Improving Family Planning Pre-Service Education: Experience from the Eastern Europe and Eurasia Region
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John Snow, Inc. implements the Europe and Eurasia Regional Family Planning Activity.

DISCLAIMER
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<td>CAR</td>
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<td>CME</td>
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<td>Family Planning</td>
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<td>HIV</td>
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<td>Institute for Family Health</td>
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<td>IUD</td>
<td>Intrauterine Device</td>
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<td>MCH</td>
<td>Maternal and Child Health</td>
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<td>NGO</td>
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<td>OB/GYN</td>
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<td>RH</td>
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<td>TA</td>
<td>Technical Assistance</td>
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<td>UNFPA</td>
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<td>USAID</td>
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The United States Agency for International Development (USAID) has been visionary in its support for improved family planning and reproductive health over many decades throughout the world. By focusing on increasing the expertise of providers and improving the quality of service delivery through excellent pre-service training, USAID has directly impacted public health. In Eastern Europe and Central Asia, high quality reproductive health services can substantially improve women’s health. Pre-service education is one important step towards increasing access to reproductive health services and improving overall health. Improving family planning and reproductive health pre-service teaching and training is a key approach for ensuring that efforts in family planning and reproductive health programming are sustainable.

USAID’s Europe and Eurasia Regional Bureau has been a driving force in supporting family planning pre-service training in the region. The Europe and Eurasia Regional Family Planning Activity (“Regional Activity”), supported by the USAID Europe and Eurasia Regional Bureau, undertook a one-year initiative to address key problems in teaching family planning at the pre-service level. This report describes how the Regional Activity and its partners in the region approached pre-service education and presents key elements of its strategy and implementation.
EXECUTIVE SUMMARY

Significant quality of care and cost-effectiveness benefits can be reaped when a coordinated, fully functioning medical education system exists in a country. This means that pre-service and in-service training are closely linked, and both teach and reinforce evidence-based scientific knowledge and clinical skills that are consistent throughout a medical professional’s career. In the Eastern Europe & Eurasia Region, there has been significant investment in family planning (FP) in-service training. The Europe and Eurasia Regional Family Planning Activity, supported by the USAID Europe and Eurasia Regional Bureau, undertook a one year initiative to address the key problems in teaching FP at the pre-service level. This report describes how the Regional Activity and its partners in the region approached pre-service medical education and presents key elements of its strategy and implementation.

In Eastern Europe and Central Asia, better reproductive health (RH) services can substantially improve women’s health by reducing abortion rates and increasing use of modern methods. The Europe and Eurasia Regional Family Planning Activity focused on increasing the expertise of providers through excellent pre-service training. The Regional Activity’s reviews of FP in the Eastern Europe & Eurasia Region detailed the many remaining challenges to improving FP and RH services. Key among them was the inadequate skill levels and limited technical competence of service delivery personnel in the areas of FP and RH.1 In October 2008, the Regional Activity launched an initiative to address the key problems in teaching FP in medical and nursing schools in the Eastern Europe & Eurasia Region. Participating countries included: Kyrgyz Republic, Georgia, and the Russian Federation. Key activities included:

- “Regional Academic Consultation”2 in October 2008
- Development of evidence-based family planning core competencies
- Faculty Capacity Building: “Contraceptive Technology: Evidence-Based Facts and WHO Recommendations” in December, 2008
- Faculty Capacity Building: “Curriculum Design and Development” in March 2009
- Academic Consultation successfully replicated in Kemerovo, Russia in April 2009
- Faculty Capacity Building: “Evidence Based Medicine: The Master Course for Medical Faculty” in June 2009
- Completed collaborative development of family planning curriculum in August 2009
• Faculty Capacity Building: “RH and Development: Analytic Skills for Medical School Faculty”, Johns Hopkins Bloomberg School of Public Health, Leadership Seminar in August 2009

• Conducted joint multi-country regional review of family planning pre-service curriculum in August 2009

Through these activities and continued dialogue with and support to participating countries in the region, the Regional Activity’s pre-service initiative had the following results:

• Began the process of changing the culture of FP and RH medical education in several countries at varying points in post-Soviet medical education reform

• Applied the concept of evidence-based medicine to curriculum content and teaching in three countries

• Introduced curricular reforms to key faculty and medical school leadership emphasizing case-based teaching and more active, student-centered learning

• Finalized new FP curriculum in modularized format for use across the region in consultation with representatives from medical schools in the region

Improving FP and RH pre-service teaching and training is a key approach for ensuring that efforts in FP and RH programming are sustainable. The Europe and Eurasia Regional Family Planning Activity has made a noteworthy contribution to improving pre-service training and looks forward to the results of monitoring and evaluating initiatives to confirm the impact of these efforts.
Europe and Eurasia (E&E) has a unique place in the global history of FP and is unique due to the ongoing challenges it faces. The story of the evolution of modern FP in the E&E Region closely parallels the political and economic changes from the Soviet Union transformation to post-Soviet societies, which are increasingly market driven. The health care system of the Soviet period, when the state was responsible for virtually all health care, has evolved to a mixed health care system with varying degrees of health reform and varying levels of effectiveness. The development of primary health care adoption of evidence-based medicine and privatization of health services have all been implemented to a certain degree throughout the region. FP programs have grown along with these changes, benefiting from the most positive and effective reforms.

