure 13. Hospitalization of Patients Registered with FGPs as a % of Total Admissions



Significantly, analysis of the HIF data also demonstrates that FGPs are more effectively managing key common acute conditions in PHC setting. In the three-year-period of analysis, the total number of referrals and the referral rate for LRTI and ENT declined by almost 50 percent.⁶⁹ (Data not shown)

4.3.2. Continuity and Comprehensiveness of Care: Management of Common Chronic Conditions

In line with expanded provision of services to manage acute conditions, family physicians have also successfully expanded the scope and scale of services for managing common chronic illnesses. For most of these chronic illnesses evidence-based guidelines have been introduced to increase management within PHC setting and reduce referrals to hospital—hence enhancing continuity and comprehensiveness function of PHC.⁶⁹

The impact of this expansion of services is clearly reflected in management of hypertension, non-insulin dependent diabetes mellitus, asthma, peptic ulcer disease, anaemia and heart.

For instance, anaemia, which is prevalent in pregnant women and which contributes substantially to maternal mortality, despite an increase in the number of persons with anaemia registered with FGPs, the number of referrals has more than halved. (Figure 14)



Figure 14. Number of referrals per person with anaemia

Similarly, the number of hospital referrals for peptic ulcer disease, where previously patients were managed by surgery, declined by over 30 percent. (Figure 15)

Figure 15. Number of FGP hospital referrals for peptic ulcer disease



In line with anaemia and peptic ulcer disease, the number of FGP referrals for asthma has declined by over 30 percent (Figure 1616), while the number of hospital admissions per 1000 asthma patients declined by almost 50 percent. ⁶⁹ (Data not shown)

Figure 16. Number of FGP hospital referrals for asthma



A large rate of decline is also witnessed in the number of referrals by FGPs for ischaemic heart disease, which diminished by over 50 percent. (Figure 17)

Figure 17. Number of referrals by FGPs for ischaemic heart disease



In the same period, the number of hospital admissions for IHD declined by around 40 percent. ⁶⁹ (Data not shown)

As with management of ischaemic heart disease, FGPs have also enhanced the management of hypertension, where the number of hospital referrals per 1,000 registered patients has substantially declined, by almost six fold. ⁶⁹ (Figure 18)



Figure 18. Number of FGP referrals for hypertension

The number of hospital admissions for hypertension per 1,000 patients registered with FGPs declined almost five fold. ⁶⁹ (Data not shown)
The management of non-insulin dependent diabetes mellitus patients has also shifted to FGPS. In line with other common chronic conditions, the number of referrals to hospital declined three fold. (Figure 19)



Figure 19. Number of FGP referrals for NIDDM

The number of admissions for NIDDM per 1,000 patients registered with FGPs declined almost three fold. ⁶⁹ (Data not shown)

The results of the analysis clearly show enhanced first contact, gatekeeping and comprehensiveness functions of PHC in FGPs, as compared with PHC providers staffed by non-specialist PHC doctors. There is a clear secondary to primary shift with a substantial decline in the number of referrals and hospital admissions for the key common acute and chronic conditions which should be managed in PHC setting.

The results confirm the positive benefit of FM centred PHC, with expansion of the scope and content of services within PHC level despite a common framework prescribed by centrally set normatives which emphasise standardisation. This improvement in key PHC functions has, in turn, led to diminished hospital referrals and admissions—thereby increasing the efficiency and effectiveness of the health system.

5. Key Achievements of PHC Reforms

Despite a resource-constrained environment and the socio-economic shocks of the transition, the achievements of PHC reforms in Kyrgyz Republic are remarkable. FM reforms have, until recently, enjoyed strong high-level support and the Kyrgyz Government has been particularly successful in collaboration with key donor agencies and development partners, including the World Bank, WHO, USAID, SDC, UK DFID, ADB and JICA, which have significantly contributed to the development process. The collaboration between the Government, donor agencies and implementing organisations, such as Abt Associates which has led ZdravPlus Programme, has been exemplary. This collaboration has led to the emergence of an 'operational SWAp' with coordinated inputs into the development process.

The results clearly point to expanded scope of services in PHC level in areas where trained family physicians predominate. There is strong evidence of enhanced gatekeeping, first contact, continuity and comprehensiveness functions of PHC as a result of family medicine centred PHC reforms. There is a substantial secondary to primary shift. User satisfaction has also increased.

5.1. Organizational and regulatory changes

Several laws have been enacted and regulations passed to create an enabling environment for FM and PHC reforms. FM is recognized in Law.

