

American International Health Alliance

## Final Performance Report

# Region-wide Health Partnership Program in the New Independent States 1998-2008



USAID CA # EE-A-00-98-00008-00

December 2008



## Preface

The American International Health Alliance, Inc. (AIHA) is a 501(c)(3) nonprofit corporation created by the United States Agency for International Development (USAID) and leading representatives of the US healthcare sector in 1992 to serve as the primary vehicle for mobilizing the volunteer spirit of US healthcare professionals to make significant contributions to the reform of healthcare overseas through partnerships.

AIHA's mission is to advance global health through volunteer-driven partnerships that mobilize communities to better address healthcare priorities while improving productivity and quality of care. Founded in 1992 by a consortium of American associations of healthcare providers and of health professions education, AIHA is a nonprofit organization that facilitates and manages twinning partnerships between institutions in the United States and their counterparts overseas. AIHA has to date supported more than 150 partnerships linking American volunteers with communities, institutions, and colleagues in 33 countries in a concerted effort to improve healthcare services and delivery.

Operating with funding from USAID, the Health Resources and Services Administration (HRSA) of the US Department of Health and Human Services, the Library of Congress, the Global Fund to Fight AIDS, Tuberculosis and Malaria, and other donors, AIHA's partnerships and programs represent one of the US health sector's most coordinated responses to global health concerns.

This final performance report is a comprehensive overview and analysis of AIHA programs made possible with the generous support of the American people through the United States Agency for International Development (USAID) through Cooperative Agreement #EE-A-00-98-00008-00. An innovative region-wide funding mechanism designed to complement and support AIHA's USAID-funded Health Partnerships Programs in four regions of the New Independent States—Caucasus, Central Asia, Russia, and the West NIS—the region-wide Cooperative Agreement was operational from 1998-2008.

AIHA wishes to express its sincerest gratitude to the countless professionals in the NIS and the United States who gave so generously of themselves to the partnership program in Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. AIHA's programs have been so successful because these individuals demonstrated the courage and commitment to change; the patience, dedication, and hard work to gain new knowledge and skills; and a generous spirit of trust and collaboration. Together they made significant contributions to improving healthcare services and delivery for thousands of people in the region. AIHA also thanks USAID for the opportunity and privilege of working in the region and for its steadfast support of the partnership program.

Finally, AIHA gratefully acknowledges the contributions of dedicated staff in its Washington, DC, and regional offices in managing and implementing the program and in preparing this final performance report.



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**Final Performance Report**  
**Region-wide Health Partnership Program**  
**in the New Independent States**  
**1998-2008**

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**Funding from the American people for the programs described herein  
was provided by USAID through cooperative agreement #EE-A-00-98-00008-00.**

**The contents are the responsibility of AIHA and do not necessarily reflect the views of  
USAID or the United States Government.**

## I. Background and Executive Summary

In response to the breakup of the former Soviet Union and the difficult economic and social transition that followed, the United States Agency for International Development (USAID) initiated a cooperative agreement in 1992 with the American International Health Alliance (AIHA) to support the transfer of modern US medical knowledge and technology. The cornerstone of this knowledge transfer involved the establishment of peer-to-peer, voluntary partnerships between US hospitals and health organizations and comparable institutions in the New Independent States (NIS). This initial NIS Health Partnership Program was funded from 1992 through 1998 and resulted in the creation and support of 21 partnerships involving 181 institutions in the 12 NIS countries.

In 1998, USAID awarded AIHA an additional series of cooperative agreements intended to renew the NIS Health Partnership Program for an additional five years, with the option to extend it for up to five years after that. Over the following decade, USAID and AIHA established 90 new partnerships involving 336 institutions in the NIS in addition to supporting sustainability activities among several of the pre-1998 partnerships. The program was supported through four cooperative agreements that were managed by the four NIS regional missions (Caucasus, Central Asia, Russia, and West NIS), as well as a fifth region-wide agreement that was managed by USAID/Washington's Europe and Eurasia Bureau. The four regional agreements funded the award of subgrants to each of the partnerships, while the region-wide agreement served as an extension of, and complement to, the individual partnerships.

The region-wide agreement represented a new and unique approach for USAID in its vision to support its regional development programs. By establishing a separate region-wide program to complement direct support for individual partnerships, USAID was able to integrate its growing network of health partnerships into a programmatic whole.

In seeking to maximize program outreach, USAID intended that the region-wide agreement would enhance the impact of the individual partnerships by:

- promoting inter-partnership communications and synergy;
- supporting innovative pilot and regional technical initiatives which cut across partnerships;
- sharing and disseminating information; and
- promoting and facilitating policy reform across borders and sub-regions.

The AIHA partnership program has distinguished itself from other technical assistance and partnership programs through its dimensions of voluntarism; community-based institution-to-institution relationships with a common focus on healthcare; flexible, inclusive approach to objective-setting that relies upon a continuous process of planning and adaptation; and structure that encourages collaboration, networking, and sharing of information among partnerships.

These characteristics are inter-related and mutually reinforcing. Unlike many similar types of partnership programs, AIHA itself is an active partner in every partnership, promoting voluntarism and community-based linkages, providing key support services that enable the partners to mobilize their resources more effectively and get the most out of their efforts, identifying and bringing to bear significant additional voluntary resources from AIHA's own strategic partners, and providing a framework for collaboration within a larger international and policy context.

Key elements of AIHA's partnership model are especially applicable to the region-wide agreement, namely:

**Closing the Knowledge Gap** — The AIHA partnership model focuses on the effective transfer of knowledge and skills. Through peer-to-peer interaction, partners work to close the knowledge gap. They adapt and disseminate new models and proven techniques to improve the efficiency and productivity of healthcare providers and allied professionals through better clinical and administrative management and organization. Under the region-wide agreement, AIHA expanded the information resources of individual partnership

institutions and created new and innovative means for partnership exchanges and information-sharing through print and online publications and information dissemination, joint workshops, distance learning programs, and the creation of Internet-capable resource centers at NIS partner institutions.

**Program Sustainability** — The sustainability of programmatic initiatives is always a key objective of AIHA's workplan. The strong emphasis on voluntarism and community involvement encourages long-term commitments and linkages that have typically been continued at some level of effort well beyond the USAID funding period. In further support of partnership sustainability, AIHA has pioneered the use of modern communications technologies in the region and will continue to do so in the future. AIHA also promotes partnership activities to engage other potential donors and private sector investors, and assists partners in developing skills necessary to seek out and attain funding support from other sources. Through a continuous process of planning and adaptation, partners themselves identify and adapt programmatic elements to the unique cultural, resource, and organizational needs of the host country.

**Rigorous Approach to Process** — Within the framework of a collaboratively developed workplan, AIHA provides programmatic guidance in the form of process guidelines, advice in establishing appropriate and achievable goals, and various mechanisms for identifying and sharing successful approaches. The support of the region-wide agreement for the development of monitoring and evaluation tools and methodologies helped AIHA work with USAID missions to develop a stronger emphasis on objective setting and outcomes measurement.

**Broad Systemic Impact** — The partnership program is designed to have a system-wide impact through a largely bottom-up approach that creates models for dissemination and replication—protocols, practice guidelines, and curricula, for example—while at the same time encouraging the implementation of supporting policies and regulations. To create a receptive audience among national decision-makers, AIHA and the partnerships actively engage ministries of health and other governmental entities to promote adoption of locally-proven solutions at national and regional levels. With the support of the region-wide agreement, programmatic success was further institutionalized and scaled up through dissemination conferences and workshops, “training-of-trainer” programs, and internships, as well as coordination with top-down technical assistance sponsored by USAID and other donors.

**A Platform for Collaboration** — Once a partnership is established, AIHA works with its leadership closely and aggressively to seek out potential collaborators to further USAID program objectives and enable the overseas partner to coordinate and utilize other forms of government or PVO-sponsored development assistance. The World Bank, UNICEF, UNFPA, Peace Corps, the US State Department's Operation Provide Hope, Department of Defense medical equipment donation program, the US Department of Health and Human Services, and private sector manufacturers such as Eli Lilly have all taken advantage of the unique opportunities provided by AIHA partnerships to support their own programs and to create broader systemic impact in the region.

## **Integrating the Partnership Program through the Region-wide Agreement**

During the 10 year lifespan of the region-wide agreement, AIHA implemented a wide range of programs and technical management activities to enhance and strengthen both the individual partnerships and the partnership program as a whole. These can be divided into three major areas:

### **1. Core Program Integration and Communications Support**

The NIS Health Partnership Program was built on the principle of knowledge transfer and dissemination. AIHA utilized a variety of mechanisms—including partnership exchanges, conferences, training workshops, the Internet, publications, and video conferencing—to promote on-site and distance learning to help bridge the divide in healthcare practice in the NIS and the West. Without the region-wide agreement, much of this exchange and cross-pollination would never have occurred.

The majority of AIHA's support for communication, information dissemination, and networking was funded through the region-wide agreement, including:

- Annual partnership conferences that provided partners with opportunities to learn from each other and share their experiences;
- Print and online publications highlighting successful program models and lessons learned;
- Program toolkits, practice guidelines, training curricula, and other materials produced by individual partnerships, as well as through cross-partnership program initiatives;
- AIHA Web site;
- Internet discussion lists for partners;
- EurasiaHealth Knowledge Network, a web-based clearinghouse focused on providing educational and reference materials for health professionals in the NIS in all of the languages used in the region;
- EurasiaHealth AIDS Knowledge Network, a spin-off of the EurasiaHealth Knowledge Network that actively translated a sizable collection of key HIV/AIDS-related educational materials into Russian; and
- Learning Resource Centers, which were established at the majority of NIS partnership sites to create the capacity for NIS partners to access the Internet for communication and information exchange.

In addition to communication and information exchange, AIHA utilized the resources of the region-wide agreement to improve and implement a new monitoring and evaluation framework with specific indicators that link program results to USAID's Strategic Objectives for each region.

AIHA also used the region-wide agreement to supplement partnership activities, conducting a number of orientation sessions that provided new partners with training on the AIHA partnership model, workplan and monitoring development processes, and administrative and financial procedures.

And, when several partnerships became involved in the shipment of medical equipment and supplies, AIHA helped coordinate these shipments through Carelift International to streamline the process and save funds across all regions. AIHA also supported several NIS health professionals who were awarded fellowships to study in the United States through the US government's Edmund S. Muskie Graduate Fellowship Program. During their period of study, AIHA provided internships designed to support the development of various programs related to each Muskie fellow's professional experience in the region.

The information and communications activities, the partnership conferences, and all of the other program integration components provided the partnerships with a core foundation that enabled them to build and enhance their individual programs. In this way, the region-wide agreement represented a unique innovation through which these integrative components and opportunities could be implemented most efficiently.

## **2. Cross-partnership Initiatives**

AIHA's ability to bring about change at the region-wide level was dependent on its support for cross-partnership programs that addressed healthcare issues of concern to all partners. Such programs were often developed by one or more partnerships in response to specific health needs identified by USAID or health ministries in various countries in the region. Through the region-wide agreement, AIHA facilitated a coordinated response to these issues by organizing collaboration among partners at workshops, meetings, conferences, and study tours, as well as through dissemination activities, including the development and replication of educational and program materials. The main cross-partnership program initiatives supported by the region-wide agreement include: Primary Healthcare; Nursing; Women's Health; Emergency and Disaster Medicine; Infection Control and Prevention; Infant Survival and Neonatal Resuscitation; and Clinical Practice Guidelines.

With the support of the region-wide agreement, AIHA was able to create synergies that helped to duplicate successful programmatic models across its partnerships in each of these areas.

### 3. Regional and Pilot Programs

While cross-partnership initiatives typically grew out of grassroots-level innovations developed by individual partnerships and then expanded to other sites across the NIS, the region-wide agreement also supported regional and pilot programs that were initiated by AIHA/USAID in response to more urgent priorities that arose during the term of the partnership program.

Specifically, AIHA worked with USAID to launch two major pilot initiatives in response to the region's rapidly expanding HIV/AIDS epidemic with the support of the region-wide agreement. The first was the establishment of a model care and training program for the prevention of mother-to-child transmission of HIV/AIDS in Odessa, Ukraine. The second involved the development and implementation of more than two dozen curricula related to the care and treatment of HIV/AIDS.

AIHA partners from each region received training based on the curricula developed through these two pilot programs. In addition, AIHA worked closely with several NIS health ministries to coordinate the pilot programs and better ensure that relevant, evidence-based policies for the care and treatment of people living with HIV or AIDS and the related training of healthcare professionals were adopted.

In summary, the programs and activities implemented under the region-wide Cooperative Agreement, which are described in greater detail in the rest of this report, were designed to:

- complement and support the goals of individual partnerships;
- promote a comprehensive programmatic vision;
- build capacity among multinational, cross-regional groups of NIS partners in support of the overall goals of the NIS Health Partnerships Program;
- disseminate information and lessons learned across partnerships and throughout the region;
- create and support a framework in which partners are empowered and encouraged to engage in continuous learning activities, and to apply that learning to professional contexts and situations that go well beyond specific partnership workplan activities;
- assist in rebuilding the linkages to facilitate dissemination of best practices among healthcare professionals in the NIS countries that were frayed or broken when the Soviet Union collapsed;
- support program administration and oversight activities that are common to all partnerships; and
- comply fully with USAID's requirements for regular programmatic and financial reporting.