When the Soviet Union collapsed, health systems also collapsed or contracted, with both positive and negative consequences. Under the Soviet system, all health care was free and accessible. Everyone was guaranteed care, although some cadres in society received better care, and under-the-table payments were virtually institutionalized. In addition, the Soviet medical system was bloated with too many health professionals and facilities. It was overly medicalized and specialized and was out of touch with modern medical and clinical sciences and client-centered practices. The new post-Soviet countries found themselves unable to meet international norms of treatment, patient care, diagnosis and technology, including FP and maternity care. RH care was in the hands of obstetrician/gynecologists (OB/GYNS), most of whom had little or no training in modern contraceptive methods. Abortion was the main method of fertility regulation; many women had frequent abortions, often under suboptimal conditions. Providers and clients alike had negative attitudes toward contraception, particularly hormonal methods, and contraceptives were hard to obtain even if a man, woman, or couple wanted to use them.

Health financing mechanisms also changed dramatically over the last three decades in the E&E Region. During Soviet times the state paid the bulk of routine operating costs for a huge health care system, but now citizens in many E&E countries pay the majority of health expenditures out-of-pocket. This shift in payment mechanisms has translated into opportunities for the private sector, particularly the pharmaceutical industry, which is growing rapidly throughout the region. The private sector now also plays an important role as a major supplier of contraceptive products, and currently only two countries in the E&E Region purchase contraceptives with government funds. The increased burden of health care costs has been a source of discontent throughout the region and is a huge burden on the poorest quintiles of society. The rural poor often fare badly in this new system, since they lack the money to pay for services as well as basic access to care. In recent years, there has been growth in government-subsidized special programs and health insurance. Countries aspiring to join the European Union are particularly inter-
IN THE EUROPE AND EURASIA REGION

ested in developing health insurance and meeting international health standards. These standards include reducing abortion rates by increasing access to and utilization of modern FP.

The E&E Region also is unique because population growth rates and fertility are “too low” in most countries; namely, fertility rates are below replacement level, resulting in population decline. This decline is further exacerbated in many E&E countries by out-migration, for economic reasons, coupled with decreasing life expectancy. The impetus for expansion of modern FP is to reduce the negative impact of repeat abortions on maternal mortality and morbidity and to allay concerns about the use of abortion as the primary method of fertility regulation. Good programmatic data throughout the E&E Region clearly show that increased use of modern FP methods reduces abortion rates.4

Donors, particularly USAID, played a critical role in the evolution of health care and FP in the post-Soviet E&E Region. Donor support for health reform promoted the integration of FP into primary health care services provided by family doctors, general practitioners and, in some countries, midwives and nurses. The liberalization of FP service delivery away from OB/GYNs significantly increased accessibility to and availability of FP services in these countries, especially in rural areas. In addition, since family doctors do not normally provide abortions, they have more incentive to provide FP than their OB/GYN counterparts. Several countries in the region now include FP in the Basic Health Benefit Package provided free of charge to all women. However, since countries in the E&E Region are at different stages of health reform, few generalizations about the liberalization of FP can be made for the region as a whole.

USAID has had a particularly dramatic influence on FP in Eastern Europe and Eurasia. From its earliest activities in the 1990s, USAID sponsored or co-sponsored5 high-impact interventions, including contraceptive technology updates, pilot programs to train OB/GYNs, social marketing of condoms, computerized logistics management information systems, behavior change communication, and demographic and health surveys. USAID and UNFPA also donated large quantities of contraceptives and supported public-private partnership initiatives that were critical to expanding access to services. The impact of these strategic actions can be seen throughout the E&E Region. There are many success stories relative to the endorsement and institutionalization of evidence-based policies and clinical practice guidelines, social marketing, FP and RH counseling, liberalization of FP provider categories, and emerging contraceptive security efforts. While available FP success stories in the E&E Region are inspiring and constitute examples of local and national commitment to reducing abortion rates and increasing use of modern contraceptives, progress has been comparatively uneven among nations.


5. With UNFPA, WHO, other donors and technical agencies.
The impetus for the Europe and Eurasia Regional Family Planning Activity came from both the dramatic success stories that demonstrate that rapid change and scale-up is indeed feasible and the frustratingly uneven progress among countries in the region. The E&E Region encompasses huge geographic and ethnic diversity, but these nations and their medical professionals share a common heritage of Soviet medical care and health systems, a common language (Russian), and many similar challenges in reforming their health systems to provide rational care. These two key circumstances in the E&E Region—the proof that cost-effective change is feasible and documented lack of even progress—pointed to the need for an approach based on widespread sharing of experience, best practices, and peer learning. The Regional Activity was designed for the E&E Region to identify, document, and disseminate clear best practices; identify the gaps in mutual experience; and foster learning and change through sharing of experiences. This report describes how the Regional Activity and its partners used this approach to begin reform of FP pre-service education.
II. RATIONALE FOR PRE-SERVICE TRAINING IMPROVEMENTS

Over the years, considerable emphasis has been placed on training FP/RH service providers throughout the E&E Region. The majority of such training programs, materials, and donor support has traditionally been directed at improving in-service education. Thousands of service providers (OB/GYNS, family doctors, nurse-midwives) have been trained to upgrade their skills and knowledge in FP/RH. Most countries in the region have developed and endorsed some evidence-based clinical practice guidelines and protocols for FP service delivery, with the support of various donors and technical agencies. Nevertheless, even the best in-service training programs suffer from irregular results due to uneven backgrounds of providers being trained, inconsistent availability of certified trainers, and the inability to reach all providers in need of training. Even when clinical practice protocols for FP/RH have been updated to include WHO and other international evidence-based standards, an enormous gap exists between pre-service training and standards for practice once providers are working in clinical settings.

