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TECHNICAL REPORT:

## **Position Paper: Advanced Training for Primary Care Physicians in Uzbekistan**

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**September 1999**

**Tashkent, Uzbekistan**



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## **I. Abstract**

Clinical training is an essential part of primary care reform in Central Asia. This report looks at the progress of clinical training in Uzbekistan and outlines a strategy for its rollout, including policy recommendations for graduate-level training of GPs, ideas for accreditation, and the importance of maintaining credentials once acquired. The report suggests ways of overcoming resource and policy constraints to achieve these ends and encourages the adoption of already tested international programs as teaching resources.

To fill in a time lag created by the need to establish and train family practice teacher trainers, ZdravReform is working with the Tashkent Institute of Advanced Medical Education (TIAME) and Ferghana Oblast Health Department to implement a series of critical-skills workshops for rural primary care physicians. These allow training to take place without doctors having to leave their practice, and focus on essential topics to help alleviate the severe problem of disease in rural areas.

## II. Executive Summary

This report looks at the progress of clinical training of primary care physicians in Uzbekistan, a component of the World Bank's Health One Project, and outlines a strategy for the rollout of clinical training throughout Uzbekistan.

At present primary care in Uzbekistan is limited by a number of practical constraints such as lack of resources, doctors' inability to leave practices for training, lack of clinical experience - even after training, lack of training bases and problems with supply and distribution of pharmaceuticals. There are also policy restraints including: regulatory restraints on use of facilities and content of care; regulatory and financial barriers to improving supply and distribution of pharmaceuticals; regulatory restraints on financing and accounting of medical facilities; and perverse incentive systems.

In spite of these barriers, the Tashkent Institute of Advanced Medical Education (TIAME) has taken a unique approach to clinical training through endorsement of a baccalaureate-level training course in General Practice, with a long-term view of creating a masters-level Family Practitioners course.

Moves towards providing the baccalaureate-level course have included collaborative training between TIAME and DFID's Know How Fund to prepare recent Medical Institute graduates to be General Practice teachers. However, because this program will take time to filter through to practice level, ZdravReform has meanwhile worked with TIAME and Ferghana OblZdravOtdel in three pilot rayons, to run a series of critical-skills workshops for rural primary care physicians. By basing these workshops in the rayons, doctors could continue to practice whilst learning. It was also necessary to implement these courses based on the immediate necessity of attending to the heavy burden of disease in rural areas.

As a result of training to date, several lessons have been extracted: clinical training should concentrate on relieving the burden of disease; training should be problem oriented; training is ineffective where basic resources are lacking; and training courses need to remain flexible.

Currently, the ZdravReform workshops and the Know How Fund's Trainee Curriculum are moving towards a point of convergence: specifically a set of problem-oriented, needs and resources based training modules which can stand alone or be combined to form a complete General Practice curriculum.

Regarding content of these modules, ZdravReform have noted that the most successful courses have been those adapted from international programs, already tested in developing countries. When the modules are being used as part of a unified course it is suggested that they be interspersed with practical patient management. However, flexibility should be maintained to ensure that individual modules could be taught to doctors unable to leave their practices.

As a means of accreditation, ZdravReform envisages a certification process, which requires completion of either a formal course of graduate-level training, or a full set of component modules, plus successful completion of a standardized examination. As an incentive, certified General Practitioners should receive higher salaries than uncertified primary care physicians. An additional suggested incentive is to continuously renew certification based on a minimum standard of continuing education and periodic reassessment of competencies and training needs.