## II. Impact of the NIS Healthcare Partnerships Program Region-wide Agreement

With the NIS Healthcare Partnerships Program, USAID initiated a new and innovative approach to its traditional technical assistance model. Working with AIHA and its network of US healthcare providers, USAID was able to broker relationships among health organizations and professionals in the United States and the NIS who were, in turn, able to voluntarily contribute their technical expertise along with substantial in-kind resources to the endeavor of building capacity and transferring knowledge.

Over the life of the program, partners have contributed professional time and material donations with an estimated value two and a half times greater than the amount invested in the program by USAID. This level of commitment also translated into the establishment of close relationships between volunteers and partner institutions, many of whom have sustained these relationships long after USAID funding has come to an end.

“In international development, we spend so much of our time on a supply-driven, shake-your-finger approach that is often resented and just doesn’t enjoy the sticking power that a slower, more equality-based approach does. That’s the true value of partnerships.”

— Paul Holmes, Senior Regional Health Advisor, USAID Europe and Eurasia Bureau

According to Paul Holmes, Senior Regional Health Advisor for USAID’s Europe and Eurasia Bureau, the design of the AIHA partnership model “embraced the right way to do development and the essence of what partnership is—demand-driven, equal relationships with equal participation. In international development, we spend much of our time on a supply-driven, shake-your-finger approach that is often resented and just doesn’t enjoy the sticking power that a slower, more equality-based approach does. That’s the true value of partnerships.”

Holmes also points out that the deliberative process of setting partnership priorities, developing detailed workplans, and implementing new programs and services “often meant slow germination, which frustrated some at USAID. But it resulted in a level of ownership and buy-in that has been hard to match in the traditional approach to technical assistance. My sense is that this approach is more successful in fostering sustainability, building communities, and building networks.”

In addition to promoting voluntarism and sustainability, the spirit of partnership also helped to communicate American partners’ values of community, civil society, and philanthropy to a region that was only beginning to emerge from the constraints of totalitarian society. The engagement of local communities became one of the hallmarks of the partnership model. As the partnership programs evolved, AIHA developed a methodology and standard guidelines to assist partners in seeking out participation from not only healthcare providers, but also schools, police and fire departments, churches, NGOs, and other key social organizations on both sides of the partnership.

Over time, NIS and CEE partner institutions began to emulate their US partners in their community-orientation and philanthropic ideals. In fact, several AIHA partner institutions in the NIS and CEE would later establish new and independent partnerships with each other and with institutions in other parts of the developing world. For example, Trnava University in Slovakia established a partnership with healthcare providers in Kenya in 1998 and are providing medical care and treatment in Nairobi’s slums, training community health workers, and supporting the development of patient record systems for several clinics.

### A Region-wide Partnership of Partnerships

When USAID renewed the NIS partnerships program in 1998, it divided the program into four separate regional cooperative agreements to provide regional USAID missions with greater flexibility to set program priorities. A fifth, region-wide cooperative agreement was established to allow AIHA to continue to support the

collaboration, networking, and the sharing of information among partnerships that had been a cornerstone of the success of the partnership model. Through its “partnership of partnerships” philosophy, AIHA actively promoted the integration of partnerships into a region-wide network tied together by conferences, seminars, on-line networks, cross-partnership program initiatives, and cross-pollination of successful activities. These programs successfully and cost-effectively enhanced partnership achievements by allowing partners to draw upon each other's experiences, and they allowed USAID to accomplish much more than the individual bilateral partnerships could collectively achieve on their own.

## **NIS Region-wide Program Spending Summary 1998-2008**

<b>Information and Communications Technology Programs (EurasiaHealth Knowledge Network, EurasiaHealth AIDS Knowledge Network, Learning Resource Centers, AIHA Web site)</b>	<b>\$4,177,310</b>
<b>Communications/Publications</b>	<b>\$2,818,978</b>
<b>Annual Partnership Conferences and Other Meetings</b>	<b>\$2,608,984</b>
<b>Monitoring and Evaluation</b>	<b>\$1,363,330</b>
<b>Cross-Partnership Program Initiatives</b>	<b>\$2,775,422</b>
<b>Regional HIV/AIDS Curriculum Development and Capacity-Building</b>	<b>\$1,024,820</b>
<b>Pilot Program: Prevention of Mother-To-Child Transmission of HIV/AIDS</b>	<b>\$1,335,550</b>
<b>Program Management</b>	<b>\$2,288,957</b>
<b>Total</b>	<b>\$18,400,453</b>

The major impacts and synergies that the region-wide agreement created were in the four following areas:

1. Development of High-quality Educational Curricula and Reference Materials
2. Development and Replication of Innovative and Successful Program Models
3. Widespread Knowledge Dissemination and Exchange
4. Strengthened Regional and International Relationships and Improved Sustainability

### **1. Development of High-quality Educational Curricula and Reference Materials**

While the bilateral AIHA partnerships frequently developed curricula and other educational and reference materials as part of their capacity-building training programs, the cross-partnership program initiatives and other programs funded through the region-wide agreement facilitated the development of curricula and information resources of much greater breadth and quality.

AIHA's Infection Control Manual, the Pre-Hospital and First Responder EMS curricula, and the Neonatal Resuscitation Training Manual could not have been produced within the budget and resource constraints of a single partnership. Through the cross-partnership program initiatives, however, AIHA was able to bring together experts and resources from both within the partnerships and from other US and international organizations to create and adapt professional curricula for use by all of its partnership institutions.

Altogether, AIHA produced, developed, and/or translated 87 major curricula, textbooks, guidelines, and toolkits for its cross-partnership program initiatives. This figure does not include the periodic updates and re-translations that were made in the case of several of these products. For example, a few of the key HIV/AIDS

textbooks that AIHA translated were updated approximately once every 18 months and AIHA worked with the authors and a specialized group of translators to cost-effectively incorporate changes that were made with each update.

These 87 products include the 31 curricula developed for the PMTCT and HIV/AIDS regional and pilot programs and a collection of 16 core HIV/AIDS-related textbooks and guidelines that were translated into Russian. Some of these texts, including multiple editions of the *Medical Management of HIV Infection* (Bartlett), *HIV Medicine 2005* (Hoffman, Rockstroh, and Kamps), and the *Textbook of Pediatric HIV Care* (Zeichner and Read), represent seminal international reference guides for the care and treatment of HIV/AIDS. These texts alone include more than 1,800 pages of text and it is far from certain that these resources would have been translated and made available without USAID's support through the region-wide agreement. As a result of this support, the vast majority of these materials are now available to all of the AIHA partnerships in Central Asia, West NIS, Russia, and the Caucasus, as well as to other USAID-funded programs in the region and any other organization or individual with the ability to download them from the Internet.

Overall, the region-wide agreement helped to fill an important gap by supporting the creation of a vast library of unique educational resources that continue to be in heavy demand by health professionals in the NIS.

In 2008, the EurasiaHealth Knowledge Network Web site continued to see thousands of downloads each month of AIHA's key training curricula and guidelines.

In producing most of its curricula and other educational resources, AIHA was able to bring together local experts from the NIS to review and adapt them to better address the health services resource environment applicable to health providers in the region. This often meant the development of prefaces to these texts that put treatment guidelines and protocols within their appropriate NIS context. By bringing together representatives from NIS health ministries and other leading NIS experts, AIHA and USAID were also able to facilitate consensus-building that led to the adoption of several of these curricula as national standards. For example, AIHA's PMTCT training program developed and implemented in Odessa was later adopted by Ukraine nationally and replicated at sites throughout the country. AIHA and its partners working with the infection control initiative also helped to develop new national guidelines for the Russian Federation.

The region-wide agreement allowed AIHA to synthesize the various products that were produced through several of its most successful programs into online and CD-based toolkits. AIHA produced a total of seven toolkits—focused on primary care, women's health, learning resource centers, healthy communities, nursing, and health management education. Each of these provides guidelines and

information resources that enable and encourage other groups and organizations to replicate AIHA's innovative programs.

Overall, the region-wide agreement helped to fill an important gap by supporting the creation of a vast library of unique educational resources that continue to be in heavy demand by health professionals in the NIS. In 2008, the EurasiaHealth Knowledge Network Web site continued to see thousands of downloads each month of AIHA's key training curricula and guidelines. During the second quarter of 2008, a guideline on chest pain—which was developed through AIHA's clinical practice guidelines cross-partnership program initiative—was the top-ranked document on the AIHA and EurasiaHealth family of Web sites, with a total of 4,126 downloads. AIHA's EMS curricula, the Infection Control Manual, and the three HIV/AIDS textbooks listed above also typically were downloaded thousands of times per quarter. In addition to making these resources available electronically, AIHA also supported the dissemination of thousands of print copies of many of these materials to health providers throughout the region.

## 2. Development and Replication of Innovative and Successful Program Models

AIHA has supported cross-partnership programs and activities in a wide range of areas, including infection control, primary care, clinical practice guidelines, infant survival, women's health, nursing, and emergency

and disaster medicine. In each of these areas, the partnerships developed innovative programs that introduced new models for healthcare in the region.

In primary care, the NIS healthcare system had traditionally suffered from over-centralization and a heavily institutionalized approach. AIHA's partnerships introduced a community-based model that transformed both the partner institutions and their fundamental approaches to healthcare delivery. In all, more than 35 primary healthcare and family medicine training centers were established in communities throughout the region. In emergency medicine, AIHA introduced a model and training network to a healthcare system that did not previously include emergency rooms. The resulting network of 16 Emergency Medical Services Training Centers in the region has now trained more than 40,000 professionals.

AIHA also introduced a unified, cutting-edge model for providing women's health services to a system in which women's healthcare had traditionally been fragmented between maternity hospitals, women's consultation clinics, and regular hospitals. By adapting the Women's Wellness Center model, AIHA was able to establish clinics that provide a comprehensive range of women's health services in 32 communities throughout the region. These centers introduced state-of-the-art approaches to women's health at the same time they were being implemented in Western contexts—including an overall patient-centered focus, mammography screening, and up-to-date shifts in nutrition guidelines.

The Learning Resource Centers similarly were able to introduce cutting-edge innovations—including the use of computers and the Internet to access the latest health research, as well as the shifting emphasis toward evidence-based medicine—at the same time these were being developed and applied at hospitals and medical universities in the United States and Europe.

By fostering its partnership of partnerships through the region-wide programs, AIHA was able to identify these and other successful models developed within one or more partnerships then promote replication by other partnerships. As the Continuing Evaluation Panel (CEP) noted in its 2001 mid-term evaluation report, AIHA's knowledge transfer, dissemination, and networking activities helped to improve the effectiveness of partnership activities by "speed[ing] the rate of adoption of new practices, often introduced first by the individual partnerships, to a wide cross-section of providers and consumers and thus contribute to measurable improvements in local or regional health outcomes."

Examples of these models and practices include many of AIHA's centers for care and treatment, training, and resource dissemination—including Neonatal Resuscitation Training Centers, which were originally piloted by the L'viv/Detroit partnership; EMS Training Centers, which were developed by several partnerships in 1994-95; and Learning Resource Centers, which were first established at partnership sites in 1995-96; as well as the Women's Wellness Centers, Infection Control Training Centers, and Primary Healthcare Centers. The use of these models helped new partnerships build upon the work already done by AIHA and its partners, thereby avoiding duplication of effort while at the same time maintaining the flexibility to adapt the models to the specific needs of each NIS partnership institution.

The CEP also noted that because cross-partnership program initiatives "have a larger geographic population target than do partnerships located at particular hospitals, polyclinics, or medical practices, they are well positioned to collaborate with city, regional, and national government entities to tackle problems that require cross-jurisdictional cooperation." For example, partners working together in regional groups with local and national policy-makers to develop primary care clinical practice guidelines have demonstrated success in getting updated, evidence-based practice standards adopted at the national level.

"Partners and public officials in the NIS/CEE were putting these publications to good use. ...The publications provide useful background for potential non-governmental funders and for mass media coverage. ...The CEP finds AIHA communications and knowledge dissemination activities to be a strong and important element of the AIHA partnership/volunteer program."

— From the 2001 mid-term evaluation report on AIHA partnership programs in the NIS/CEE conducted by the Continuing Evaluation Panel on behalf of USAID (June 2001)

Similarly, region-wide supported pilot programs in PMTCT services and HIV/AIDS curriculum development allowed AIHA to establish models for capacity-building that have subsequently been implemented and used in at least 10 countries of the NIS, often with the support of WHO and Global Fund resources. The Regional Knowledge Hub for the Care and Treatment of HIV/AIDS (supported by WHO, GTZ, and the Global Fund) has used the curricula developed through these programs to deliver more than 205 training courses to in excess of 4,900 health professionals to date. These materials have also been used by the Odessa PMTCT Training Center, and AIHA's newest HIV/AIDS partnerships and the St. Petersburg AIDS Training and Education Center (ATEC) in the Russian Federation.

In summary, the region-wide agreement allowed USAID and AIHA to develop and fine tune its most effective program models and then replicate these through new partnerships and programs. Without this support, these successful programs may have remained relatively invisible and isolated within the individual bilateral partnerships.