The information taught at the pre-service level is often outdated, and thus, very different from modern, evidence-based guidelines. Such a gap often leads to a continuous need for training to meet these standards of quality of care for service delivery, even for new graduates. To compound the challenges, in some countries of the region, many providers and trainers who have received in-service training have left the country due to bleak political and/or economic prospects. In such circumstances, high turnover of trained staff requires continuous training to ensure adequate coverage and therefore, further reduces the effectiveness of in-service investments.

The ultimate objective of improving pre-service education is to improve the delivery of health services. The performance of a health system depends on the knowledge, skills, motivation and deployment of the people responsible for organizing and delivering services. The health workforce represents one of the six “building blocks” that make up the health system. To develop a well-performing health workforce and to meet the increasing need for quality FP/RH services, it is essential to ensure stronger pre-service education and in-service training systems. Pre-service medical education is defined as pre-specialized training in nursing, midwifery, and medical schools and is also referred to as “undergraduate medical education.”

“Having providers who have the necessary skills to immediately begin providing services upon graduation leads to improved RH service delivery and helps ensure that women and families have access to the services they need.”


II. RATIONALE FOR PRE-SERVICE TRAINING IMPROVEMENTS

Pre-service education represents the first step in health worker human resource development, playing a critical role in preparing health professionals. Initiatives that integrate public health interventions, such as FP, into pre-service training have a greater potential for impact and sustainability than those that rely on continuous in-service trainings. Considerable emphasis has been placed on in-service training through the various health sector reform initiatives in the E&E Region, but very little attention and few resources are available to assist with pre-service curricula development or reform. Despite large investments in in-service training in FP, pre-service training has consistently lagged behind, making sustainability and impact important issues.

There are many advantages and benefits to investing in pre-service education. Most importantly, pre-service medical education represents a more efficient use of resources because it (1) provides the educational foundation for future health care providers, (2) prepares a greater number of providers for both public and private sectors and (3) takes place over a longer time period, resulting in more substantial educational outcomes than in-service training. Generally, students are more receptive to new approaches, knowledge, and skills than practicing health professionals. The bulk of a health care provider’s effective skills and practices can be developed during pre-service training, if the adequate mechanisms are put in place to ensure that pre-service medical education is strengthened so that students graduate with the necessary skills.

Pre-service medical education also reduces the need for recurrent in-service training cycles, thus conserving scarce training resources. The financial and human resources needed for regular and time-consuming in-service training can become enormously burdensome for donors and national governments. The needs never end, as new graduates continue to require basic FP training. When compared to solid pre-service training, the costs of in-service training are high. Providers who received quality pre-service medical education require only periodic reviews and regular supervision to reinforce good practices. All providers require regular supervision and support, but those that leave the public sector and have not had good in-service training in FP create a special group with additional needs that are often not met. Unfortunately, those providers that join either the public or the private sector often never receive the opportunity for comprehensive FP in-service training. This results in entire cadres of workers that are not capable of providing evidence-based, quality FP services.

Quality pre-service medical education will ensure that all categories of health care professionals who will serve both in public and private sectors develop the same essential competencies or critical knowledge, experience and skills in FP/RH and capable of de-
livering quality services. Most importantly, it has a potential to give FP/RH appropriate prominence in the curriculum and strengthen FP as a public health approach.

In-service training is more appropriate for reinforcing pre-service medical education and provides critical opportunities to update provider skills and introduce new information and technologies that were unavailable during pre-service education. An ideally functioning health education system clarifies the roles of pre-service and in-service training (including continuing medical education [CME]) and coordinates this extended system of health care provider education. These are critical elements to maximizing the effectiveness of both types of training and help ensure a well-qualified workforce. Linkages with professional associations, which often develop and issue clinical guidelines and recommendations, are also important to both the health education system and to individual providers. These linkages help ensure consistency and continuity throughout the entire career of a medical professional.

While the role of FP in producing and protecting healthy families is well-documented, it is not always reflected in pre-service training curricula. A review of pre-service medical training in the region found that education of health professionals in FP is not well coordinated. Some curriculums offer sporadic lectures on FP topics, while others present a wide variety of contraceptive technology information, much of which is not based on contemporary evidence. FP teaching and training lacks information in WHO’s Medical Eligibility Criteria for Contraceptive Use and other international guidelines and evidence-based standards. The provision of quality FP services, according to the WHO and other international standards for access to care, requires service provision by a wide range of providers. Practical training in the provision of FP services is totally lacking in both physician and nurse-midwife pre-service training, and is provided in very limited, unpredictable amounts. In addition, educational methodologies used in many medical and nursing schools in the E&E Region are based on traditional educational methods (e.g. students attending lectures where they remain passive) and provide little opportunity for interactive and student-centered learning. Overall, currently used medical education methodologies do not focus on building adequate competencies in FP and other RH service provision for a variety of service providers in the region.