The tripartite, paediatric, women's and adult clinic system has been consolidated into unified PHC centres, which now provide services for all citizens—enhancing continuity of care and improving efficiency.

New PHC provider organisations have been established: FGPs, with autonomy to manage budgets and contract with the MHIF, and FMCs comprising FGPs and narrow specialists. The autonomy provides an opportunity to improve micro efficiency of these providers and creates an enabling environment for innovation to occur.

The scope and content of FGP services have been articulated in law and defined in detail in the State Guaranteed Benefits Package, ensuring equitable and 'free' access to citizens for PHC services.

The gatekeeping function of PHC has been established with FGPs acting as the first point of contact for patients. The positive benefits of first contact and gatekeeping function is demonstrated by reduced rates of referral and admissions for key acute and chronic illnesses—thereby improving efficiency and effectiveness of the health system through diminished 'unnecessary hospitalisations'.

A large number of PHC centres have been refurbished. Users have been given the freedom to choose or change their family physicians. This creates a

more conducive environment for the users to access services—with a positive benefit on responsiveness and continuity objectives.

An accreditation system has been developed and a number of PHC and hospital facilities have been accredited. This helps maintain quality levels in the system and helps enhance equitable provision of PHC services to citizens by ensuring even standards throughout the country.

5.1.1. Governance: empowering the users

Both ZdravPlus Project and the SDC supported Kyrgyz-Swiss Health Reform Support Project have supported extensive grassroots activities to enhance user's understanding of the reforms in general but in particular to develop the knowledge of users on their rights and choice, State Guaranteed package of Services, PHC reforms and official user charges.

Through innovative work supported by the SDC, users have been able to directly participate in identifying needs of their local communities, setting priorities and developing community-led public health interventions.

Additionally, the Health Policy Analysis Unit, supported by WHO and UK DFID, SDC and ZdravPlus have undertaken surveys to explore user perceptions of PHC reforms and co-payment policies to inform policy level. For instance, surveys undertaken in Issyk-Kul and Chui Oblasts, following the introduction of official co-payments scheme, have demonstrated that the proportion of patients paying for services and the amounts paid were less than those levels observed prior to the scheme. The policy was generally well received. Users reported paying less for services than previously and being able to plan health expenditure as well as observing a change in the quality of services.^{67 68}

5.2. Financing, resource allocation and provider payment systems

Mandatory Health Insurance has been introduced, with formal co-payments: providing additional resources to the health system but also creating a transparent environment as regards payments to health service providers. There is empirical evidence demonstrating the benefits of the new system for the users but especially the poor.

A key achievement of the Kyrgyz reforms is the introduction of the Single Payer System which has pooled all sub-national budget funds for health care (from oblast, rayon and city tax revenues from local finance departments) in the TD-MHIF as a "single-pipe funding for public health, curative services and pharmaceuticals" to fund the State Guaranteed Benefits Package.

New provider payment methods have been successfully introduced in the all regions for FGPs, based on simple per capita mechanism. Per capita payment mechanisms are much more equitable way of allocating resources to

PHC level, as compared with budgets based on historic activity, provider activity or historic input levels. Per capita payment mechanism establishes an excellent platform for need-based resource allocation methods to be introduced through incorporation of 'weights' or 'coefficients' —reflecting determinants of need—to the simple per capita formula.

Direct and indirect contracts have been introduced for FGPs, including partial fundholding for pharmaceuticals. Contracts provide an opportunity to the purchasing authorities to become 'strategic purchasers' to develop care packages that reflect the need of the country but also to continually improve the quality levels in provider institutions through modification of the contract specifications and introducing quality/outcome based targets, with appropriate incentives.

5.3. Service Provision

PHC reforms have helped improve equity of access in the Kyrgyz health system. There is excellent coverage of immunisation and widespread provision of essential PHC services in all regions.