### III. Acronyms and Abbreviations

ARI	Acute Respiratory Illness
CDD	Control of Diarrheal Disease
DFID	Department For International Development
ENT	Ear Nose and Throat
FAP	Feldsher Station
FSU	Former Soviet Union
GP	General Practitioner
IMCI	Integrated Management of Childhood Illness
MedInstitute	Medical Institute
MinZdrav	Ministry of Health
OblZdravOtdel	Oblast Health Department
STD	Sexually Transmitted Disease
SVA	Rural Ambulatory
SVP	Rural Medical Center
TB	Tuberculosis
TIAME	Tashkent Institute of Advanced Medical Education
TsRB	Central Rayon Hospital
USAID	US Agency for International Development
WHO	World Health Organization

## **IV. Introduction**

Under the Health One Project the World Bank is lending money to Uzbekistan, principally to finance capital improvement of primary health care facilities. Capital improvement is not expected to be economically sustainable without reform of healthcare financing and management, which is the second component of the Health One Project, and it is not expected to reduce the burden of disease significantly without reform of clinical training, which is the project's third component. This paper assesses the progress of the project's clinical training component and outlines a strategy for the rollout phase. This strategy includes steps for raising the level of expertise of doctors in rural primary care centers in Uzbekistan (SVP's and SVA's), training graduate-level physicians to assume the role of primary care provider, accreditation of a new specialty of General Practice Physician, and continuing education for primary care physicians.

## **V. Present Condition of Primary Care**

### **A. Local Institutions Involved in Primary Care Training and Delivery**

- TIAME, Regional MedInstitutes
- MinZdrav, OblZdravOtdel, Oblast Hospitals, TsRB's, SVA/FAP's, SVP's

### **B. Outside Organizations Providing Training in Primary Care**

- World Bank - Health One Project (lead agency)
- DFID – Know How Fund (ten-month course, institute-based)
- USAID - ZdravReform Project (short courses, rayon-based)

### **C. Resource Constraints in Primary Care**

- Primary care personnel are poorly trained
- Healthcare workers lack access to scientific medical literature or international standards of care
- The opportunities for continuing education are very limited
- Many rural doctors, especially solo practitioners, cannot leave their practices for training
- The GP training program will produce only 50 retrained GPs per oblast by June 2000
- GP trainers have very limited clinical experience, before and during training
- Training bases (other than at TIAME) have not been developed
- There are no GPs to act as role models or faculty
- There is no system for licensure or accreditation of physicians
- Physicians are unfamiliar with evidence-based medicine
- Medical training establishments tend to be out of touch with health needs of rural areas
- Rural health facilities have almost no equipment, supplies or medicines
- Severe problems with the supply and distribution of pharmaceuticals persist

- Health facilities lack the capability to collect and analyze data
- Infrastructure (water supply, sanitation, transport, telecom) is lacking in rural areas
- Critical public-health problems prevail in rural areas (ADD, ARI, Family Planning, TB, etc.)

#### **D. Government Policies**

- Resolution of the Cabinet of Ministers of the Republic of Uzbekistan as of May 21, 1996 “On development program of social infrastructure of the rural areas in the Republic of Uzbekistan for the period of 2000”

Reorganization of health care

- Resolution N 182 as of May, 25,1996 of the Cabinet of Ministers of the Republic of Uzbekistan, directed to comprehensive resolving of rural infrastructure problems:

Consolidation of FAP/SVA’s into SVP’s (rural and urban)

- Order of the Ministry of health care of the Republic of Uzbekistan N 464 as of 30.05.96

Staffing of SVPs with GP’s

- Decree of President of the Republic of Uzbekistan as of November 10,1998. “On state program of reforming the health care system of the Republic of Uzbekistan”

Strengthening of rural primary care network

#### **E. Policy Constraints to Improvements in Primary Care Delivery**

- Healthcare reform must be budget-neutral
- Regulatory restraints on use of facilities and content of care
- Regulatory and monetary barriers to improving supply and distribution of pharmaceuticals
- Regulatory restraints on financing and accounting of medical facilities
- Quality control based on punishment for substandard care rather than rewards for excellence

#### **F. Pilot Training Projects to Date**

TIAME has endorsed the concept of baccalaureate-level training in General Practice as a realistic goal for the near future, while maintaining the long-term goal of producing masters-level Family Practitioners. This approach is unique among the Central Asian Republics. Parallel training projects at TIAME and in the field in three experimental rayons have provided valuable lessons for the structure and content of this baccalaureate-level program.