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<th>Rationale for Strengthening Pre-Service Education</th>
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<td>• Represents a more rational use of limited resources</td>
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<td>• Prepares health care professionals who are capable of delivering quality, client-centered services immediately after graduation</td>
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<td>• Provides correct information, good practices, and attitudes from the beginning of medical practice</td>
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<tr>
<td>• Changes perception so FP/RH is seen as part of a basic package of skills</td>
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<td>• Reaches more providers than in-service training</td>
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<tr>
<td>• Reduces the burden of in-service training</td>
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<td>• Reaches providers who work in both public and private sectors</td>
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Countries in the E&E Region are demonstrating their commitment to improving access to and quality of FP and other RH services in a variety of ways. Reducing abortions and increasing use of modern FP methods will depend in large part on the quality of health services and the skills and training of the health care providers who deliver them. The Regional Activity’s reviews of FP in the E&E Region detailed the many remaining challenges to improving FP/RH services. Key among them were the inadequate skill levels and limited technical competence of service delivery personnel in the area of FP/RH. In October 2008, the Regional Activity launched an initiative to address the key problems in teaching FP in medical and nursing schools in the E&E region. The remainder of this report details the project’s approach, strategy, and implementation.
TECHNICAL APPROACH

The Regional Activity adapted the framework described in the *Preservice Implementation Guide*\(^\text{15}\), illustrated in Figure 1 below.

The Regional Activity had only one year to complete this series of actions, therefore it needed to adapt this process to fit a severe time constraint. During the Orient and Plan phase, for example, it was not feasible to work on the national level with working groups, national-level plans, etc. While the number of academic teaching hours allotted for each subject is decided on a national level, in the E&E Region, the detailed technical contents and training methodology are not regulated by governments. These matters are left to the discretion of each teaching institution. Thus, the Regional Activity adapted their approach to work within the existing regulations, rather than going through the lengthy process of changing the regulations.

Phase I, Orient and Plan, began with a technical consultation with countries. Subsequent Phase I activities included a Regional Academic Consultation meeting (described be-
low), detailed planning, and addressing the barriers to quality FP medical education. At the same time, the key components to developing a FP curriculum (Phase II: Prepare and Conduct Teaching) were incorporated into the activities designed to build local capacity for quality FP pre-service teaching and training. Use of the new curriculum begins in Fall 2009, the time that the Regional Activity ends. The Regional Activity’s expiration date means that there will be no opportunity to monitor and evaluate the implementation of the new FP curriculum on national or regional levels before the formal end of the project. However, individual country teams will be coordinating and monitoring teaching while documenting the needs for improvements and revisions.

BUILDING BUY-IN AND ENCOURAGING PARTICIPATION

To launch the process, the Regional Activity invited all E&E Region USAID Missions to participate in the pre-service initiative. The Regional Activity also identified countries that appeared to be most supportive and ready to institute FP educational reform based on the FP situational analyses conducted by the project, JSI’s other work in the E&E Region, and discussions with local partners. The Regional Activity initiated dialogue with different stakeholders in each country to help marshal support for the pre-service initiative. These included government institutions, such as the Ministry of Health and the Ministry of Education, USAID Missions, bi-lateral country projects focusing on health, professional associations (i.e., Association of OB/GYNS, Association of Family Doctors), and international technical agencies, such as WHO and UNFPA. The Regional Activity recognized that many different stakeholders had a vested interest in being a part of this process of change. As such, the project worked to include as many supportive organizations as possible.

Once the Regional Activity had indications that the different stakeholders would be supportive of FP pre-service education reform, it continued dialogue with the appropriate Mission staff to encourage the country’s participation in the Regional Academic Consultation. Delegations from Armenia, Azerbaijan, Georgia, and the Kyrgyz Republic attended this Regional Academic Consultation. Selected institutions from the Russian Federation had planned to attend, but later were required to cancel due to political tensions with Georgia. The Regional Academic Consultation was later successfully replicated in Russia in the spring of 2009, focusing on issues specific to Russia.

The Regional Academic Consultation benefitted from a regional approach for several reasons. First and foremost, there was some overlap in the situations and challenges to FP pre-service education reform that participants face due to their shared Soviet legacy.
To build on these similarities, the Regional Academic Consultation was designed to draw out the issues unique to the E&E Region and included ample time for discussion and exchanging medical education reform experiences and issues. The Regional Activity prepared probing questions to maximize this exchange of experiences, and facilitators documented the responses. This activity elicited interesting discussions among the participants, resulting in a rich exchange about the status of medical education in the region and various country experiences in reform efforts.

The second benefit of a regional approach was that it highlighted the different paths that various countries had taken to modernize teaching and training of their medical professionals. Some smaller countries with only a few medical schools were able to tackle large-scale reform efforts, others only small changes within existing regulations. Some examples include:

**Georgia** has benefited from strong support—political and financial—for shifting the medical education at Tbilisi State Medical University to meet western medical education standards and practices. Georgian medical education has been undergoing significant changes and curricular reform initiatives with more emphasis on integrated, case-based teaching and active, student-centered learning.

**Russia**, with over 50 medical schools in the country, is far better suited to a bottom-up approach, with individual institutions and departments deciding upon their own changes within existing regulations. The distances are vast, but opportunities for exchange within oblasts can and have been used to share pre-service medical education reform experiences.