At the stage of pilot introduction of FGP model in separate regions the scope and content of services have significantly expanded. The survey of scopes of health services shows statistically significant differences in the application of medical techniques, use of equipment, management of first contact illnesses, as well as management of chronic conditions by FGPs in advanced reform regions as compared with intermediate and early reform regions.⁶⁹

The facility survey shows the service profiles in advanced, intermediate and early reform regions to be very similar due to ministerial decrees and standard contracts which specify a common set of services for PHC units throughout the country. The results clearly point to expanded scope of services in PHC level in areas where trained family physicians predominate. There is strong evidence enhanced gatekeeping, first contact, continuity and comprehensiveness functions of PHC as a result of family medicine centred PHC reforms.⁶⁹

There is strong evidence from the analysis of the MHIF data demonstrating a shift from secondary to primary level with a decline in the number of hospital referrals for key acute and chronic conditions that are typically managed in PHC setting. Unfortunately, baselining for referrals and admissions at start of reforms was not robust enough to undertake pre- and post-intervention comparisons by oblast or unit level.⁶⁹

Evidence based care guidelines have been introduced for 162 conditions commonly encountered in PHC. FGP teams have been trained in adoption and implementation of evidence-based guidelines. This will help further enhance the quality of PHC services delivered, reduce unnecessary interventions and diminish referrals to hospitals. There is strong evidence from qualitative research undertaken as part of the World Bank financed FM Evaluation Study that the new FM model is welcomed by the users and health professionals who identify many benefits, which amongst others include: user-centredness of the model and having a named doctor, user choice, more comprehensive services, empowerment of FM team and an increased emphasis on teamwork.⁶⁹

5.4. Resource Generation

A critical mass of FM specialists and nurses has been trained in the shortcourse retraining programmes with support from ZdravPlus Project, STLI, Swiss Development Corporation and the World Bank. The number of family doctors and nurses trained meet 60-70% of the requirement for the country as a whole. Although a FM specialist residency programme has been established the number of residents on this programme is small. An able cadre FM and nurse trainers have been trained in ToT programmes and many of these trainers are now involved in retraining of doctors and nurses.

The standing of family physicians amongst the population and health professionals has been enhanced through effective advocacy activities of the FGP Association and the ZdravPlus Reform Project.

A critical mass of middle and senior level managers and health professionals were trained early in the reforms with exposure to international experience and have emerged as key members of the Manas team and occupied senior positions within the health system. The World Bank, WHO and ZdravPlus, amongst other, have supported initiatives to train senior policy makers and provided support to the MoH Health Reform Unit in policy development and analysis. The Health Policy Analysis Unit, established as part of the Manas Health Reform Programme with support from WHO-Euro, UK DFID and Kyrgyz MoH, works as a closely integrated arm of the MoH providing critical intelligence on PHC reforms to the MoH Health Reform Unit on key issues to enhance evidence based policy making.

A joint World Bank and WHO supported Flagship Programme have been successfully implemented to train senior managers on health system development.

Many PHC professionals and managers have been trained in Evidence Based Medicine, guidelines development and implementation by ZdravPlus and STLI. This training has created local capacity to develop evidence-based guidelines for over 160 common conditions which have subsequently been adopted by the Kyrgyz Government for use in PHC setting.

6. Key Challenges for Manas II

There is no doubt that PHC reforms in Kyrgyz Republic have been remarkably successful and evolved rapidly. However, further legislative changes are needed to sustain the reforms and support the next second major phase of development.

There is a need (a view shared by key stakeholders) to accelerate the pace of reforms in a number of areas, in particular: (i) Further broaden the role of FGPs and the scope of services they deliver; (ii) Build on the payment mechanisms, contracts and the autonomy afforded to the PHC providers to introduce more flexible contracts with incentives to improve performance, quality, and provide additional services—especially to expand health promotion, prevention and extended PHC; (iii) Increase remuneration for FGPs and FM nurses trained as specialists; (iv) Further refine resource allocation taking into account need and equity of access, to allocate necessary resources to rural and poorer areas with higher health needs; (v) Expand further the adoption and implementation of evidence-based care guidelines; (vi) Change reporting mechanisms which reinforce the old tripartite model and hinder unified service provision.

6.1. Organisational and regulatory issues

6.1.1. Provider structures

The tripartite provider system at PHC level has given way to new PHC units with unified service provision to all citizens. However, at FMCs, continued presence of narrow specialists, who can be accessed directly by patients, fragments first contact and gatekeeping functions of PHC, hinders continuity of care, discourages many family physicians to enhance their scope of services and encourages them instead to cross-refer, prevent emergence of holistic care, and duplicate the role of hospital outpatient departments.

Hence, given the potential adverse effect on development of PHC, the FMCs should be gradually converted to FGP centres, staffed by FM specialist only. The narrow specialists working at FMCs should either be transferred to hospital outpatients or retrained as FM specialists.

6.1.2. Reporting Systems

The development of new reporting systems at PHC level has not progressed at the same pace as the PHC reforms. The reporting systems at PHC level require returns by sub-speciality. This encourages narrow specialists which have been trained as FM specialists not to change their practices but continue to practice their narrow speciality. Further, presence of guidelines, which require screening of new-born and older children, pregnant women, workers, and conscripts by narrow specialists, further reinforce this practice and is used as an argument to maintain narrow specialists in PHC. These tasks can be usefully devolved to FM specialists.