##### **1. Training at TIAME**

The British agency DFID, in collaboration with TIAME, agreed to finance training of the first cadre of teachers for baccalaureate-level medical education. In September 1998 the Know How Fund launched a ten-month training program designed to prepare recent graduates of the Medical Institutes to be teachers of General Practice. Twelve teachers and four teacher-trainers completed the course in June 1999. The four teacher-trainers will start the second cycle of training teachers in September 1999 at a specially designed SVP attached to TIAME. The eleven other graduates of the course (one has withdrawn) will be

sent in pairs to each of the six Medical Institutes around the country to begin teaching General Practice to physicians from adjacent oblasts in September 1999.

The curriculum for retraining of rural physicians by the new cadre of GP trainers represents a major step toward realistic, needs-based training for primary-care practice in rural Uzbekistan:

- It has been considerably reworked to include material from the WHO modules on Integrated Management of Childhood Illness, Rational Prescribing, and Safe Motherhood.
- It focuses on a short list of preventive and curative services which are of primary importance in rural areas, and for which something approaching adequate resources exists, or is expected to be provided by the other components of the Health One Project.
- It devotes a considerable proportion of training hours to raising awareness of community medicine, problem-based patient assessment, and rational approaches to care management.

## **2. Training in the Rayons**

The USAID-sponsored ZdravReform, in collaboration with TIAME and Ferghana OblZdravOtdel, began a series of critical-skills workshops for rural primary care physicians and nurses in three pilot rayons in the fall of 1997, for several reasons:

- The DFID-sponsored program would take several years to produce practicing physicians trained in General Practice, while the other components of the project (strengthening the material base of rural clinics and restructuring their financing and management) were moving ahead. In short, SVP's were being built without primary care physicians to staff them.
- The training of practicing rural physicians needs to take place in their home rayon, in blocks which are short enough not to disrupt their practices.
- Short seminars can provide feedback for modifying training content or methodology with a fairly short cycle time.
- The overwhelming burden of disease in rural areas created a sense of urgency to begin alleviating these health problems in a relatively short time frame.

The first seven workshops covered the following topics:

- Acute diarrheal disease
- Acute respiratory illness
- Reproductive health
- Breastfeeding
- Emergency care
- Hypertension and common cardiovascular problems
- Rational use of pharmaceuticals

A majority of physicians in the three pilot rayons, as well as a representative group of nurses, have completed the first seven workshops.

Based on feedback from these frontline practitioners, as well as from a site visit in June 1999, five more workshops have been proposed for completion by June 2000:

- Anemia
- Intestinal parasites
- Clinical laboratory diagnosis
- Endemic goiter
- Cancer screening

Anecdotal information suggests that not all of the original seven workshops have been equally effective in changing physician practices and reducing the burden of disease:

- It is probable that the workshops on ADD, ARI, Breastfeeding, and Reproductive Health have been highly successful in both respects.
- The module on Hypertension has had limited impact, in part because rural clinics lack the basic equipment needed to make use of and reinforce the training.
- The module on Pharmaceuticals likewise had little meaning given the severe shortage of essential drugs in rural areas.
- The module on Emergencies also suffered from lack of basic emergency equipment, and possibly from the paucity of field-tested sources from which to draw training materials.

## **G. Summary Lessons from Training Experience to Date**

1. The clinical content of training should focus on health problems which contribute significantly to the burden of disease.
2. Training should take a problem-oriented approach.
3. Training materials should be taken from internationally accepted sources and adapted to real conditions in rural areas.
4. When basic equipment, supplies, pharmaceuticals, or definitive care are lacking, training is ineffective:
  - In such cases, training should be deferred and attention given to rectifying the shortages in order to make the training useful.
  - In the case of basic equipment, the material base of rural clinics in three pilot oblasts will be strengthened by support from the World Bank (SVP's) and USAID (SVA/FAP complexes in Ferghana Oblast).
  - It is hoped that the government of Uzbekistan will soon find a way to relieve the severe shortage of pharmaceuticals.
5. The training program should have the flexibility to adapt to the changing scope of practice of primary care doctors: The scope and intensity of services available at SVP's can be expected to increase, and the burden of disease can be expected to change as critical problems such as diarrhea and ARI are brought under control.
6. Short, self-contained courses offer several advantages over broad, indivisible curricula:
  - They help healthcare personnel focus on critical health problems.
  - They can be mastered by working providers with minimal disruption of their practice.