### 3. Widespread Knowledge Dissemination and Exchange

AIHA's programs have demonstrated a continuous commitment to knowledge dissemination and exchange. Through its information and communication technology and publications programs, as well as through its support of regional conferences and workshops, AIHA's knowledge dissemination strategy has made significant contributions toward the efforts of partners and other NIS health professionals seeking to update their knowledge and skills. The AIHA Web site along with *CommonHealth*, *Connections*, and other professional publications provided partners and other NIS health professionals with information about program models, successes, and best practices. In its 2001 evaluation, the CEP team observed that: "Partners and public officials in the NIS/CEE were putting these publications to good use...The publications provide useful background for potential non-governmental funders and for mass media coverage...The CEP finds AIHA communications and knowledge dissemination activities to be a strong and important element of the AIHA partnership/volunteer program."

AIHA also developed the EurasiaHealth Knowledge Network, a separate Web site that aims to provide and develop native-language educational materials and to serve as a forum for NIS and CEE health professionals to communicate and consult with each other. With a library of more than 2,000 native-language educational resources, the EurasiaHealth Web site was receiving a peak of over 30,000 visitors per month in 2006. As

noted by Paul Holmes, USAID's Senior Health Advisor for Europe and Eurasia, "EurasiaHealth is one of the best—if not *the* best—sources of evidence-based curricula and information resources for health professionals in the Eurasia region."

"LRCs were a very valuable tool for increasing health professionals' access to data and medical literature, and they contributed significantly to the achievement of partnership goals. Information technology and the Internet had a profound effect on the medical profession ... the LRCs introduced these tools to the partners well ahead of most of their peer institutions."

— From an external evaluation report on AIHA's CEE programs prepared by RTI (January 2006)

In addition to supporting knowledge dissemination through print and electronic media, AIHA also helped the majority of its NIS partner institutions to establish Learning Resource Centers (LRCs), which function as evidence-based practice training centers and libraries for health and medical information. Taken together, the 120 LRCs that AIHA has established in the NIS evolved into a networked community that supports greater cross-partnership collaboration, as well as the sharing and dissemination of knowledge to other health professionals and institutions in the region.

An evaluation team looking at AIHA's LRC program in Central and Eastern Europe observed that: "LRCs were a very valuable tool for increasing health professionals' access to data and medical literature, and they contributed significantly to the achievement of partnership goals. Information technology and the Internet had a profound effect on the medical profession in these sites. The LRCs introduced these tools to the partners well ahead of most of their peer institutions."

Altogether, the LRCs supported a community of more than 103,000 health professionals in the NIS and provided computer and Internet skills training to nearly 19,000 individuals.

The final component of AIHA's knowledge dissemination strategy supported through the region-wide agreement was the sponsorship of conferences and workshops. These events reinforced and disseminated the successes of NIS partnerships both individually and regionally. Conferences and workshops were designed to assure that individual partnership exchanges were as effective as possible and built on the experience of others; that emphasis was placed on sustainability of the program outcomes; and that systems were in place to disseminate clinical and administrative changes beyond the direct participants in the AIHA partnerships.

AIHA's philosophy in supporting its various conferences and workshops was to make them highly participatory, rather than the rote reading of presentations that NIS partners were traditionally used to. This participatory approach helped to reinforce the peer-to-peer aspects of the partnership model and encourage the rise of leaders and champions of change within the partnership communities. By sharing information, the partners were able to learn from each other's successes and failures, thus allowing each individual partnership to achieve considerably more than it could alone. Such events and efforts also served as opportunities to gain high-level attention for partnership programs, on both the US and NIS sides, which often led to official endorsement of the programs and/or financial support.

The 2001 CEP evaluation team noted that: "In addition to their excellent content, AIHA conferences and workshops provide opportunities for essential networking of partners and attract government officials who have the capacity to change national healthcare policy."

Without the support of the region-wide agreement, the exchange of knowledge and information would have been considerably more modest. Partners would have not had the same opportunities and resources to learn from each other's experiences and ultimately apply those experiences in their own environments.

#### **4. Strengthened Regional and International Relationships and Improved Sustainability**

The fourth major area of impact of the region-wide agreement was the cultivation and strengthening of relationships. By its nature, the AIHA partnership model helped to develop the international bonds between US and NIS health professionals and institutions, but through its networking activities the region-wide agreement helped to strengthen these relationships considerably. Forest Duncan, Senior Health Sector Advisor for USAID's Europe and Eurasia Bureau, observed that "with the conferences, workshops, and working groups, the partnership program generated a lot of goodwill and fostered a lot of almost family-like relationships that have remarkably helped to sustain these partnerships beyond their initial funding period."

In addition, region-wide programs helped to rebuild relationships between NIS healthcare organizations that had broken down in many cases as a result of the deterioration of national healthcare systems and the breakup of the former Soviet Union. The evaluation team looking at AIHA's primary healthcare partnerships in 2006 found that AIHA's regional activities have "facilitated an on-going experience-sharing and cross-fertilization among same-country partners" and that as a result some partners have been able to continue their involvement after the partnership program formally ended.

The same evaluation team also noted that: "Several partnerships highlighted the value of cross-partnership meetings for benchmarking: to gauge one's own achievement vis-à-vis other partnerships' progress. NIS partners have used region-wide events to discuss partnership operations and brainstorm on coping strategies for dealing with common problems."

"In addition to their excellent content, AIHA conferences and workshops provide opportunities for essential networking of partners and attract government officials who have the capacity to change national healthcare policy."

— From the 2001 mid-term evaluation report on AIHA partnership programs in the NIS/CEE conducted by the Continuing Evaluation Panel on behalf of USAID (June 2001)

## The NIS Region-wide Program in Numbers

*(All figures as of June 2008, unless otherwise indicated)*

Total USAID Funding = \$18,400,453

Partnerships involved in Region-wide Programs = 111

Textbooks, curricula, guidelines, toolkits, and other products developed = 87

Full-text documents available through the EurasiaHealth Web site = 2001

Full-text documents included in the EurasiaHealth AIDS Knowledge Network Library = 636

HIV/AIDS-related training curricula developed and translated for the NIS = 31

HIV/AIDS-related training courses delivered using the above-mentioned curricula = 205

Number of HIV/AIDS care practitioners trained using the above-mentioned curricula = over 4,900

Peak average visits per month to the EurasiaHealth Web site (2006; compared to 6,900 in 2001) = 27,399

Peak average visits per month to the AIHA Web site (2007) = 54,997

Learning Resource Centers (LRCs) established in the NIS = 120

LRCs sustaining themselves (as of 2005 survey) = 102

Health professionals supported by the LRCs = 103,000

Health professionals trained to use computers and the Internet by LRC staff = 18,853

Percentage of staff at partner institutions using the Internet to access health information = 91%

Number of programmatic toolkits developed = 7

Major program assessments and evaluations conducted through the region-wide agreement = 19

Primary Healthcare Centers established = 31

Number of Nursing Resource Centers established = 24

NIS/CEE Nursing Leadership Institute graduates subsequently promoted to leadership positions = 23

Women's Wellness Centers established = 30

Patient visits to Women's Wellness Centers = 1,277,566

EMS Training Centers established = 16

Professionals trained by EMS Training Centers = over 40,000

National Infection Control Training Centers established = 4

Neonatal Resuscitation Training Centers established = 17

Health professionals trained at the NRTCs = 12,866

MTCT rate of HIV at Ukraine pilot and replication sites = 6% (compared to 21% in baseline group)

These opportunities to meet and discuss a wide range of common issues and concerns have fostered a wide network of relationships that will continue to support improvements in healthcare in NIS countries long after the AIHA partnership have come to an end. In many cases, former NIS partnership leaders have already risen to national and regional positions of authority, which has resulted in further replication of the practices and programs that were observed and developed through the partnership program.

In conclusion, the NIS Healthcare Partnerships Program and the AIHA partnership model have provided a unique and highly effective approach to technical assistance that has had both grassroots and systemic impacts for the healthcare systems of the NIS. Through the programs and activities of the region-wide cooperative agreement, USAID has provided critical support that has greatly enhanced the partnership program.

AIHA's strategy of supporting knowledge dissemination, regional conferences, and cross-partnership program initiatives has served as a catalyst for bilateral partnerships to develop programmatic synergies and associated resources that would not have been possible to achieve through any individual partnership.

USAID's innovativeness in developing a region-wide agreement with a regional, integrative focus served to transform a set of 111 individual partnerships into a more cohesive and interconnected whole. This integrated program was able not only to take advantage of efficiencies in producing information, communication, and networking resources and opportunities, but also to create networks that allowed each partnership to reproduce successes and achieve more together than they could on their own.



### III. Core Program Integration and Communication Support

**D**esigned to complement and augment the healthcare reform efforts of individual partnerships, the region-wide agreement supported the creation of a network of professionals, institutions, and communities linked by a shared history and the common goal of wanting to improve the quality and scope of health-related services available to people throughout the region. Information access, knowledge sharing, and active communication were critical to AIHA's strategy of developing and supporting this fledgling network of like-minded individuals. By funding core program integration and communication support activities such as the Learning Resource Centers, EurasiaHealth Knowledge Network, publications and other vehicles of communication, monitoring and evaluation, and annual conferences and topical meetings, USAID greatly enhanced the impact of individual partnerships, thereby maximizing the effectiveness of its development assistance.

#### A. Learning Resource Centers (LRCs)

In the early 1990s, health professionals in the NIS found themselves increasingly isolated from the global body of medical literature. The transition from centrally-planned to market-based economies wreaked havoc with finances for their primarily public-funded health systems. As a result, in addition to shortages of pharmaceuticals and medical supplies, access to the latest medical research became a scarce commodity as well. In the face of funding shortages, medical libraries were unable to maintain subscriptions to international medical journals and domestic medical publishing houses were forced to cut back on the number of journals they published. Because of this isolation, many NIS health professionals, educators, and policymakers were not always aware of new advances in medicine, which led to oftentimes outdated and less effective clinical practice and healthcare policy.

At the same time NIS health professionals were facing this crisis, the international medical community was witnessing the growth of a grassroots movement in support of "evidence-based practice" (EBP), which aims to ensure effective integration of research evidence with clinical practice. This growth was prompted in part by studies by the Institute of Medicine and others, which found that medical errors were far more prevalent in patient care in the United States and Europe than many had assumed. The "errors" cited not only included misdiagnoses or incorrect treatment, but also the frequent use of less effective or ineffective therapies. In other words, physicians were too often *not* prescribing treatments that were proven to be the most effective. Many adherents to the discipline of EBP therefore began working from the premise that physicians need to balance their own knowledge and experience with the most current research evidence, as well as with patient preference when deciding on a course of treatment. EBP provides a methodology that helps clinicians find and interpret research that will better inform their decision-making.

A third developing trend in the 1990s was the rapid growth of the Internet on an international scale. As local markets for Internet access developed around the world, it became more affordable for institutions and individuals to get connected. Furthermore, by the mid-to-late 1990s, it was becoming increasingly apparent that the model of medical publishing was going to be transformed as more and more journals and other sources of research became available online. Thus, for health organizations in the NIS, the Internet offered an opportunity to at least partially address their information access problems.

The convergence of these three trends—the breakdown in access to health information for NIS health professionals, the rise of evidence-based practice, and the rapid growth of the Internet—presented AIHA with a unique opportunity to help address the capacity-development needs of its NIS partnerships.

To address the dual challenges of helping its partners access health information and tying standards of practice to the latest research evidence, AIHA began complementing the activities of its ongoing partnerships by investing directly in the information infrastructure of the NIS partner institutions. AIHA began to routinely purchase computers, Internet connectivity, and a package of medical CD-ROMs and online databases for each of its new NIS partner organizations. The unifying concept behind these investments was the Learning Resource Center (LRC). The LRC model was designed to ensure that partners saw these investments not

only as improvements in their infrastructure, but also as a focal point to encourage their staff to adopt quality improvement and evidence-based approaches to care, treatment, education, and policy.

Through the LRC project, AIHA incorporated a combination of strategies to begin to overcome barriers to accessing information. One of the distinguishing features of AIHA's approach is that the LRCs were designed to give health professionals access at the point of care and thereby improve the convenience—and the likelihood—of using up-to-date information.

Another element of the project involved active staff outreach and education. To accomplish this, AIHA promoted the development of a cadre of staff at partnership institutions to serve as "change agents" or "opinion leaders" at their institutions. These change agents, referred to as Information Coordinators, were charged with the task of getting their colleagues to begin using information and communication integrally in their day-to-day practice. The salaries of Information Coordinators and any other LRC staff were always supported entirely by the NIS partner institutions.

In establishing each LRC, AIHA's approach was grounded in the belief that partners must be prepared to commit their own resources to the project. This commitment was formalized through the signing of a project agreement that outlined the responsibilities of AIHA and the partner institution. In exchange for the above-mentioned resources provided by AIHA, each institution was required to establish a separate, secure room for the center that must be open and accessible to all staff. The institution also had to designate an Information Coordinator to maintain this center and to devote a minimum of 15 hours per week to various project activities. Information Coordinators designated by the partnership institutions were typically medical librarians, physicians, or nurses. In addition to the Information Coordinator, after 2002 the institutions also began to assign an Evidence-Based Practice (EBP) Specialist and an Information Technology (IT) Specialist who were responsible for managing these specialized components of the project.