6.1.3. Governance and accountability

Studies and surveys undertaken by the Swiss–Kyrgyz Health Reform Project, WHO/DFID Manas Health Policy Analysis Project and the MHIF have demonstrated clearly that the introduction of transparent formal user fees has had a positive impact on the extent of informal payments, reduced extent of corrupt practices and benefited in particular the poor. User fees are now formally made to institutions against outputs and services rather than to individual health professionals. Clearly this is desirable and efforts should be made to further enhance this transparency through effective education of the users.

The income from co-payments has been reinvested in the PHC centres to augment salaries and for salary of health professionals and for supplies. Mechanisms, such as fundholding, which can encourage shift of funds in a transparent way from secondary to PHC through substitution of services, can be used to further augment the income of PHC level to address issues relating to who have low salaries and incentives.

6.2. Financing, Resource Allocation and Provider Payment Systems

6.2.1. Level of funding for the health sector

Since 1996, the level of funding for the health sector has been declining. Contributions to health sector from both the Republican and Oblast budgets have consistently declined from 28.4% of the total Oblast budget in 1996 to 22.1% in 2003. Similarly, the expenditure for health from the Republican budget, as a proportion of the total, has declined from 13.5% in 1996 to 8.5% in 2003.⁶⁹ Consequently, the health expenditure, as a proportion of GDP has declined from 3.1% in 1996 to 2.1% in 2003. In addition to the budget allocation, problems with budget execution exist: with budget sequestration and budgets not being allocated for use.⁷⁰

The Kyrgyz Poverty Reduction Strategy Paper highlights the need to invest in health to alleviate and reduce poverty in Kyrgyzstan. In line with this strategy and to sustain the successful reforms it is critical that the health financing is maintained at levels enjoyed in late 1990s.

6.2.2. Equity and allocative efficiency

FM reforms have been successfully introduced to all regions and now cover majority of the insured population. However, in addition to declining funding,

major inequities in distribution of financing: as regards funding levels to regions (due to excessive resources allocated to Republican Hospitals) and access to services (for instance as the poor cannot travel to Bishkek to attend tertiary care facilities) exist due to inequitable resource allocation to regions which favour urban regions at the expense of rural ones. For instance, per capita health expenditures by region can vary fivefold—with Bishkek attracting the highest per capita levels and poorest oblasts (Batken, Naryn and Talas) the least, hence creating reverse gradients in the system.^{71 72}

The next phase of reforms should further increase the emphasis on developing resource allocation mechanisms which take into account poverty and health needs.

The World Bank Health Sector Reform Project-2, is supporting the development and adoption of a new methodology for calculating categorical grants which include poverty, age and gender as adjusters. It is expected that the legal framework allowing this will be passed in 2005.

Allocative inefficiencies between levels of care and type of institution persist. The Republican Hospitals in Bishkek consume a significant proportion of the health system budget and establishment of mechanisms to rationalise these institutions and reallocate funds to PHC is now well overdue. The next phase of reforms should explore how further efficiency savings can be made, for instance through rationalisation of republican facilities, to release resources which can be reinvested in the health system to support salaries of health professionals

6.2.3. Provider payment systems

Transparent payment mechanisms based on anticipated volume of work (per capita financing in PHC) and outputs (fee-for-service) in the hospital sector has replaced the inefficient mechanisms based on historic activities and inputs. The public sector budgeting process for health system, at Republican and Oblast levels, need to be modified to reflect the new payment systems and refined further to reflect current and future need.

6.2.4. Incentives

Limited incentives and poor salary levels of FM specialists are two major problems that need addressing in the next phase of reforms.

Although the new payment mechanisms do provide incentives and establish an excellent platform on which to build, there needs to be stronger indication that FM is valued on par with hospital specialties. For instance, a visible salary differential between GPs and FM specialists would send a strong signal that FM is valued. Given the expanded competence base of family physicians and improved management of common conditions, as demonstrated by the task profile survey, as well as the referral and admission patterns, performance related incentives—emphasising enhanced quality, expanded services and improved outputs—need to be introduced in PHC. This will reinforce the policy commitment to quality and improved performance and encourage further development of PHC.