- Some self-contained courses, so-called “vertical programs”, have already been developed and field-tested by WHO and others.
- They can be field-tested and revised or replaced in relatively short cycles.

## **VI. Policy Recommendations for Graduate-level Training of General Practice Physicians**

### **A. The Ideal**

Restructuring of medical education in Uzbekistan should include reform at the undergraduate, graduate, and postgraduate levels.

At the undergraduate level, medical students are currently channeled from the beginning of their training into separate faculties and even separate institutes specializing in either pediatrics, or adult medicine, or obstetrics-gynecology, or public health, or dentistry. This early division has resulted in the fragmented, overly specialized, and costly system which is now the focus of reform. At least the first three of these channels should be combined into a unified undergraduate medical program which produces graduate medical students with a basic knowledge of the entire spectrum of clinical activity. Although the government has mandated that these faculties begin preparing medical students for general practice, in actuality the system has not changed.

Similar structural reform should take place at the vocational schools for midlevel practitioners, producing universal nurses who can then go on to specialized training in surgical nursing, primary care, home care, patient education, etc.

At the graduate level, newly trained physicians are currently required to spend one year apprenticed to a more experienced physician, after which they receive their license to practice independently. The undergraduate preparation for this apprenticeship is only five years in total, long on theory and extremely short on clinical or practical content. The apprenticeship, therefore, produces physicians who must refer the great majority of their patients to specialists. It should be replaced by a clinical year in which graduate medical students receive guided experience complementing and reinforcing their theoretical knowledge.

At the postgraduate level, specialty training in Family Practice does not exist, either for recent medical graduates to complete their education or for practicing doctors to learn a new specialty. A postgraduate training program should be developed by TIAME for the Medical Institutes. This program should be designed to produce General Practitioners with the breadth and depth of expertise required to manage independently the majority of problems encountered in primary care, to refer to and collaborate effectively with specialists when necessary, and to serve as teachers of Family Medicine.

A mechanism for accreditation of General Practitioners should be worked out, preferably by TIAME in collaboration with the Association of SVP Physicians, which enables both postgraduate physicians and retrained practicing physicians to receive specialty certification. Accreditation should include guidelines for continuing medical education and periodic re-certification.

Resources for continuing medical education should be made available at the Medical Institutes and in each rayon, preferably at a specially designated “teaching SVP” equipped with a library and educational materials.

### **B. Obstacles to the Ideal Model**

Although both the Know How course and the USAID-supported Family Practice training program in Bishkek started from models analogous to the American Family Practitioner or British General Practitioner, in both cases these models have had to be modified considerably to fit Uzbekistan’s current healthcare environment:

- The overwhelming burden in rural areas of problems such as acute diarrheal disease, iron-deficiency anemia, and high fertility rates, calls for intensive campaigns geared toward prevention, community education, and public hygiene.
- Financial constraints severely limit procurement of all but the most basic medical equipment and supplies at the primary care level, even under the most optimistic scenarios of health care finance reform.
- Entrenched problems with the availability of pharmaceuticals and other definitive medical therapies render many of the traditional activities of the general practitioner untenable in rural Uzbekistan.
- A rigid tradition of disease-based medicine, unquestioning acceptance of expert opinion, didactic teaching methods, and lack of support for independent learning necessitates that a significant part of training be devoted to changing fundamental ways of thinking, leaving less time for the more straightforward transfer of clinical skills.

These realities suggest several policy constraints:

- The intensity of clinical training and scope of practice of the SVP physician will, for the foreseeable future, be dramatically condensed in comparison to the Western model.
- Pathways to certification of GP physicians must be flexible enough to allow resource-constrained, practicing rural physicians to complete their retraining as their time and commitments permit.
- Training should make use of periodic assessment and short feedback cycles in order to keep it on target.