The equipment and infrastructure investments were complemented with a series of training workshops, initially delivered to the Information Coordinators over the course of 2-3 years, but later delivered to three different staff at three separate workshops during the first year of the project. These workshops were designed to introduce a range of skills and themes that help LRC staff and their colleagues develop a more sophisticated attitude toward information and covered the following core set of skills:

- Basic and advanced Internet tools and applications;
- Medical searching techniques, including use of MEDLINE and other databases;
- Principles of evidence-based practice and critical appraisal of information;
- Training and outreach (training-of-trainers, presentation skills);
- Strategic planning (how to build support for the LRC, budget management, and grant proposal writing);
- Presentation skills, marketing and promotion;
- Web site development and design; and
- Basic database design, computer networking, and information systems planning.

The workshops also served as a forum to provide an orientation for LRC staff relating to their roles and responsibilities and provide an opportunity for AIHA staff to meet individually with each participant to discuss issues and problems specific to their institution.

Following the workshop, LRC staff undertook the tasks of setting up the LRC, getting better acquainted with the tools and resources available, and working with AIHA regional staff on establishing (or improving) their Internet connectivity. AIHA developed annual project workplans to help guide the development of the LRCs while at the same time providing the flexibility to allow the partner institutions to adapt the LRC model to meet their needs.

Project workplans addressed the following key areas:

Staff Outreach and Training – One of the primary responsibilities of LRC staff was to educate health professionals on the benefits of using the Internet. To accomplish this, they organized outreach activities such

as lectures, presentations, and training sessions. Some met with physicians during or after their morning rounds to discuss problems the physicians encountered and what information might be useful to them. Many LRCs created information bulletins, brochures, reference guides, and other printed materials to make staff aware of new resources. LRC staff were also responsible for providing assistance to health professionals in searching for information and research materials.

Evidence-based Practice – After receiving formal instruction on EBP, including search methodologies and critical appraisal skills, LRC staff were responsible for providing training on these skills to other health professionals and working with them to help them integrate the latest evidence into clinical practice, education, and policy. LRC staff also periodically worked with groups of staff to review and appraise the literature on various topics identified as important to the institution, using a template developed by AIHA called a Practice Standard Review (PSR). The PSR was intended as a tool to demonstrate the value of EBP, as well as to engage a wider cross-section of staff from the partner institution into the activities of the LRC.

Communications and Information Exchange – During training workshops, LRC staff learned about a variety of Internet communications tools, including e-mail, mailing lists, chat, audio conference, and application sharing that enable conferencing and teleconsultation with other health professionals from around the world. LRCs were thus able to serve as communications centers for health professionals within their institutions, allowing staff to solicit input on difficult patient cases and other problems, participate in on-line international medical conferences, post their own research findings, and communicate with professional colleagues via the Web.

Building Support and Sustainability for the LRC – Throughout the program, Information Coordinators were faced with the task of thinking about how their institution would be able to continue to support the capabilities provided by the LRC after AIHA funding concluded. The LRC model was intended to provide built-in sustainability by investing in the core equipment and information/communications infrastructure, as well as developing staff skills so that the recurring costs of supplies, equipment maintenance, and Internet connectivity are all that is required for an institution to sustain the LRC on its own. During training workshops, LRC staff discussed various methods for building sources of support within the institution and ensuring that the LRC remains an integral resource for health professionals. AIHA also provided LRC staff with training on LRC budget development, cost-recovery approaches, and grant proposal writing.

Web Site Development – One of the initial tasks of the LRC was to begin developing an identity for their institutions on the World Wide Web. By creating a Web site, partner institutions were able to reach out to both local and global communities to market their institutional and staff capabilities and to share information, including research, conference reports, etc.

Information Systems Planning and Database Development – Building on the IT infrastructure provided through the LRC, many LRC staff became engaged in thinking about the institution-wide flow of information. LRC staff learned that in addition to having an impact on patient care, information affects resource utilization and costs for the institution as a whole. For example, the introduction of computerized or electronic patient record systems and databases can help physicians, nurses, and administrators access patient information, including a patient's previous medical history, more easily. This helps physicians and nurses make more informed decisions about treatment. It also makes it easier for physicians, nurses, and administrators to evaluate aggregate data about patient treatments and costs. LRC staff received training on basic database development and information systems planning thereby learning how to develop applications that allow health professionals and administrators alike to organize and evaluate patient and financial information. They also learned some basic computer network management skills to help them expand the reach of LRC resources within the institution.

Reaching Out to Local Communities – After each of the NIS partners successfully established its LRC as a central hub for information access, training, and communications, many LRCs became involved in activities that extended outside of the boundaries of their institution—for example, by sharing health education materials and other resources with local NGOs, community groups, and other healthcare providers. Some LRCs also served as resource centers for patients in addition to their own staff. A majority of the most successful LRCs have been actively engaged in serving their local communities by providing resources to

## Reaching Out to Young People within the Community



Dr. Sergey Kosintsev

Healthcare practitioners are not the only group that benefits from LRCs. Programs that educate patients and members of the community are also important focus areas for staff at many AIHA partnership institutions. Students in the Russian city of Kurgan, for example, reap the benefits of public education and outreach programs developed by LRC staff.

Sergey Kosintsev, a programmer at Kurgan Obstetric Hospital No. 1 and information coordinator of the Kurgan-Schuche/Appleton partnership, notes that a lack of school-based programs on issues of reproductive health has resulted in a low level of knowledge on the subject among area youth. "In general, school curricula do not encompass the provision of information on the sexual or behavioral aspect of human life. . . . This often leads to poor decision-making later in life."

To fill this void, the LRC's lectures and educational materials focus on topics such as healthy lifestyle choices, substance abuse, STIs, contraception, and both male and female reproductive health. Courses on these and other subjects were presented to more than 3,200 students between the ages of 14 and 19 at four Kurgan area schools between November 1999 and February 2001, Kosintsev says.

health professionals and supporting other institutions in their efforts to establish similar capabilities.

### Key Results

Through the healthcare partnership program, AIHA supported the establishment and maintenance of a total of 120 Learning Resource Centers in the NIS between 1998 and 2008. Nearly half of these LRCs were established under the original (1992-1998) partnership program, while 64 were established after 1998. As of the last time the entire group of LRCs were surveyed at the end of 2005, 102 out of the 120 were still active and functioning. Altogether, this group of LRCs provided support to a community of more than 103,000 health professionals.

AIHA measured the achievements of the LRCs according to a set of indicators linked to four key objectives, which themselves were tied to the overall project goal of promoting improved healthcare practices through increased access to, use of, and understanding of available health and medical information resources.

#### Objective 1: Increased Access to Up-to-date Health and Medical Information Resources

The LRCs increased access to information in a variety of ways. First, they provided training to health professionals to enable them to use computers and the Internet to find health and medical information on their own. Altogether, the 120 NIS LRCs trained a total of 18,853 health professionals while they were being funded by AIHA.

Second, the staff of the LRCs performed information searches on behalf of their colleagues who were either too busy or reluctant to use the LRC computers to obtain the latest research evidence on their own. NIS LRCs responded to a total of 86,458 information requests during the period of funding.

In addition to service statistics, AIHA tried to measure trends and changes based on surveys among the target user audience for the LRCs. With the first surveys conducted in 1997 (approximately one year after

## Keeping Healthcare Professionals on the Cutting Edge

At Minsk City Hospital No. 36 in Belarus, information coordinator Dr. Vladimir Rambowsky and his colleagues at the LRC conduct weekly review sessions and monthly seminars for physicians to keep staff informed of the latest developments in healthcare and clinical practices. "We have also launched a series of training courses in reproductive health and STIs for gynecologists from other medical institutions across Belarus," Rambowsky says.

Following a recent presentation on diagnosing chlamydia, a doctor who attended the lecture reviewed the file of one of his patients and discovered that her chronic symptoms were in keeping with what had been discussed during the session. Another series of tests indicated that the woman did indeed have chlamydia, according to Rambowsky, and she has since been successfully treated.

"It often happens like this," Rambowsky concludes. "A physician will attend a lecture and something he hears will remind him of one of his patients then he will review the case and come to a correct diagnosis."



Dr. Vladimir Rambowsky

many of the LRCs had been set up), about 40 percent of the health professionals surveyed were using the Internet to access health and medical information. By the time the last round of staff surveys were conducted in 2002-2003, this had grown to 91 percent of all health professionals surveyed.

Aggregated statistics hide many of the greatest success stories in terms of improving access to and use of information resources. In Schuche, Russia, for example, the LRC at Schuche Rayon Central Hospital represented the first opportunity for most health professionals there to be able to access the Internet. In November 1999, prior to the official opening of the LRC, none of the staff had used the Internet to access health and medical information. One year later, nearly 70 percent of staff surveyed were using the Internet to obtain such information. Just three years later, this figure had risen to more than 85 percent. Even at institutions that already had access to the Internet prior to the LRC project, usage rates grew tremendously. For example, at Odessa State Medical University in Ukraine the percentage of health professionals surveyed who were using the Internet to access information grew from about 20 percent in 1999 to more than 70 percent in 2002.

### Objective 2: Improved Knowledge and Application of Evidence-based Practice

In measuring the knowledge and application of evidence-based practice, AIHA tracked NIS partner usage of EBP resources, as well as their ability to demonstrate an understanding of its principles. Aside from the Internet itself, two of the most significant resources that AIHA provided to the LRCs during the scope of the project were the Cochrane Library and the Ovid Full-Text Medical Library databases. The Cochrane Library includes the well-known Database of Systematic Reviews, which provides a periodically updated synthesis of the latest research on a wide range of clinical topics. The Ovid Full-Text Medical Library (provided to partners from 1996 through 2002) included a collection of more than 30 full-text major medical journals, as well as an easy-to-use MEDLINE interface. Although these resources only include information in English, they provided partners with access to a valuable cache of peer-reviewed information and research that were well-utilized. According to annual surveys of AIHA partner institutions conducted in 2002, nearly one in three NIS health professionals surveyed was using the Cochrane database and nearly half were utilizing the Ovid database. Prior to the LRC project, the number of partners with access to these resources was negligible.

As part of efforts to promote evidence-based practice, AIHA in 2001 began requiring each LRC to produce something called a “Practice Standard Review” (PSR). The objective was to change the way individual health professionals think about their own practice and the evidence which may or may not support it. The activity was designed to help partners critically evaluate the literature on a particular topic related to clinical practice, health and social policy, or educational methodologies. AIHA sought to create a simple step-by-step method that would guide partners through the process of posing an appropriate query, finding and reviewing the available evidence, and determining whether the evidence is consistent with existing practice.

Although all LRCs produced at least one PSR, these were not always prepared in a manner consistent with evidence-based practice. In making this evaluation, AIHA reviewed each PSR to determine whether (a) the literature selected by the partners demonstrates that they have done a critical quality assessment, (b) the partners showed an ability to tie the evidence to an existing practice, and (c) at least one individual outside the staff of the LRC was involved in conducting the review. By 2003, around 56 percent of all LRCs in the NIS—up from 52 percent in 2002—were able to demonstrate their ability to apply evidence-based methodologies using the PSR template.

In addition to evaluating the PSRs, AIHA worked to enhance its qualitative assessment of its EBP activities by contracting with two researchers from the University of Wisconsin-Eau Claire in 2002. To measure the impact of the LRC project on the understanding, acceptance, and implementation of EBP among partner institutions, the researchers surveyed participants at two AIHA LRC dissemination conferences and conducted individual and group interviews with information coordinators. The evaluators also performed textual analysis of documents and training curricula developed by AIHA. The evaluators were satisfied with AIHA’s efforts to provide material conditions, including infrastructure and information resources, and to promote “how-to knowledge” among LRCs. However, they also concluded that to achieve fully rational practice of EBP at partnership institutions, the staff need to master the “principles knowledge” of evidence-based practice. The researchers suggested that this could be accomplished through: a) additional training on EBP fundamentals

## Evidence-based Practice Improves Confidence of Practitioners and Patients



Dr. Bobir Shukurov

When Dr. Ravshan Asamov of the Tashkent National Republican Center for Emergency Medical Care was having difficulty convincing a patient she needed an operation to correct a bronchial condition, he sought help from Dr. Bobir Shukurov, information coordinator of the Fergana/Atlanta partnership. “Medical staff often seek our assistance in getting information for patients regarding both their ailments and treatment options,” Shukurov states.

“In the case of this young woman, she was [apprehensive] about the operation and didn’t really believe it was necessary. We provided her with data describing the disease, how it was affecting her, and probable outcomes of the operation. . . . This information helped strengthen her trust in the surgeon’s competence and sincerity. She agreed to the procedure and is now doing much better,” he explains.

Improved patient confidence is one result of using evidence-based research; improved confidence among medical professionals themselves is another, according to Shukurov. “Our patients take comfort in the fact that we obtain information only through reliable Internet sources, while our physicians gain a new level of evidence-based scientific knowledge. This has created an environment of continuous learning that has dramatically changed the attitudes medical staff have toward both their chosen profession and their patients.”

and critical appraisal skills; b) the development and dissemination of an EBP guide book for partnership institutions; and c) the designation of an additional staff as an “EBP point person.” The last recommendation was addressed through a new division of LRC responsibilities that AIHA began introducing in 2003. The Information Coordinator should now have a designated EBP Specialist and a Technical Specialist who are responsible for various aspects of the LRC project requirements. AIHA staff also compiled an EBP reference manual in 2003 that included a number of information resources to aid EBP specialists in the understanding and the implementation of evidence-based practice at their institutions.