The **Kyrgyz Republic**, in an effort to support national strategies of reducing maternal, infant, and child mortality, has modified its legal and regulatory system to liberalize FP service provision. They also have lowered the minimum requirements for medical education as a way to meet the health care needs of the population given geographic, economic, and human resource challenges.

**Armenia** has been strongly focusing on strengthening in-service medical education for FP/RH, and the decision has been made to focus on adapting their existing in-service resources as the best approach for improving FP pre-service education.
III. IMPROVING FAMILY PLANNING

These exchanges underscored how each country is at a different stage of reforming medical education, developing curricular reforms, and determining competency standards (see One Size Does Not Fit All, p. 24). Still, common needs in improving pre-service FP teaching and training were articulated by the participants. Key issues listed by all countries participating in the Regional Academic Consultation included:

- Lack of evidence-based and up-to-date FP curriculum for undergraduate students
- Insufficient knowledge for using and critically evaluating the evidence and teaching evidence-based medicine among medical faculty and staff
- Outdated teaching methodologies, including methodologies highly centered on teaching and lecturing, with minimal use of adult learning principles
- Absence of faculty who have had any training in teaching methodologies
- Insufficient communication and coordination between departments and faculty where prerequisites and core competencies reinforce subject matter
- Lack of state-of-the-art teaching tools and resources (i.e., new teaching and reference materials, anatomical models for clinical practice skills teaching, computers and visual aids)
- Inertia among some staff members to embrace new ideas, teaching methodologies, and evidence-based medicine

A third major benefit of the regional approach in this context was the potential for sharing of materials. Participants could see what other faculty and medical training institutions had developed and consider adopting or adapting these resources. The Regional Activity helped the participants begin to critically appraise the adequacy of those materials: How appropriate are these materials for undergraduate students? Were the materials evidence-based? Did they have clearly defined learning objectives and core competencies against which students would be evaluated? This discussion helped faculty compare their process and products to what is considered the “gold standard” for western medical education.
Prior to implementing the pre-service initiative, the Regional Activity undertook some strategic planning to identify what factors may predispose successful implementation of this kind of pre-service work. Georgia was an excellent candidate for this pre-service work for a number of reasons:

- Tbilisi State Medical University had been working to adopt Western standards for medical education and university administration was committed to undertake medical education reform.
- National, evidence-based clinical practice guidelines in FP that serve as a basis for strengthening FP pre-service education were developed and endorsed by the Ministry of Labor, Health and Social Affairs.
- The USAID’s Healthy Women Georgia Project, a collaborator of the Regional Activity, had worked with Tbilisi State Medical University to develop an evidence-based curriculum on maternal and child health and to incorporate it into current teaching.
- USAID Mission strongly supported improving pre-service medical education as a way to assure continuity and sustainability of FP/RH efforts in Georgia.

The Kyrgyz Republic was another country that seemed well-poised to implement such a reform effort. Reasons include:

- FP is a national priority, concomitant with the government’s efforts to reduce maternal mortality.
- The Kyrgyz Republic already has a liberalized FP provision policy that allows nurse-midwives to provide FP services. Nursing schools were included in the Regional Activity efforts in the Kyrgyz Republic because so much of the rural population obtains their services from nurse-midwives.
- The Kyrgyz Republic has an established partnership with USAID’s ZdravPlusII project, which helped leverage local expertise and experiences.
- There was strong USAID Mission support for this activity and for pre-service education improvements.
- Ministries of Health and Education were flexible and willing to work with international projects.

The Russian Federation later provided an unexpected opportunity. Because of the success of the in-service activities taking place in MCH, the USAID Mission and local partners were most interested in obtaining support for family planning in-service activities.
However, once the Regional Activity began working with faculty, USAID Mission staff, and local partners, it became readily apparent that the faculty and these stakeholders were ready and eager to begin incorporating FP curriculum reform on the pre-service level. The Regional Activity coordinated with a local partner, the Institute for Family Health (IFH), to enable the pre-service initiative to move ahead for some of the Russian medical schools. This built upon the replication of the Tbilisi Regional Academic Consultation in Russia, during which numerous medical schools and members of local and national chapters of the Russian OB/GYN Associations met and reviewed options and obstacles to FP/RH pre-service reform. The results led the IFH to commit resources to assist the Regional Activity to continue to include select medical schools from Russia in key activities. The Regional Activity will provide the curriculum and documents to IFH and participating schools in the fall, and IFH has plans to pilot its use in two schools in Siberia this year. In addition, a meeting to disseminate the results and adopt the curriculum for other schools throughout Russia is planned for early 2010.

CORE COMPETENCIES: THE ROADMAP

As the Regional Activity began to develop their technical strategy for its pre-service reform work, it began collecting existing resources that could be used. The Regional Activity team sought out resources that supported fundamental medical education principles—the building block of the project’s pre-service work. First and foremost, medical education must produce practitioners who are able to identify and respond to the needs of the people they serve; they must be capable of providing high-quality, relevant, effective, and equitable services. In order to teach medical professionals, certain things need to be clearly defined:

- What are the core competencies and learning objectives that each student must be taught in a specific course, discipline, specialty?
- How does the medical program evaluate a student’s competency in knowledge, skills, and abilities?