6.2.5. Flexible contracting

Existing legislations should be modified to allow more flexible contracting and afford greater autonomy to PHC providers to encourage emergence of new organisational forms — such as networks of FGPs with greater planning and service delivery capacity which can develop flexible patterns of service provision to enhance secondary-to-primary shift.

6.3. Service Delivery

Although an effective FM-centred PHC system is being introduced in Kyrgyzstan, the incentives to achieve a substantial secondary-to-primary shift can be expanded. This limits the ability of PHC level to develop extended primary care and strengthen its roles beyond gatekeeping, namely continuity and comprehensiveness functions.

Presence of narrow specialists at PHC level, which can be accessed by citizens, is a major barrier to achieving an extended PHC model. In all FMCs direct access to narrow specialists and cross referrals between these fracture gatekeeping, continuity, comprehensiveness and coordination functions of PHC. Stronger referral and counter-referral systems should be introduced to limit access to narrow specialists without referral from FM specialists.

Vertical integration needs to be enhanced through further development of the evidence based guidelines by emphasising continuity and development of a care continuum through use of integrated care pathways.

The platforms established during Manas I (such as autonomous FGPs, contracts, per capita payment system, partial fundholding) provide excellent basis to further develop PHC to achieve further secondary to primary shift — by expanding the scope and content of services provided and by further strengthening gate keeping function. Partial fundholding, which has been successfully introduced, can be further extended to encourage innovation, improve quality and achieve cost-efficiency.

6.4. Resource Generation

A successful retraining programme for doctors and nurses in PHC has been introduced with technical assistance from STLI team, supported by ZdravPlus and the World Bank. This training has trained almost 75% of FM specialists and FM nurses for Kyrgyz Republic. However, as with financing and access, inequities exist between urban and rural areas in the distribution of trained FM specialist and FM nurses. While in urban areas the number of registered citizens per FGP physician is 1500, in rural areas there is a net shortage.

Consequently, in some remote areas the number of citizens per FGP physician can reach between 10-12,000 persons.⁷³

Presence of narrow specialists in FMCs is adversely affecting PHC function. Manas II should ensure that adequate technical assistance is provided to retrain the narrow specialist working in FMCs as FM specialists. These doctors can work as FM specialists but can also provide additional services as a 'Family Physician with Special Interest'—a model recently adopted in the UK National Health System which enables these physicians to provide additional services (in addition to essential services stipulated by the contract) and be remunerated accordingly. This change will also help develop extended PHC and enhance comprehensiveness function.

The PHC reforms have thus far focused on postgraduate training. The next phase of reforms need to invest in developing the undergraduate medical and nursing training to move towards generalists training to replace the model which trains graduates as narrow specialists and emphasises a curative approach directed at managing diseases rather than promoting health.

The academic units of Family Medicine at Faculties of Medicine must be further strengthened and undergraduate training in FM expanded to sensitise medical students to the speciality early in their studies and also to ensure that future narrow specialists are acquainted with the scope and activities of FM, thereby creating a better common understanding between narrow specialists and family physicians.

6.5. Communicating the reforms

There needs to be more investment in communicating the benefits of the PHC reforms, to increase the visibility of family medicine and build a positively on between and within levels of the health system should be and with the public is limited — identified by those interviewed as a critical problem. The benefits of FM-centred PHC system are not adequately communicated to citizens and health professionals. There is hence, limited understanding of family medicine and modern PHC amongst health professionals, citizens and politicians who see FM-centred PHC in the Alma Ata mode — as 'basic' public and personal health services — a Western construct, and a retrograde step from 'advanced' Soviet medicine.

Inadequate communication and limited engagement of the operational level lead to the reforms being perceived by some as being 'top-down'. This is a barrier to full scale-up and sustainability of a FM centred PHC system.

A clear and all-embracing communication strategy is necessary to increase visibility of PHC reforms, inform users and other key stakeholders of the expected benefits to increase ownership of the process.

6.6. Concluding remarks

Despite a resource constrained environment Kyrgyz Republic has successfully introduced multifaceted and comprehensive PHC reforms in the Manas I Programme. During this process, the collaboration and coordination between the international donor agencies, implementing institutions and local partners has been exemplary and a model for the ECA Region. Further, strong leadership demonstrated by the MOH and the mechanisms put in place to implement evidence-based policies is unmatched in the ECA Region. The policy makers, donors, implementing agencies and the local partners, who have contributed to the design and implementation of the reforms are to eb congratulated.

It is incumbent upon those policy makers and politicians who inherit the mantle from Manas I Program to ensure that Manas II successfully build on these achievements an historic opportunity is not squandered.

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