### Objective 3: Increased NIS Partners’ Development and Use of Information and Communication Technology Tools and Applications

The LRCs often had the effect of stimulating or supporting the adoption of other information and communication technologies that can help improve the quality and efficiency of healthcare delivery. This included the development of local area networks (LANs), databases, and the use of e-mail and the Internet to support telemedicine, including consultations related to the diagnosis and treatment of individual patients. Partner institutions have also been encouraged to develop an institutional Web page which, in addition to improving visibility and access for patients, can also serve to promote the overall reputation and prestige of the institution. As a result of LRC efforts among NIS partnership institutions, 67 percent of them developed databases to manage administrative and/or healthcare information; 78 percent set up local area networks that enable expanded access to knowledge resources; 80 percent used their LRCs for telemedicine; and 82 percent established institutional Web sites.

## **Reaching Beyond Institutional and Community Boundaries**

In some cases, the information available through the LRCs spreads far beyond the walls of hospitals and borders of individual communities. When a television broadcast highlighted the plight of a 9-year-old Kazak boy who was apparently suffering from progeria—a rare disease that causes rapid premature aging—journalists turned to Almaty’s Scientific Center of Pediatrics and Children’s Surgery for more information.

“This was the first suspected case of progeria ever reported in Kazakhstan, so there was very little information on the disease available in the Institute’s scientific library,” explains Zhyldyz Abdrakhmanova, information coordinator of the Almaty/Tucson partnership. “Through various Internet resources and search engines, we were able to obtain the necessary information on the disease and a number of journalists from newspapers and television channels throughout the country conducted interviews with leading specialists from our center,” she says.



**Zhyldyz Abdrakhmanova**

Reports on the boy’s condition soon came to the attention of medical professionals as far away as Germany, Russia, and Ukraine—many of whom consulted on the case—and individuals from Moscow, Vladivostock, Sakhalin, and the United States, whose letters of support flooded in.

“For clinicians at our Institute, it is often necessary to perform scientific research on a wide range of topics concerning pediatric medicine and surgery,” Abdrakhmanova continues. “To do this, they must have ready access to current information. Our LRC provides this access, as well as assistance with many of the tasks involved with collecting data.”

#### Objective 4: Sustained Access to Knowledge Resources Independent of AIHA Funding

From the beginning of the project, all partner institutions covered the costs of staffing the LRCs, as well as furniture, office space, and most supplies. During the period of funding for the partnerships, AIHA provided ongoing support in the form of monthly Internet payments, office supplies (mostly paper and printer toner), and equipment repairs. AIHA tried to support monthly Internet connections at a cost that would be affordable to NIS partners after funding ended. As mentioned previously, 102 of 120 (85 percent) of the NIS LRCs were still functioning and sustaining Internet connections on their own at the end of 2005 after funding support for most of them had ended.

Another common approach to attaining sustainability for LRCs in the NIS was seeking grants from local and international foundations and other organizations. In part as a result of the grant proposal writing training modules provided by AIHA during various LRC workshops, 43 percent of partnership institutions in the NIS applied for grants that would specifically support continued access to knowledge resources and other LRC functions, and 38 percent of all NIS LRCs have had at least one successful grant proposal.

#### **B. EurasiaHealth Knowledge Network**

Through the region-wide agreement, USAID and AIHA recognized the importance of promoting information exchange and communication among its networked partner institutions. From the beginnings of the NIS healthcare partnerships program, AIHA harnessed the capabilities of the Internet, including electronic mailing lists and the Web, to support this goal. In addition to the main AIHA Web site, which provided information about successful partnership program models and activities, AIHA maintained a second Web site designed to serve as an online community for the exchange of knowledge and resources on medicine and healthcare focused especially on the Eurasia (Central and Eastern Europe and the former Soviet Union) region. This site became known as the EurasiaHealth Knowledge Network ([www.eurasiahealth.org](http://www.eurasiahealth.org)). The EurasiaHealth site offers searchable databases of downloadable resources and links along with interactive forums. The site's content is particularly rich in subject areas that represent critical and common concerns facing the region, such as HIV/AIDS, infection control, and women's health. These resources are available for free to AIHA partners, other CEE/NIS health professionals, and the broader international community through a network of Internet mailing lists and World Wide Web links to key medical sites.

“EurasiaHealth is one of the best—if not *the* best—sources of evidence-based curricula and information resources for health professionals in the Eurasia region.”

— Paul Holmes, Senior Regional Health Advisor, USAID Europe and Eurasia Bureau

Since its inception in 2001 as an independent Web site separate from the AIHA site, the usage of the EurasiaHealth site has increased dramatically. In the fourth quarter of 2001 the average number of visits to the site per month was 6,900. By 2006, the average was 27,399 visits per month, a 297 percent increase. About 800 healthcare professionals list their contact information and professional interests in the site's EurasiaHealth Community directory. Four EurasiaHealth-affiliated e-mail discussion and dissemination lists support the exchange of knowledge and news about new health and medical resources and events in the Eurasia region, and the lists range in membership from 200 to 500 subscribers.

The site offers free access to more than 2,000 downloadable documents—including articles, conference proceedings, presentations, clinical practice guidelines, and patient education materials—many of which are available in Russian or other languages of the region, or even in several languages. AIHA has been responsible, through its partnership programs and collaboration with other healthcare organizations, for the translation of hundreds of these resources from English into other NIS/CEE languages, while others have been contributed directly by EurasiaHealth community members and users, or offered by other organizations.

With its associated Internet mailing and discussion lists, EurasiaHealth also supported ongoing communication and networking among partners. Partners frequently utilized these channels to share resources and solicit advice and assistance. Many partnership institutions became active in soliciting and providing online teleconsultations.

Through EurasiaHealth, AIHA produced a series of online publications, which were widely distributed around the world and were often copied and reprinted on NIS Web sites and print publications.

These e-bulletins included:

- Free Resources Bulletin and Guide to Electronic Medical Libraries – providing information on health-related books, CD-ROMs, and other resources available for free to health professionals in developing countries.
- Grants and Funding Bulletin – a monthly review of funding opportunities available to AIHA partners and other NIS health professionals and organizations
- Health Resources Digest – a monthly bulletin highlighting newly available online health resources, usually focusing on specific topics relevant to current USAID/AIHA program activities
- EurasiaHealth Bulletin – a monthly newsletter letting subscribers know about new educational materials, projects, conferences and other information resources posted on the EurasiaHealth Knowledge Network.
- Guide to Electronic Medical Libraries – updated annually, this guide provides an expansive list of Web sites and organizations that are providing access to full-text health and medical journals, books, and other information resources. It includes projects like WHO's HINARI program, as well as several full-text access projects specifically available to health organization in Eurasia. Copies of this guide have been reprinted by print medical journals in the Eurasia region.

“Through the EurasiaHealth Knowledge Network, AIHA has contributed significantly to the growing body of health and medical resources available in many languages not only to partners in the NIS and CEE, but to the broader community of physicians, nurses, students, and other health professionals in the region who have access to the Internet.”

— Mark Storey, former AIHA Program Officer for Information and Communication Technology.

EurasiaHealth's Content Management System was reconstructed in December 2008 to improve functionality and reliability. The new system streamlines publishing of new or updated materials and incorporates a database to facilitate tracking, locating, and identifying relationships among site content. AIHA is in the process of transferring ownership of EurasiaHealth to a Russian entity to preserve this invaluable resource for healthcare professionals in the region and ensure both continuity and sustainability of the project.

### **EurasiaHealth AIDS Knowledge Network**

In 2003, AIHA launched a new branch of the EurasiaHealth Knowledge Network dedicated to the development and dissemination of resources on HIV/AIDS. The *EurasiaHealth AIDS Knowledge Network* (EAKN) was designed not just to capture existing information resources, but also to proactively identify and translate into Russian key information resources pertaining to various aspects of HIV/AIDS care, treatment, and prevention. AIHA began collaborating with a network of organizations actively working in the NIS region along with international HIV/AIDS content experts to prioritize key textbooks and reference materials for translation. This network included WHO and its Regional Knowledge Hub for the Care and Treatment of HIV/AIDS in Eurasia, AIDS Foundation East West, AIDS Healthcare Foundation, the Association of Nurses in AIDS Care, Connect Plus e.V., the International Association of Physicians in AIDS Care, the International HIV/AIDS Alliance, the International Training and Education Center on HIV, Medecins Sans Frontieres, Medical Advocates for Social Justice, and the Open Society Institute's International Palliative Care Initiative. AIHA also formed a partnership with the Center for HIV Information (CHI) based at the University of California - San Francisco School of Medicine, which maintains several of the seminal knowledge bases for HIV/AIDS information, including HIV Insite ([www.hivinsite.org](http://www.hivinsite.org)). CHI works with a network of experts who are active in patient care, research, and policy to maintain the most up-to-date research and guidelines on HIV/AIDS care, treatment, and prevention. Through this collaboration, CHI's experts served as content managers for the EurasiaHealth AIDS Knowledge Network, helping to ensure that new information resources were included.

AIHA also collaborated with MedMir, a US-based nonprofit that provides Russian-speaking health

professionals with up-to-date clinical information by providing Russian-language summaries of clinical studies published in major medical journals. Through this collaboration, AIHA sponsored the development of a series of MedMir clinical summaries related to HIV/AIDS.

## **Selected HIV/AIDS-related Textbooks, Guidelines, and other Reference Materials Translated through the EurasiaHealth AIDS Knowledge Network**

**WHO HIV/AIDS Treatment and Care Protocols for the CIS** – WHO developed protocols specifically for the region, taking into consideration both the unique structures of its healthcare systems and available resources. The protocols address treatment and care for various patient populations and represents one of the cornerstone documents of the EAKN HIV/AIDS Library.

**Medical Management of HIV Infection (2007 update)** – a comprehensive clinical handbook edited by Drs. J. Bartlett and J. Gallant of the Johns Hopkins University Division of Infectious Diseases. This textbook was reviewed by an AIHA-sponsored committee of AIDS specialists from Eurasia. One thousand copies were printed for distribution in Russia and other NIS countries.

**HIV Medicine 2005** – This textbook provides a comprehensive and up-to-date overview of the treatment of HIV infection and is a product of the collaboration among European HIV/AIDS specialists, edited by C. Hoffman, J. Rockstroh, and B. S. Kamps. AIHA has previously posted the 350-page 2003 version of this textbook. This 580-page textbook was reviewed by an AIHA-sponsored committee of AIDS specialists from Eurasia.

**Textbook of Pediatric HIV Care** – This textbook, published in 2005, was edited by S. Zeichner and J. Read of the US National Cancer Institute and reviewed by an AIHA-sponsored committee of AIDS specialists from Eurasia.

**The Pocket Guide to Adult HIV/AIDS Treatment 2007** – In addition to posting on-line, AIHA published and distributed 2,000 Russian-language copies of this quick reference for antiretroviral drugs, antiretroviral therapy, opportunistic infections, and related issues edited by J. Bartlett.

**Prevention of Mother-to-Child Transmission of HIV (PMTCT) Generic Training Package by WHO and HHS/CDC** – This comprehensive, evidence-based PMTCT course was developed for implementation in limited-resource settings.

**Management of Pediatric HIV Infection, HIV Prevention in Clinical Settings, Prevention/Treatment of Opportunistic Infections** – from the Global AIDS Learning and Evaluation Network (GALEN) modules, published by the International Association of Physicians in AIDS Care (IAPAC).

**Strengthening Health Systems to Improve HIV/AIDS Programs in the Europe and Eurasia Region Using Global Fund Resources** – a USAID report prepared by Roger Drew and George Purvis.

**Palliative Care for People with AIDS: A Curriculum and Teaching Resource for Medical Educators** – by the University of Washington Center for Palliative Care Education.

**Case Management Recommendations for HIV-infected Patients** – a manual developed by AIHA.

**Patients' Medical Cards Audit as a Quality Improvement Tool** – a manual developed by AIHA.

**Prevention of Mother-to-Child Transmission (PMTCT) of HIV - Monitoring Tool** – a tool developed by AIHA together with the Samara Oblast Medical Information-Analytic Center and Samara Oblast AIDS Center.

**Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1-Infected Women for Maternal Health and Interventions to Reduce Perinatal HIV-1 Transmission in the United States** – US National Institutes of Health.

**Safety and Toxicity of Individual Antiretroviral Agents in Pregnancy** – US National Institutes of Health.

**Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection** – US National Institutes of Health.

**Rapid HIV-1 Antibody Testing During Labor and Delivery for Women of Unknown HIV Status** – US Centers for Disease Control and Prevention.

As of September 2008, the EAKN HIV/AIDS Learning Library featured more than 625 resources. A sampling of some major textbooks, guidelines, and other resources that were translated through the EAKN initiative are included in the box on page 25.

As part of the EurasiaHealth Knowledge Network, AIHA also developed a Web site in support of the new public-private partnership with global pharmaceutical leader GlaxoSmithKline (GSK). *The Russia Professional Development in HIV Medicine Program* Web site serves as a main provider of information and interactivity for program participants, which includes a core group of clinical leaders who post and interactively review evidence-based literature and clinical cases on a monthly basis. Distance education tools were also developed as part of this program to enable continuous learning and testing by the community of HIV care providers.