The vehicle to answer these questions lies in utilizing core competencies and learning objectives for analysis. Core competencies are the fundamental set of knowledge, skills, abilities, and perspectives that are basic to all health care providers interfacing on matters of FP. Learning objectives define what students should know or be able to do at the end of an academic program or course. Such objectives determine what content is taught, how it is taught, and how it is assessed. Core learning objectives define the es-
sentential knowledge, attitudes, and skills that students must develop; they also focus teaching, guide student learning, and reduce “information overload.” While there were very clear evidence-based guidelines for FP service provision, far fewer resources specific to family planning pre-service education existed.

The Regional Activity searched throughout the professional organizations and technical agencies (WHO, FIGO, ACOG, ICM, AANM), USAID cooperating agencies, and academic institutions (RCOG), to identify core competencies for FP teaching and training. The Regional Activity found that they did not exist for undergraduate medical education. In-service FP training manuals often listed learning objectives and had guidelines for evaluating a trainee’s skills, but these were most often for in-service providers, or graduate-level trainees who are developing or refining clinical skills.

Therefore, the Regional Activity embarked on drafting a comprehensive list of FP competencies as well as the valid and reliable assessment of performance based on these competencies. A first draft was developed by the Regional Activity’s FP/RH technical experts and clinicians who had worked with WHO on developing evidence-based guidance, as well as by consultants skilled in pedagogy. The draft core competencies were introduced to the Tbilisi Regional Academic Consultation participants and discussed at length. The Regional Activity subsequently refined the competencies and revisited them at subsequent pre-service workshops and trainings. Each time the competencies were examined from a different lens: What is a core competency and why is it important? Which competencies are most appropriate for undergraduates? For graduates? Which ones are essential to a FP curriculum, and which ones can go in related coursework? How can these competencies be used to evaluate students’ knowledge, skills, and attitudes?

The core competencies became the guiding principle for developing the FP curriculum that was implemented (see Curriculum Development, p. 26). A final set of competencies includes those FP-related competencies that each country deemed essential for an undergraduate medical student to learn, as well as annexes of related competencies for graduate students and other classes. Different universities and programs can review and adapt these competencies as fit best within their country setting, legal and regulatory environment, and service delivery system.
EVIDENCE-BASED MEDICINE AS THE LYNCHPIN OF THE PRE-SERVICE ACTIVITY

One legacy of the Soviet-based medical system is the lack of familiarity with and use of evidence-based medicine.\(^{17}\) During the height of the Cold War, when the Western world was beginning to embrace the notion of providing clinical care based on the scientific evidence, the Soviet medical system was cut off from this movement. As a result, clinical decisions were often based on experts’ opinion, observational studies, and anecdotal evidence. Textbooks and teaching materials were also developed in this way, rather than based on rigorously controlled research.

Unfortunately, many of these old Soviet-era textbooks, teaching materials, and less rigorous research practices persist throughout medical institutions in the E&E Region. Medical professionals who have had exposure to EBM through international training activities often talk about how this is a radical shift in thinking for them and how it can bring about a “sea change” in their clinical practice.\(^{18}\) Using EBM is the exception, rather than the norm, throughout Eastern Europe and Eurasia.

Many health-related programs have been implemented in the E&E Region through support from USAID, WHO, UNFPA, and other institutions. Therefore, many providers and faculty have heard of EBM. Most are aware of how the Western medical world has shifted toward this approach. Select faculty and providers have had some introductory training on EBM; others have attended FP/RH and MCH trainings that included evidence-based recommendations and guidelines. However, there has been no systematic teaching of EBM in the region among medical faculty. For these reasons, the Regional Activity determined that it was essential for EBM be at the heart of their FP pre-service reform work. All activities were designed accordingly. The first technical workshop of the FP pre-service initiative focused on sharpening faculty skills on contraceptive technology and evidence-based FP service provision. The information in this workshop was evidence-based, up-to-date, and in concert with the four WHO FP cornerstones. Ensuring that faculty understood the most recent information about contraception was the first step to preparing them to teach it to undergraduates.

The second training pre-service initiative activity focused on developing teaching skills. This workshop was also based on the literature, highlighting best practices and evidence in medical education. This training included learning how to develop lesson plans, incorporating core competencies and learning objectives into teaching materials, and understanding what teaching methods are appropriate for transferring knowledge, skills,
and attitudes. All of the small group work, case studies, and interactive teaching exercises were about FP, and all of these were technically sound and based on the evidence.

The third technical workshop designed by the Regional Activity focused on EBM. This training was quite different from those usually held in the region about EBM in that it focused not only on teaching the faculty to understand, interpret, and critically appraise the medical literature, but also how to teach these skills to their students. The project felt that this was an essential skill for providers to have in order to help develop local capacity and long-term ability to update and modify their FP (and other) curricula as new evidence warranted. It is one thing to understand what the difference is between an odds ratio and relative risk, or between a cohort study and a randomized controlled trial; however, it is another thing altogether to read a research article and say “Does this warrant a change in my clinical practice? Does this warrant a change in what I am teaching my students to know or to do?” This workshop aided medical faculty to read through seminal research articles on FP that changed clinical practice and that therefore should be used as the basis for what is taught in a FP curriculum. Participants assessed the strengths, weaknesses, and internal and external validity of each study and developed small group exercises on how to teach the same skills to undergraduate medical students.