### **C. A New Model for Graduate-level Medical Education: Training Modules**

The critical skills workshops sponsored by ZdravReform and the Trainee Curriculum developed by the Know How Fund are moving toward convergence. The point of convergence is a set of problem-oriented, needs- and resources-based training modules which can stand alone or be combined to form a complete General Practice curriculum. It is worth noting that the Bishkek Family Practice program, working with many of the same constraints as are found in Uzbekistan, is independently evolving a very similar model.

#### **1. Content**

The most successful short courses conducted by ZdravReform have been those which were adapted from WHO or UNICEF programs. These programs are solidly grounded in internationally accepted best practices, have been field-tested in developing countries, and are adaptable to local conditions. Training modules should, whenever possible, be based on source material which shares these characteristics. In particular, source materials developed especially for the FSU should be sought:

- The ZdravReform short courses can be converted into modules fairly readily.
- A number of the Know How Fund Trainer Training units can likewise be taught as stand-alone modules.
- Course materials for the Trainee Training program are currently being developed.
- Some materials are available from the Bishkek Family Practice training program.
- Materials may be available from FP training programs in St. Petersburg and/or Moscow.

Taken together, the full set of modules must cover at least the majority of clinical activities expected of the General Practitioner. Reliable source materials for such a broad spectrum of activity may have to be developed from scratch. The process for developing new materials should incorporate the following controls:

- Content must be based on evidence from a review of international medical literature.
- An editorial committee consisting of clinical specialists from the Know How Fund, ZdravReform, Health One Project and TIAME should review all materials.

## **2. Structure**

For each module, the following components must be developed, reviewed, tested and adapted as needed:

- Lecture notes (including audiovisual materials)
- Cases for discussion, demonstration, and role-playing
- Printed materials in Russian and Uzbek for distribution, including relevant scientific literature, guidelines, and patient education aids.
- A patient-management requirement, including a log of cases cared for primarily by the trainee

While the modules should ideally be presented in logical order (general subjects before specifics, physiologic conditions before pathology), this may not always be possible in practice, especially when modules are taken as time allows by practicing physicians. A certain order may be recommended but not required.

## **3. Logistics**

When the modules are combined into a unified course at a Medical Institute or TIAME, formal instruction can be interspersed with precepted patient management experience at the SVP attached to the teaching institution. In this case, the full course can be completed in one year.

The modules should also be offered individually for practicing physicians who wish to gain certification as GP's, but who cannot leave their practices for more than a few weeks at a time. In this case, several years may be required to complete the full set of modules. In order to make certification feasible for these physicians (who will constitute the majority of trainees for the foreseeable future), some flexibility needs to be built into the program:

- Some modules can be taught at the oblast hospital by visiting faculty or qualified local specialists (see below).
- Documentation of patient management can be drawn from records at the trainee's place of work.
- If the trainee can document significant clinical experience in a particular subject, he or she may be exempted from certain modules by passing an equivalency exam (see Annex 1).

General Practice is far more than a conglomerate of other specialties. The GP is uniquely qualified, for example, to manage psychosocial problems, to promote healthy behaviors, and to coordinate community-based care. Thus, some parts of the General Practice curriculum, including modules on prevention, community medicine, and behavioral health, can be properly taught only by certified GP's.

Because there will for the foreseeable future be relatively few certified GP's available for teaching, it will be expedient to make use of specialists as teachers whenever possible and appropriate. Especially when modules are offered at the oblast hospitals, it will be important to recruit specialists to teach modules relating to their specialty. In these cases, it will be necessary to orient the teacher-specialist to the standard

materials and teaching methods developed for the module, to monitor his or her teaching performance, and to provide feedback for improving performance when necessary. This model has been successfully tested at the Family Practice Center in Karakol, Kyrgyzstan.

In order to attract, motivate, and retain good teacher-specialists, it should be obvious that they must be adequately compensated for their work.

## **VII. Accreditation**

It is proposed that an accreditation process is established that acknowledges the experience and expanded clinical skills of the practicing SVP physician, while setting a standard for the General Practitioner of the future.

In the United States, when the specialty of Family Practice was introduced in 1969, practicing generalists were given the opportunity to gain accreditation through a ‘grandfather clause’. That is, they were required to pass the certifying examination, but they were not held to the same educational requirements as Family Practice residents, who lacked the practicing physicians’ clinical experience.