### EurasiaHealth Tuberculosis Knowledge Network

AIHA was approached in 2005 by representatives from PATH, who were working on a tuberculosis program in the Russian Federation. Rather than investing resources in creating a new Web site to disseminate Russian-language educational resources related to tuberculosis treatment, PATH program managers proposed that AIHA establish a section on the EurasiaHealth site devoted to this topic. PATH provided funds to support the creation of the *EurasiaHealth Tuberculosis Knowledge Network*, which by September 2008 had grown to include a core library of 99 resource documents.

### AIHA Program Toolkits

AIHA also worked to package resources into instructional toolkits that would promote and support replication of AIHA's successful program models. These seven toolkits and resource libraries built on the various resources, training curricula, and other products developed through the cross-partnership programs:

- **Women's Health** – provides resources that can be utilized to replicate, step-by-step, the development of a Women's Wellness Center or to enhance the capacity of existing healthcare providers working in women's health.
- **Healthy Communities** – a comprehensive guide designed to help community leaders learn about, set up, and manage their own healthy communities programs.
- **Nursing** – contains four separate modules representing different approaches to capacity-building and developing the skills of nurses: Primary Healthcare Nursing, Nursing Associations, Nursing Leadership, and Nursing Resource Centers.
- **Primary Healthcare Centers** – provides step-by-step models to follow and proven techniques to help healthcare institutions strengthen their delivery systems by creating Primary Healthcare Centers.
- **Learning Resource Centers** – provides resources to help healthcare organizations worldwide create the capacity to access evidence-based information resources on their own.
- **Health Management Education** – maintained by AIHA's partners at the National Institute of Health in Tbilisi, Georgia, this toolkit serves as an online repository for the health management training curriculum developed through the partnership program.
- **Blood Safety** – offers best practices and standard operating procedures to help ensure the safety of blood and blood products, as well as chapters on voluntary donor recruitment, quality control, and effective clinical use of blood products. This toolkit provides a wealth of step-by-step resources for Russian speakers.

“As a nursing college professional, I am interested in full-text, Russian-language materials on nursing care and management. These are relatively new topics for us and the use of management and marketing tools in the practice of medicine is a concept that frightens even those who must teach such subjects. After searching on EurasiaHealth, I found a very useful article on the development of nursing in Russia. The site is well done and very interesting and informative.”

— Elena Gulyaeva, Nursing Resource Center Coordinator, Republican Medical College, Almaty, Kazakhstan.

## C. Communications and Publications

From the beginning of the NIS Healthcare Partnerships Program in 1992, AIHA produced highly-regarded print and online publications that disseminated information about AIHA and its partnerships to both English- and Russian-speaking audiences. Because they were published in both languages, AIHA publications were uniquely able to reach an extremely wide audience and thereby foster dialogue between the healthcare professionals, ministry officials, and other interested parties in many countries. The synergy created by these dialogues strengthened not only the partnership concept, but the goals of USAID—specifically to improve healthcare and bring democracy and sustainability to the institutions and policies of the NIS and CEE.

In addition, AIHA publications

- supported partnership activities by promoting the partnership concept and the programs developed through the partnerships;
- disseminated the lessons learned and successes of the partnership program and model to healthcare professionals and government officials over a large geographic area;
- assisted in legitimizing healthcare institutions by highlighting their programs and providing a forum through which they could author or be quoted in articles read by a large audience of colleagues;
- promoted the sustainability of institutions through the legitimizing process described above;
- promoted reform at both the institution and government level;
- educated professionals through articles that articulated their specific circumstances and spoke to their specific needs; and
- promoted USAID and the programs and projects it supports.

Through its communications and publications activities, AIHA worked to support and facilitate information exchange, a key component of partnership collaboration and an essential component of capacity building and “scale-up.” NIS and CEE partners benefited from this exchange by receiving, for example, information on best practices, evidenced-based medicine, and successful models that help partners use resources effectively and promote sustainability. AIHA’s approach created a framework for information sharing and capacity-building among partners and the worldwide community through the production of a wide range of high-quality publication and educational products that are disseminated on the Web and in hard-copy format.

AIHA’s Web site, journal, electronic newsletter, and other publications kept partners, USAID, ministry officials, healthcare practitioners, and the public informed about partnership activities and healthcare issues throughout Eurasia. These are described in more detail below.

**AIHA Web Site** – Over the life of the NIS Healthcare Partnerships Program, the AIHA Web site ([www.aiha.com](http://www.aiha.com)) consistently provided a nearly comprehensive description of AIHA partnerships and program initiatives. In addition to providing standard information available in official quarterly reports, AIHA developed and routinely updated detailed partnership summaries that provided a list of partnership objectives and achievements. A searchable database allowed users of the site to seek out partnerships focused on particular program areas ranging from emergency medicine to chronic disease management. An online directory of partnership coordinator contacts enabled and encouraged partners to communicate with each other to exchange experiences and solicit input and advice.

**CommonHealth** – AIHA’s flagship periodical strived to offer articles of interest to a broad range of healthcare professionals working in and with the NIS and CEE, offering a forum for exploring cross-partnership issues and programs. *CommonHealth* was published since 1992 in separate English and Russian editions and was sent to all partnership institutions, as well as to USAID missions, foreign ministries of health, and healthcare professionals worldwide. Most issues of *CommonHealth* focused on a specific healthcare-related topic that was being addressed by partners—such as health promotion, mental health, or substance abuse. The final journal, “Building Capacity to Fight HIV/AIDS in Eurasia,” was published in



2005, after which AIHA began focusing more exclusively on the production of online publications in order to conserve funds. Because of its broad distribution, CommonHealth provided a unique opportunity to educate NIS and CEE professionals through articles that articulate their specific circumstances and speak to their specific needs and to promote reform at both the institution and government level.

**Connections** – As a way to both disseminate timely news and information on partnership activities and to keep partners and other interested healthcare professionals abreast of current program initiatives and projects, AIHA produced *Connections*, a monthly online newsletter. Beginning in 1996, AIHA published *Connections* in both English and Russian on AIHA's Web site and sent it out by e-mail through Internet mailing lists for partners, USAID missions, and other interested parties. *Connections* delivered timely news on AIHA partnership activities as well as information on grants and conferences. Each issue included "Partner News;" "Regional News;" "Workshops, Conferences, Grants, and Other Opportunities;" and "Features."

The objectives of *Connections* were to:

- provide an opportunity for a large number of partners to highlight their unique activities;
- promote the sustainability of institutions and partnership activities by promoting the partnership concept, the programs they develop, the centers they open, and the individuals involved
- provide information on opportunities for further education and development;
- keep partners abreast of information of importance to their specific region;
- increase the visibility of the programs by incorporating a large number of photographs into the publication.



**AIHA Success Story Series** – Launched in April 2001, this series highlighted the accomplishments and effectiveness of the AIHA partner programs by focusing on individuals whose lives have been changed—both professionally and/or personally—by the partnership programs. Often the story of a practitioner whose way of thinking, methodology, and/or skill set was changed by his or her participation in the partnership was paired with the story of a patient whose life was saved and/or altered by this practitioner. Many times the experience of both the practitioner and the patient goes beyond the realm of healthcare and effects their attitudes toward accessibility, knowledge, quality of care, and personal responsibility—all elements that facilitate the growth of democracy. Success stories explained in very real terms the importance of AIHA's programs and added to the body of materials that constitutes AIHA's qualitative program evaluation. As of September 2008, more than 50 success stories had been produced highlighting partnership successes in the areas of primary healthcare, HIV/AIDS, women's health, nursing, and many other topics.



**Summary of Sessions** – These detailed reports provided written and visual documentation of AIHA annual conferences. Daily event overviews were combined with extensive descriptions of each plenary or breakout session held during the meeting and were an important way to disseminate information presented at the conference to a large group of people.

**Partner Publications** – As a means to further disseminate lessons learned by partners and expand the knowledge of professionals working toward reform, as well as to legitimize healthcare institutions and professionals in the NIS, AIHA worked with partners to develop and publish an electronic Russian-language journal in the field health management education (HME). This journal is based at the Kazakh School of Public

Health, but its editorial committee is comprised of representatives from other HME partnership institutions. One of the purposes in establishing the journal was to create a vehicle through which healthcare professionals in the NIS can publish articles, a process which is second nature in most US academic institutions. By relying on an editorial board that establishes standards against which submissions are judged, international journal standards and practice can be taught to those less familiar with this process. Additionally, the journal provided practical information relevant to the specific situations and circumstances of NIS institutions. It is not meant to compete with internationally recognized journals, but rather to augment them by speaking to the needs of a specific audience. While articles are written in Russian, they are accompanied by English abstracts to increase the visibility of the content to an international audience.



### **Partnership Products, Posters, Curricula, and Thematic Booklets –**

In addition to its regular publications, AIHA published brochures and posters about various program areas, and a series of booklets that covered areas of cross-partnership interest such as healthy communities and information technology. AIHA also supported the production of a variety of curricula, manuals, and other educational materials that were developed through AIHA cross-partnership programs. These publications consolidated lessons learned and methodologies employed, distilling them into easy-to-understand, practical information that may be applied to many institutions and situations. These products promote sustainable programs by providing practical information on what has been successfully implemented by other partners and how to do it, as well as educate professionals through text that examines specific circumstances and addresses specific needs. AIHA also published guidelines, curricula, brochures, and other materials. A listing of selected products that were published with the support of the region-wide agreement can be found on page 30.

## **D. Monitoring and Evaluation**

With regard to the NIS Healthcare Partnerships Program, the objectives of AIHA's monitoring and evaluation (M&E) strategy were to:

- improve the performance of programs, ensure optimum use of available resources, and provide feedback for programmatic decision-making;
- create systems that support learning from experience, help disseminate knowledge of best practices, and assist the replication of successful models, thus improving the relevance, methods, and effectiveness of partnerships and other programs;
- provide information to funding agencies and key stakeholders regarding progress and results of AIHA programs, as well as to strengthen support for the programs;
- provide feedback to AIHA partners as a means of engaging them in the program improvement processes; and
- strengthen the capacity of partner institutions to conduct monitoring and evaluation, which will ultimately contribute to the sustainability of the programs and institutions.

During the initial years of the current cooperative agreements with USAID (1998-2000), AIHA focused its M&E efforts at the following levels and types of activities:

**Partnerships** – With the start-up of a new round of partnerships in 1999, AIHA worked closely with partners to assist them in developing a monitoring and evaluation framework at the partnership level. These efforts included developing a standardized partnership workplan format along with guidelines for completing workplans and conducting initial partnership assessments. Partners received assistance in incorporating measurable objectives, outcomes, and indicators into their workplans and in annually reassessing those objectives and revising workplans accordingly. AIHA worked with partners to collect data to assist in

# AIHA Partnership Products (by program area)

## Blood Safety

- Blood Safety Toolkit

## Clinical Practice Guidelines

- Clinical Practice Guidelines (CPG) Process Manual
- Chest Pain: Clinical Practice Guideline for Primary Healthcare Physicians
- Protocol for Diagnosis and Treatment of Peptic Ulcer in Adults
- Bronchial Asthma: Clinical Practice Guideline for General Practitioners
- Cervical Screening: Clinical Practice Guidelines for Primary Care Providers
- Common Diagnoses of Primary Care
- Healthy Lifestyle During Menopause-Training Manual
- Clinical Practice Guideline for General Practitioners: Community-Acquired Pneumonia Diagnosis and Treatment Protocol
- Community Acquired Pneumonia (CAP)-Diagnosis and Treatment Protocol

## Emergency & Disaster Medicine

- First Responder EMS Curriculum for Training Centers in Eurasia: Instructor Manual
- First Responder EMS Curriculum for Training Centers in Eurasia: Student Manual
- Pre-Hospital EMS Curriculum for Training Centers in Eurasia, 2nd Edition

## Health Management Education

- HME Toolkit

## Healthy Communities

- Healthy Communities Toolkit
- Safer Streets, Longer Lives: Creating a Healthy Community

## HIV/AIDS and PMTCT

- Practical Guide for Providing HIV-Positive Women with Family Planning Services
- Practical Guide to Counseling and Testing Procedures for Prevention of Mother-To-Child HIV Transmission
- Practical Guide on Treatment of Sexually Transmitted Infections in HIV-Positive Pregnant Women
- Practical Guide on Sexually Transmitted Infections and HIV Prevention
- U.S. Public Health Service Recommendations for HIV Counseling and Voluntary Testing for Pregnant Women

## Infection Control

- Infection Control Manual

## Learning Resource Centers

- Lessons Learned & Best Practices Report
- Health Care Without Borders: Promoting Partnerships through Technology
- LRC Toolkit

## Neonatal Resuscitation

- Neonatal Resuscitation-Student Manual
- Neonatal Resuscitation-Instructor Manual
- Neonatal Resuscitation-Train the Trainer
- Neonatal Resuscitation-Train the Trainer Audiovisual Book
- Neonatal Resuscitation Slide Presentation Kit

## Nursing

- Nursing Toolkit
- NIS Nursing: A Revolution in Progress
- Nursing Primary Healthcare Curriculum

## Primary Healthcare

- Primary Healthcare Centers Toolkit
- Youth Risk Behavior Survey
- Youth Risk Focus Group Questions

## Women's Health

- Women's Health – Making Women's Health Matter: An Integrated Approach
- Women's Wellness Center Toolkit
- Women's Health Needs Assessment Survey
- Women's Health Needs Focus Group Questions



monitoring progress toward technical, budgetary, and scheduling objectives; to identify problems; and to improve performance on an ongoing basis. Partners were provided with standardized reporting formats that focused on collecting output data.