It is important to note is that while EBM was a primary component of each of these workshops/trainings, improving faculty skills in teaching was also incorporated throughout each of these activities. Each workshop for faculty built upon the prior one and upon the content of the current session. In this way, the faculty practiced developing and facilitating small group teaching activities, case-based teaching, evaluating successful teaching activities, replicating new ways to engage adult learners, and applied interactive teaching methods. Strengthening local capacity to teach—and teach EBM and evidence-based FP in particular—was identified as a key need by all countries participating in the Regional Academic Consultation. Following this feedback, the Regional Activity designed their activities to address these as much as possible and in as many ways as possible.
ONE SIZE DOES NOT FIT ALL

Despite the common challenges the countries are facing in medical education reform, significant differences were also very evident. These differences can be characterized by four overarching themes:

1. **Time devoted to teaching FP:** Each teaching institution has a certain number of academic hours devoted to FP in the undergraduate curriculum. These hours vary widely: 4 hours in Georgia and Russia to 16 hours in Kyrgyzstan. Usually, the training programs and the number of hours allotted for each subject is state approved and standardized. However, the detailed technical contents and training methodology are not regulated by the government and are subject to interpretation by each teaching institution.

   While some countries were eager to recommend changing the number of hours that FP is taught, others preferred to develop curricula and lesson plans that fit into the pre-existing hours slated for FP. In Russia, for example, the number of hours devoted to teaching a subject is mandated from the top, so that all medical schools cover the same amount of time. However, the faculty has the ability to modify those mandated hours by as much as 20% (and sometimes they increase it even more). Faculty who believe that FP is important can shift additional time to teaching family planning, but usually at the expense of another topic.

   Some participants thought that the best strategy would be to develop a comprehensive FP/RH curriculum and core competencies that crossed all disciplines, then incorporate this content into multiple courses (i.e., anatomy and physiology, reproductive biology, public health). This approach would ensure that the key content and knowledge could be built upon throughout the entire undergraduate curriculum, and that the same evidence-based information would be taught consistently and would be reinforced in all courses.

2. **Different medical education systems:** Although the participating countries’ medical schools all emerged from the Soviet medical education system, some of them have gone through extensive medical education reform processes and, therefore, have different structures and training programs (internship, residency, etc.). They also have different guidelines on what a trainee can and cannot do to a patient. In Kyrgyzstan, for example, a medical student can provide an intramuscu-
lar injection to a patient under proper supervision, while in Georgia undergraduates are not legally allowed to do so and cannot even counsel a patient.

While some institutions have begun incorporating teaching evidence-based medicine in their curricula, others have not. Georgia, for example, has developed an evidence-based, comprehensive maternal and neonatal health curriculum for undergraduate medical students that is consistent with the implementation of their USAID-supported “Effective Perinatal Care” program efforts and WHO recommendations. Medical faculty see integrating FP pre-service education as a complementary component of this unit. Each country is at a different place in their educational reform efforts, and they have different needs and methods for addressing the gaps in their FP undergraduate teaching.

3. **Different legal and regulatory frameworks authorizing specific providers to provide contraception:** Each country has different regulations on provision of FP methods and services, and FP teaching in medical and nursing schools is consistent with these regulatory requirements. For example, Kyrgyzstan’s liberalized regulations for FP service provision has resulted in teaching IUD insertion procedure at the undergraduate level for medical and nursing school students. While most countries considered this a graduate-level competency that only specifically trained doctors can undertake, Kyrgyzstan included IUD insertion as a skill necessary for each newly-graduated doctor and midwife. An interesting discussion ensued on this point at the Regional Academic Consultation. Such exchanges provoked some rethinking about what skills and competencies could successfully—and safely—be taught at the undergraduate level for doctors, including specialists and general practitioners, as well as for nurses and midwives.

In the end, because countries’ regulations on method provision vary, the FP curricula developed by the teaching institutions must be consistent with national regulations and guidelines.

4. **Various levels of need for technical assistance:** Five countries participated to varying degrees in the pre-service activity. These five countries all had different external TA support needs. Russia, for example, is fairly self-sufficient. The faculty could use some resources and guidance but for the most part are comfortable working in collaboration with IFH in Moscow. (IFH is known for bringing EBM in MCH and FP/RH to Russia and is seen as the leader in EBM in the country.)
Azerbaijan, on the other hand, appeared to have the greatest need for TA, at all levels.

In the Kyrgyz Republic, there is a need to help improve the quality of medical education—there is a sense that providers are less prepared to practice than they should be, based on the human resource constraints that the country is facing. Furthermore, there is a need to provide support to technical/vocational schools that teach nurse-midwives, since this cadre of health professionals provides care to the vast majority of the rural population. These challenges aren’t being faced by the other countries that attended the Regional Academic Consultation but are very much a present in other Central Asian countries such as Tajikistan.

Despite these differences, there are still lessons learned from providing TA to specific countries that are applicable to other countries. There will always be benefits to sharing experiences and learning from another country’s positive steps and missteps. Furthermore, the common language that is spoken as well as excellent internet access in the E & E Region provide opportunities for taking advantage of targeted regional exchanges while tailoring country activities to best fit the specific situation and needs of each country (see Future Directions, p. 28).