Similarly, a certification process for General Practitioners is envisioned which requires completion of EITHER a formal course of graduate-level training, OR a full set of the component modules, PLUS successful completion of a standardized examination. Graduates of a unified course at TIAME or a MedInstitute should have the opportunity to take the certifying exam immediately after graduation. Practicing physicians who have completed or been exempted from a full set of modules, perhaps over a several-year period, and who have documented sufficient patient management experience, should also be eligible to sit for the standard certifying exam. It is highly desirable that both groups also complete residency training at an oblast hospital, but it may take some time before such residencies become available. In the meantime, certification of the first generations of GP’s should not be held up.

It is expected that the Association of SVP Physicians, at present in its formative stages, will eventually be well suited to provide guidance in the development of specific standards for certification, including requirements for patient management experience, eligibility to take equivalency exams, and content of the certifying exam.

## **VIII. Maintaining Credentials and Continuing Education**

It is considered self-evident that certified General Practitioners should receive higher salaries than uncertified primary care physicians, both to recognize their higher level of training and to motivate lesser-trained physicians to raise their skill level. To provide an incentive for physicians to maintain and continuously improve their expertise, it is recommended that periodic renewal of certification be required. Maintenance of credentials should depend on a minimum standard of continuing education and periodic reassessment of competencies and training needs.

Rural physicians face considerable challenges with regard to transportation, finances, and practice coverage. Opportunities for continuing education should take into account these challenges:

- For those who can arrange transport and practice coverage, short courses at the MedInstitute level can provide valuable contact with the cutting edge of medical information and health policy, and can strengthen ties between academics and frontline healthcare workers.
- Oblast health departments traditionally take responsibility for keeping primary healthcare workers apprised of new policies, protocols and medical developments. In addition to the usual means for disseminating information, such as medical newsletters, oblast health officials could collaborate with the Association of SVP Physicians to put on short conferences for practicing physicians, which would give them credit toward re-certification.

- Specialists at the rayon level with an interest in teaching could travel to SVP's and SVA's to present half-day seminars on topics in their specialty for which the primary care component is especially important. The outline of these seminars could be submitted to the Association of SVP Physicians in advance in order for participants to receive credit toward re-certification. This kind of contact between referring physician and specialist can be invaluable in improving relations between them, which are frequently adversarial, and in improving the quality of care.
- One SVP in each rayon should be designated as a teaching center, with a medical library, Internet access, and self-study materials. Again, the Association of SVP Physicians could approve courses of self-study.

## **IX. Advanced Degrees**

An advanced training program leading to the degree of Master of Family Medicine is currently in the early conceptual stages. This level of training falls outside the scope of the Health One Project.

## Annex 1: Sample Set of General Practice Training Modules

The following is intended as a starting point for designing a modular training program, not as a definitive recommendation. It draws from the ZdravReform short courses, the Know How Fund Trainees curriculum, and the Bishkek Family Practice training program. Each numbered item represents a module of approximately 24-36 hours. Items marked with an asterisk are suggested as subjects for which experienced physicians may be eligible to take an equivalency exam. Unmarked items are suggested as mandatory for certification:

1. Normal development, Nutrition
2. Well child care
3. Injury prevention
4. IMCI, CDD, ARI
5. Family planning
6. STD's, Office gynecology
7. Prenatal care
8. Breastfeeding
9. Rational prescribing
10. Emergency care\*
11. Dyspnea\*
12. Chest pain, Ischemic heart disease\*
13. Hypertension\*
14. Anemia\*
15. Headache, Altered consciousness\*
16. Eye disorders, ENT problems\*
17. Urinary tract infection and stones\*
18. Back pain, Arthritis\*
19. Dyspepsia, Gastrointestinal disorders\*
20. Skin problems\*
21. Diabetes, Thyroid disorders, Goiter\*
22. Depression, Anxiety, Psychosis, Alcoholism
23. Screening, Health promotion
24. Control of communicable disease (TB, hepatitis, brucellosis)
25. Clinical laboratory
26. Medical informatics, Record keeping