Cross-Partnership Programs – For the purposes of monitoring and evaluating its cross-partnership programs, AIHA developed monthly reporting forms and conducted a number of qualitative evaluations. The monthly forms captured training and service statistics for programs in emergency and disaster medicine, infection control, information and communications technology, neonatal resuscitation, nursing, and women's health. Data from these forms were reported in AIHA quarterly reports to USAID. Evaluations, both internal and external, were conducted in the areas of women's health, emergency medical services training, neonatal resuscitation, and information and communications technology. While largely qualitative and process-oriented, the evaluations provided useful assessments of the status of various partnerships and cross-partnership programs, some analysis of outcomes such as observable attitude changes among staff, adherence to clinical practice guidelines and evidence-based practices, as well as some evaluation of the sustainability of the programs.

Program-wide Mid-term Evaluation – AIHA's cooperative agreements with USAID provided for a single interim independent summative evaluation of AIHA's overall program. Completed in 2001, this mid-term evaluation was conducted by a panel of internationally recognized healthcare experts. AIHA worked closely with the "Continuing Evaluation Panel" over the course of approximately 18 months as they assessed program context, conducted interviews and site visits, synthesized available program monitoring and outcome data, and rendered an informed assessment of overall program effectiveness as well as recommended strategic directions for future program enhancement, particularly in the area of monitoring and evaluation.

### **Establishment of a More Comprehensive Regional Program Monitoring and Evaluation Framework**

Following the completion of the Continuing Evaluation Panel's report in 2001, AIHA began working to develop a comprehensive M&E strategy that focuses more on aggregate program outcomes, particularly in the area of primary healthcare. In moving toward a program-wide monitoring and evaluation framework, AIHA also addressed the challenge of identifying common indicators that demonstrate outcomes of programs that are pursued by more than one partnership or by the partnership programs as a whole. AIHA developed an outcome-oriented "Results Framework" based on USAID's performance monitoring system and comprised of a series of underlying tools designed to gather data and results for each AIHA program area. This framework incorporated both partnership and cross-partnership programs, with goals and objectives relevant to the strategic objectives and "intermediate results" accepted by the USAID missions, and having a structured set of indicators covering all levels of programmatic activities, from inputs to outcomes.

For each of the major cross-partnership program areas, AIHA identified an M&E Working Group comprised of staff and US experts. Each working group was charged with developing the overall goal, specific objectives, and outcome indicators, as well as activities and output indicators for each program area. The groups also reviewed and revised data collection forms and suggested additional evaluation activities.

As a result of the process of reviewing objectives and activities within these program areas, certain common, cross-cutting themes emerged, reflecting key strategies utilized by AIHA to accomplish its programmatic goals. These relate to:

- improved knowledge, skills, and competencies;
- increased educational and service capacity;
- increased access to and utilization and dissemination of evidence-based information;
- professions development; and
- increased sustainability and policy-level impact.

These strategies were reflected directly in the objectives of the individual results frameworks. AIHA measured partnership sustainability—the extent to which partners are committed to and actively pursue ongoing relationships after AIHA funding—through periodic assessments of current and graduated partnerships.

In response to demand from USAID missions, AIHA gradually developed more targeted and tailored monitoring and evaluation plans for each NIS region, corresponding to the varying programs funded through each cooperative agreement. After annual regional workplans were finalized and approved, AIHA worked to prepare region-specific plans that included results frameworks corresponding to the specific program areas agreed upon with USAID and meeting the monitoring and evaluation needs of individual regions/cooperative agreements. Program results were then reported in annual reports for each region.

## **Program Assessments, Tools, and Evaluations**

AIHA conducted a wide range of monitoring and evaluation activities for the partnerships and for its cross-partnership program initiatives. These included assessments and evaluations conducted by AIHA staff, as well as by external evaluations. The highlights of AIHA's evaluation activities and reports are listed in chronological order in the box on page 33.

## **E. Annual Partnership Conferences and Meetings**

Region-wide conferences and workshops provided an opportunity for partners to meet and share information, best practices, and lessons learned. Each year from 1999 to 2002, AIHA provided NIS partners an opportunity to come together for an annual meeting. In addition, AIHA supported partners through orientation meetings and a wide variety of regional training workshops and conferences. These meetings not only provided networking opportunities, but also offered sessions about topics relevant across partnerships.

1999 Annual Partnership Conference – Representatives of all active NIS and CEE partnerships attended AIHA's 1999 annual partnership conference, titled "Partnering for Healthier Communities," in Arlington, Virginia. Approximately 700 US, NIS, and CEE partners and distinguished guests gathered for the event, which focused on past successes of partnerships, as well as future directions in primary healthcare and community health for the new NIS partnerships. Selected partners also participated in pre- and post-conference meetings addressing health management education, infection control, women's health, and emergency medical services.

2000 Annual Partnership Conference – Some 250 healthcare professionals from the NIS, CEE, and the US participated in AIHA's 2000 partnership conference in Budapest, Hungary, on "Developing Common Strategies for Improving Primary Care and Community Health." The conference offered plenary presentations and breakout sessions focusing on community mobilization, health promotion strategies, and practical skills-building for primary care providers. Partnerships also met in sub-regional sessions to share best practices and facilitate coordination on issues related to workplan implementation, primary healthcare clinical practice guidelines, and performance indicators and outcomes. Throughout the conference, partners had opportunities to meet and work on their respective workplans, and US partners attended meetings specially designed for partnership coordinators on administrative and financial issues and AIHA's evaluation activities.

2001 Annual Partnership Conference – AIHA hosted the 2001 annual partnership conference in Washington, DC. The theme of the conference, "Primary and Community-based Healthcare Solutions: Building on Models of Change," was in keeping with AIHA's programmatic emphasis on developing community-based approaches to improving the quality of primary healthcare in the NIS. Conference participants included key healthcare leaders from 18 countries, including the Ministers of Health of Kazakhstan and Tajikistan, and more than 500 health professionals from the NIS, CEE, and the United States. AIHA partners participated on panels throughout the conference to present their successful healthcare models and ways they have met the challenge of providing primary healthcare services and training family physicians. Additional topics included

"The relationships that were built and the goodwill that was generated by the partnerships themselves was clearly evident when people gathered at conferences, trainings, and working group meetings. Many partners became like family to one another."

— Forest Duncan, Senior  
Health Sector Advisor, USAID Europe  
and Eurasia Bureau

## Selected AIHA Program Evaluations and Assessments

**Partnership Self-Assessment Tool, 1998** – AIHA developed a self-assessment process in which partners use a standardized assessment tool to evaluate the extent to which they have accomplished workplan objectives.

**Patient Satisfaction Surveys, 1998** – AIHA developed standardized surveys to measure patient satisfaction at Primary Healthcare Centers and Women's Wellness Centers. AIHA staff worked with staff from centers that implemented the surveys to help them develop quality improvement plans.

**"The Diffusion of Medical Information Technology in CEE and NIS"** – An Assessment of AIHA Learning Resource Center Project, 1998 – Researchers from the University of Minnesota conducted site visits and interviews to determine factors contributing to the success or failure of partner institutions trying to implement the Learning Resource Center model.

**Evaluation of Emergency Medical Services Training Centers, 2000** – A team of graduate students from New York University visited three EMS Training Centers and interviewed EMS and AIHA staff, USAID representatives, local, and national health officials.

**"Making Women's Wellness Sustainable" - Women's Wellness Centers Evaluation, 2000** – A team of graduate students from New York University visited three WWCs in Ukraine, Russia and Uzbekistan. The evaluation included a qualitative assessment of the sustainability of the WWC model.

**Continuing Evaluation Panel (CEP) Mid-term Evaluation, 2001** – An independent panel of seven distinguished academicians and researchers spent a year conducting a comprehensive examination of AIHA's partnership program. The panel assessed the sustainability and ongoing impact of graduated partnerships as well as the mid-term status of partnerships established since 1999.

**Assessment of Women's Wellness Centers, 2001** – This assessment of 10 WWCs was completed in September 2001 by a team from the University of Illinois at Chicago.

**Assessment of the Learning Resource Center Project, 2001** – An evaluation based on a series of site visits conducted at selected LRCs by a former consultant with the Information Technology for Development program in USAID's Europe and Eurasia Bureau.

**Neonatal Resuscitation Program – Assessment of Training Centers in Ukraine, 2001** – The first of two external assessments of AIHA's neonatal resuscitation program. The assessment included site visits to four hospitals in the L'viv region and two in the Kyiv region.

**Healthcare Management** – AIHA conducted a survey of participants in the standardized introductory management courses offered to all partnerships during 1999-2001 to determine the perceived level of competency in core areas of management taught in the workshops.

**Neonatal Resuscitation Program – Assessment of Training Centers in Russia, 2002** – The assessment of Neonatal Resuscitation Training Centers in Russia was the second part of a targeted, external assessment of AIHA's neonatal resuscitation program.

**Assessment of Women's Wellness Centers, 2003** – This assessment examined WWC accomplishments based on a survey of Center staff and determined the consistency of core services and clinical practices provided at the centers.

**Assessment of International Nursing Leadership Institute, 2003** – This assessment evaluated the success of the INLI program from the perspective of its 47 nurse participants.

**Assessment of Infection Control Training Centers, 2003** – A phone survey conducted with infection control specialists from Caucasus, CAR, Russia, and West NIS to assess training impact on hospital infection control practices.

**Assessment of Basic Healthcare Management Training, 2003** – Results of a self-assessment questionnaire completed by 54 participants in basic healthcare management workshops conducted by AIHA.

**Assessment of WHONET Laboratories, 2003** – Phone survey conducted with representatives of 18 laboratories established by AIHA in Eurasia.

**Assessment of Nursing Resource Centers, 2003** – An assessment of the 24 NRC sites in 14 countries of the NIS and CEE conducted during a three-month period.

**Neonatal Resuscitation Program - Monitoring Clinical Outcomes, 2004** – A second round of data on the Neonatal Resuscitation Program (NRP) in the New Independent States.

**Evaluation of AIHA's Primary Healthcare Partnerships in the Newly Independent States (1998-2006)** – In 2006, a USAID evaluation team conducted an assessment of the 30 community-based primary healthcare partnerships that have contributed to reorienting healthcare delivery systems towards primary care and family medicine in the NIS and CEE.

health promotion and education, effective methods to conduct needs assessments, the development of clinical practice guidelines, methods to encourage community involvement, infection control and multi-drug resistant strains of infections, integrated approaches to women's health services, and mother-to-child transmission of HIV/AIDS.

2002 Annual Partnership Conference – AIHA organized and held its 2002 annual partnership conference in Washington, DC. In addition to celebrating the organization's 10-year anniversary, the conference focused on disseminating partnership successes and discussing the emerging health challenges created by HIV/AIDS. More than 500 health professionals representing current and graduated partnerships, as well as numerous VIPs and other guests, participated. Graduating partnerships were recognized during a ceremony on the conference's first day, and special recognition awards were presented to three individuals for their contributions to the partnership program.

USAID Conference: Ten Years of Health System Transition in CEE and the NIS – AIHA's 10-year anniversary conference was co-located with and took place immediately following a conference titled "Ten Years of Health System Transition in Central and Eastern Europe and Eurasia," which was co-sponsored by USAID, the World Bank, and the World Health Organization and organized by AIHA. During this unprecedented-in-scope regional event, more than 700 health ministry representatives, policymakers, and other healthcare practitioners from 37 countries exchanged views on lessons learned from a decade of reform in the region.

The agenda incorporated the enormous cross-regional diversity of approaches to health systems transition in CEE and Eurasia and balanced country and donor representation. The conference program was organized around five key areas of health system transition. Six conference theme papers produced in collaboration with WHO's European Observatory on Health Systems and Policies provided an overview of 10 years of health sector reform

in the regions and served as the framework

for the conference tracks. The 125 presentations sparked lively discussions and the conference was a rare opportunity to gain an overview of the vast changes that have occurred in these regions. With USAID support and in collaboration with WHO/Europe, AIHA hosted healthcare reporters from 13 countries spanning the region. The two conferences gave these professional print and broadcast journalists unprecedented access to healthcare policymakers and practitioners, including ministers of health, and resulted in at least 30 stories on donor-supported health reform projects being published or broadcast in NIS/CEE markets.

Partnership Orientation Meetings – The region-wide agreement also supported several orientation meetings and training sessions for new US partners. Orientation meetings offered a wide range of information and practical skills, including an introduction to the AIHA partnership program, model, and organization; USAID's role in the partnership program; expectations of partners and what it means to be an AIHA partner; programmatic, logistical, and administrative information and tools; and issues of cross-cultural sensitivity and intercultural communication. In conjunction with the orientation sessions, AIHA provided participants with many resource



“Partnerships make us stop, reflect, rethink, redesign, and importantly, reprioritize what we do. We get professional clarity from being partners because, in helping our partners face challenges and solve problems, we learn from them and grow together.”  
of the Bishkek/Nevada and South Florida partnership. “

— Robert Daugherty, Jr., Dean and Vice President, University of South Florida Health Sciences Center, Tampa (Bishkek/Nevada-South Florida partnership)

documents, such as information on regions, countries, and the healthcare system in the NIS; lessons learned and best practices from experienced AIHA partners; and AIHA policies, procedures, forms, and reporting information.