### CURRICULUM DEVELOPMENT

When asked to prioritize the key barriers to improving FP pre-service education, country delegations at the Regional Academic Consultation included the following:

- Insufficient knowledge for using and critically evaluating the evidence and teaching evidence-based medicine among medical faculty and staff
- Outdated teaching methodologies, including methodologies highly centered on teacher and lecturing, with no use of adult learning principles
- Lack of evidence-based, up-to-date, FP curriculum for undergraduate students

The activities described previously were designed to directly address these first two barriers. The last piece—the lack of appropriate FP curriculum—was also incorporated into these activities. At the curriculum design workshop, the participants winnowed through the draft list of core competencies and selected those most appropriate to their country situation. Once these competencies were selected, they drafted learning objectives and lesson plans that reflected what topics they considered essential. The lesson plans in-
cluded ideas for small group work, case-based teaching, and other interactive adult learning methods appropriate for teaching knowledge, skills, and attitudes.

A crucial element to note regarding the curriculum is that the final list of core competencies participants selected was based on what they considered important without any time constraints placed upon them by their institution. That is, the Regional Activity included the information that faculty in all implementation countries thought fundamental for all undergraduate students to learn about FP, regardless of the number of teaching hours devoted to FP. The project did this so that every country that would adopt and/or adapt the curriculum in the future could have a full FP curriculum available to them.

FP technical experts, clinicians, counseling experts, and teaching methodologists participated in FP curriculum development and review. This allowed for maximum technical accuracy in all disciplines reflected in the curriculum. Faculty from the three implementing countries—Georgia, Kyrgyz Republic, and the Russian Federation—undertook a technical review of the curriculum: its content, design, activities, evaluation etc. Based on this review, the Regional Activity finalized the curriculum and provided electronic and hard copies to all of their collaborating partners and institutions. Electronic version of the curriculum and core competencies is available at www.jsi.com.
The FP pre-service reform effort focused on working within the existing medical education system, rather than trying to reform the system from the top down. This allowed for rapid progress in identifying needs for improving the educational system, developing local capacity to improve their FP teaching and training skills, and developing an evidence-based FP curriculum that addresses the core competencies and learning needs of undergraduate medical students.

Coordinated and fully-functioning medical systems can largely improve quality of care and cost effectiveness. Pre-service (undergraduate and postgraduate) and in-service training (including CME) are closely linked, and both teach and reinforce scientific knowledge and clinical skills that are consistent throughout a medical professional’s career. In the E&E Region, there has been significant investment in FP in-service training. The pre-service work described in this paper complemented the existing in-service efforts.

More improvements to the medical education environment in E&E are necessary, however. Such an undertaking is a long-term process—one that requires years to fully implement, evaluate, and modify. It will also require time and support to test, refine and finalize teaching materials and to fully develop local capacity to do so independently. Possible next steps to continue to strengthen medical education include:

1. **Review and analyze individual country experiences** of all involved teaching institutions implementing new family planning teaching practices. This will provide evidence to mobilize resources and can highlight strengths and gaps to be addressed for further improvement of quality of pre-service teaching and training.

2. **Develop strategies and mechanisms for effective dissemination of findings** to share information and experiences throughout the E&E Region. Medical schools must be able to adequately document and disseminate results in order for the rest of the schools and the professional associations to support change throughout countries and across the region.

3. **Document results of methods to support continuous capacity building** for faculty including the sustained provision of learning materials. The need for continuous capacity building for medical faculty is well-documented, and there are currently several methods being used in the region. The major growth in technology that can appropriately assist E&E medical schools in this en-
deavor has spawned several methods to support faculty learning. The use of new technologies and more traditional methods must be documented, so other countries can benefit from lessons learned and avoid replicating mistakes.

4. **Create a comprehensive RH curriculum that includes evidence-based, up-to-date information that is related to and goes beyond family planning.** Another part of a well-linked, coordinated medical education system is reinforcement of proper information across various courses, departments, and curricula. The core competencies identified a number of concepts important to an undergraduate student closely related to FP, but that could not be incorporated into the FP curriculum. By bringing in faculty from other departments and following a similar process, a project could continue developing local capacity in teaching medical students, while at the same time developing a broader curriculum that can include other health topics. Over time, the local staff would develop the capacity to go through this iterative process on their own and achieve sustainability.

5. **Develop additional complementary activities to improve the quality of postgraduate and CME teaching and training.** This pre-service activity was developed to address the FP deficiencies at the undergraduate level, where the primary focus is on providing future medical professionals with the proper knowledge and general skills. It is during their postgraduate training (i.e., internship and residency) where the students obtain most of the specialized clinical skills and develop habits that will last a lifetime. It is during CME courses that providers learn about any new research findings that warrant changes in clinical practice. The gaps that the Regional Activity identified in undergraduate FP medical education also exist at the post-graduate and CME level. Addressing these gaps can go a long way in improving the quality of FP service provision in the Region and eliminating conflicts between content taught at different levels in the system. Including professional organizations in such an effort could also be beneficial.

The E&E region has great potential for continuing FP medical education reform efforts. There is a large cadre of well-trained professionals who are eager to learn new information and respond positively to evidence-based medicine and public health practice. Furthermore, there are benefits that can be gained from continuing a regional approach of
knowledge-sharing and lessons learned among countries that face various challenges, but whose challenges that stem from a common past.

In response to the expressed need to revise, update, and modernize medical and nursing education, USAID or another committed financial and technical partner could play a leading role in supporting broad health pre-service training and curriculum reform. It is important to continue supporting pre-service education initiatives, mobilizing resources, and broadening partnerships to elicit long-term support for this key component of sustainable high-quality service delivery.
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