With many of AIHA's new partnerships focused on community-based primary care, AIHA also provided US partners with training on how to facilitate community partnerships. Representatives from each of these partnerships participated in an interactive course provided by VHA, Inc., an AIHA Board organization. The US trainees were then responsible for conducting a community needs assessment during their first exchange trip to the NIS and engaging in a collaborative planning process with key stakeholders in the partner communities.

Cross-partnership Workshops and Conferences – AIHA also organized meetings, conferences, and workshops around specific topics, such as primary care, nursing, infection control, and health management education. These are described later in this report in the section on cross-partnership program initiatives.

Partner Participation in International Conferences – In addition to AIHA-sponsored meetings and events, AIHA also occasionally supported NIS partners' participation in other international conferences, including events for the World Congress of Home Care and Hospice and WHO. In addition to the learning and networking opportunities, these conferences provided NIS partners with a forum to present their own successes and lessons learned. In 2003, for example, AIHA was invited to organize a breakout session at a special combined conference on hospital and health services management and health policy hosted by the International Hospital Federation and the American Hospital Association (AHA). AIHA staff and partners discussed organizational strategies they have effectively used to mobilize volunteers to participate in the community-based primary care partnerships during a panel presentation, while partners had the opportunity to expand their knowledge and enjoy a global exchange of experiences and management techniques with international leaders in health services management.



## IV. Cross-partnership Program Initiatives

**A**IHA's cross-partnership programs have played a critical role in AIHA's knowledge dissemination strategy. These programs brought groups of partners together to address health problems on a more regional level, creating synergies that enabled resources to be used more efficiently. As stated by the Continuing Evaluation Panel (CEP), these programs help to improve the effectiveness of partnership activities by "speed[ing] the rate of adoption of new practices, often introduced first by the individual partnerships, to a wide cross-section of providers and consumers and thus contribute to measurable improvements in local or regional health outcomes." For example, partners working together in regional groups with local and national policymakers to develop primary care clinical practice guidelines have demonstrated success in getting updated, evidence-based practice standards adopted at the national level. Through the region-wide agreement, AIHA has supported cross-partnership programs and activities in the areas of infection control, primary care, clinical practice guidelines, infant survival, women's health, nursing, emergency medical services, and health professions education.

### A. Primary Healthcare

In support of USAID's objective to restructure healthcare delivery in the NIS to assure higher quality, more cost-effective services to the general population, AIHA established 32 community-based healthcare partnerships to promote a reorientation toward primary care. These primary healthcare (PHC) partnerships developed broad-based, community primary care services in local jurisdictions that served as models for national replication. This region-wide approach was designed to promote collaboration beyond and in addition to the bilateral partnerships through the sharing of common strategies; collaborative development of programs, interventions, and materials; joint capacity-building of new competencies/training; evaluations/lessons learned, especially as they relate to program replication; and dissemination.

The region-wide agreement supported the following activities as part of the primary healthcare program initiative:

Regional Capacity-building Workshops – AIHA organized a number of regional workshops covering topics relevant to the PHC partnerships, including:

- Consultation Skills Training – designed to enhance doctor/patient relationships through active listening and patient counseling/patient education communication skills. The workshop covered three counseling topic areas: reproductive health, anti-trafficking awareness, and HIV/AIDS.
- Primary Care Nursing – AIHA launched its primary care nursing program with a series of basic skills workshops targeted to nurses working in primary care settings. Topics included physical assessment, communication skills, patient education and health promotion, mental health, pediatric and adolescent health, and nursing management.
- Community Development Workshops – A workshop titled "Resolving Public Health Problems through Community Involvement" was conducted at several PHC partnership sites with the objective of encouraging active participation of community stakeholders. Participants included city administrators, educators, police officers, social service workers, and citizens, as well as the AIHA partners. Action plans were developed by each communities and two leaders from each community/partnership who participated in this one-week training met again six months later to measure progress.
- AIHA also organized regional workshops on special topics that became the focus of one or more of the PHC partnerships. When one partnership developed a training program on a particular topic, other partnerships were invited to participate to help avoid duplication of effort and to encourage cross-fertilization of ideas and care models. Some of the topics covered in such workshops included mental health, substance abuse, occupational safety and infection control, and dental health.

## Primary Care Initiatives Help Strengthen Health System in Turkmenistan

In 1999, AIHA established a partnership linking the Turkmen Ministry of Health and Medical Industry and Health House No. 1 in Ashgabat with the University of North Dakota and a consortium of area healthcare organizations. Partners opened a Family Medicine Training Center (FMTTC) at the Health House in May 2001. Since then, nearly all primary care professionals and medical school faculty in the capital have undergone training at the center and new education topics are constantly being added to the program.

The FMTTC has six instructors, including three nurses—all trained in North Dakota and received on-going instruction at numerous family medicine workshops and conferences conducted by AIHA. Primarily, the center works with former GPs and pediatricians who, after training, return to their institutions ready to provide a range of healthcare services to people of all backgrounds.

“Our center has the latest equipment, mannequins, and visual training aids that help us show our students the changes that occur in the body with different diseases and how to detect them during clinical examinations,” says FMTTC Director Aina Klychdurdyeva. “Our courses are unique; they devote 70 percent of training time to the hands-on acquisition of clinical skills.”

The standard course at the center lasts four weeks and trains physician-nurse teams who work together to provide care. “As a result, nurses understand what the doctors are doing, so they can speak the same language,” explains Maya Saryyeva, a nurse-instructor for cardiovascular diseases. The training, she notes, is designed to enable doctors and nurses to complement one another in their daily work, with the nurse’s role focusing on disease prevention.

Although Kulrakhan Rakhmanova, a GP at Ashgabat Health House No. 9, has 30 years of professional experience, she readily admits that the course she took at the FMTTC was better than all of the previous courses she had taken. “Never before did we receive so much practical knowledge. The lessons here were really aimed at developing our skills and it was easy for us to learn, to share experiences, and to solve the case studies,” she says. Rakhmanova is one of the more than 1,000 healthcare professionals and medical school instructors from Ashgabat who have earned diplomas from the center. Among them is a team of instructors for a second Family Medicine Training Center, which opened in December 2005 at Scientific Center of Physiology with AIHA and USAID support.

“We’d never seen a training center with such state-of-the-art resources,” says Guljahan Annamamedova, director of the second center. “Moreover, we never attended such comprehensive, hands-on training sessions as we did at Health House No. 1.” The new center—which was established to train physicians and nurses from five regions spanning Turkmenistan, as well as nurse practitioners from rural areas—now possesses similar modern educational and audiovisual equipment, as well as a fully equipped Learning Resource Center and a library. “Now that our initial plan to open this center has been successfully met, we all know that the most important thing is to be true to our own beliefs and aspirations. We’re really grateful to the American people for providing us with the chance to do it.”



**Patient education—like this prenatal class that teaches women about maintaining a healthy pregnancy and the realities of labor, delivery, and newborn care—plays an important role in primary care and is an integral part of the FMTTC training courses.**



**An instructor at the Scientific Center of Physiology FMTTC demonstrates birthing techniques to a group of practitioners from Turkmenistan’s outlying regions.**

"Given the current budgetary constraints that we are all feeling at local, national, and international levels, it is even more imperative to focus on primary care and prevention programs. The bridges and relationships we have built through our AIHA partnership with Tomsk are invaluable tools for creating a safer, more caring, global community."

— Mary Thompson, public health nurse and US partnership coordinator, Bemidji, Minnesota, USA  
(Tomsk/Bemidji primary healthcare partnership and Engels/Bemidji HIV/AIDS partnership)

Primary Healthcare Case Study Handbook – In Spring 2002, AIHA sponsored an inter-partnership meeting in which key partnership representatives and healthcare leaders shared lessons learned in developing, implementing, and improving the delivery of new community-based primary care services as part of their partnership programs. Drawing on the outcomes of this meeting, AIHA produced a case study handbook on PHC development strategies and lessons learned to further dissemination and replication of the successful model programs and to help guide NIS health ministries in their efforts to scale up efforts to shift toward primary care.

Primary Healthcare Training Curriculum “Resolving Public Health Problems through Community Involvement” – Working in collaboration with PHC partners, AIHA worked to adapt and package the curriculum from the above-mentioned training workshop so that it could be disseminated and implemented more widely by partners throughout the NIS and CEE.

Clinical Practice Guidelines – AIHA launched its Clinical Practice Guidelines (CPG)-Quality Improvement (QI) Program in 1998 to provide the infrastructure and tools required for using an evidence-based approach to disease prevention and disease management. AIHA provided training to a group of master trainers from each PHC partnership on how to initiate the development and implementation of guidelines in their institutions. (See the section below on the

Clinical Practice Guidelines Initiative for more details about the activities and achievements of this initiative.)

PHC and Healthy Communities Toolkit – To encourage replication of the community-based PHC model developed through the partnership program, AIHA produced an online toolkit that provides step-by-step models to follow and proven techniques to help healthcare institutions strengthen their delivery systems by creating Primary Healthcare Centers. AIHA also created a toolkit outlining the processes for engaging community group and organizations in developing healthy communities programs.

Evaluation of AIHA's Primary Healthcare Partnerships in the Newly Independent States (1998-2006) – In 2006, a USAID evaluation team conducted an assessment of the 32 community-based primary healthcare partnerships that have contributed to reorienting healthcare delivery systems towards primary care and family medicine in the NIS and CEE.

## **B. Nursing**

Skilled nursing professionals are a vital link to patient care and an essential component of any healthcare system. In the NIS, however, the nursing profession had been largely neglected. Lack of professional nursing standards, lack of emphasis on critical thinking and independent decision-making, and the absence of baccalaureate and advanced degree opportunities limited the role nursing plays in the healthcare delivery system. To facilitate a coordinated approach to strengthening the role of nurses as clinicians, managers, and educators, AIHA assembled a task force comprised of US and NIS representatives from each partnership through the initial NIS Health Partnerships Program beginning in April 1995. The Nursing Task Force organized annual international nursing conferences, at which participants from all AIHA partnerships addressed the need for enhancing the professionalism of nurses and nurse administrators, reforming undergraduate and graduate nursing education, and developing regional and national professional associations. The task force also developed a basic nursing reference, the *Leadership Skills Workbook*, which provides guidelines on basic nursing practice, nursing education, continuous quality improvement, research, professional organizations, human resource structure, budgets, hospital operations, ethics, leadership skills, and mentoring.

## Providing Home-based Care: A Nurse's Domain

"For me, providing care to people in their homes is extremely rewarding, not only because I am helping patients, but also because it gives me greater autonomy. Inpatient care is dominated by physicians, but home care is truly a nurse's domain," Marina Markova says, explaining that being a nurse in Russia these days requires more independent thinking than it ever has.



**Marina Markova**

Markova is senior nurse at Medical Center DELOR, a primary care facility established by St. Petersburg State Medical University Hospital and DELOR—a private company that coordinates patient referrals to the hospital's specialists. Her responsibilities range from managing patient flow and training new nurses to acting as a liaison between physicians and nurses and patient care. Despite all this, home care visits remain one of her most satisfying duties.

Markova had been a surgical nurse in the hospital's urology department for almost 15 years when in 1996 she heard about a new type of clinic the hospital planned to open. As part of AIHA's St. Petersburg/Atlanta partnership, the facility was well-equipped to make primary care part of the changes they were implementing. But, Markov explains, the concept of general practice medicine is not deeply rooted in Russian mentality. "Under the Soviet system, the idea of family medicine became lost in a sea of specialty care providers. Telling people that a general practice office was opening in their community meant nothing to them because most of them had never even heard of such a thing."

Nevertheless, Markova was convinced that primary care was the wave of the future, so she enrolled in a nine-month course to obtain a certificate in general practice nursing. When Medical Center DELOR opened its doors later that year, she opened a new chapter in her career, joining the practice as senior nurse. Markova soon signed up for two courses at the Post-graduate Nursing College at St. Petersburg Hospital No. 122, a member of AIHA's St. Petersburg/Louisville partnership and the only place in the city that offered an American-style nursing curriculum. There, she says, the classes on clinical practice and management opened up a world of new ideas for her and, when the opportunity to participate in a professional exchange hosted by the Georgia Baptist Medical Center in Atlanta arose, she was eager to see the theories she had been learning put into practice. "My experience and the courses I had taken had given me the knowledge, but seeing everything with my own eyes impressed me more than I ever thought it would," she says, describing visits not only to the Atlanta Center, but also to an area medical school, general practice and insurance offices, and a second hospital center in nearby Macon.

Something else Markova had not expected to see was the way nurses were viewed—not only by the medical community but patients as well. "Nursing is a respected profession in the United States. They work capably and have quite a bit of independence, yet they also work as part of a team with physicians. In Russia, this has not been the case, but it is starting to change," she remarks, noting that similar doctor/nurse teams—as well as nursing units that incorporate clinical care, social services, and patient education—were established at DELOR soon after she returned from the exchange.

"The doctors I work with now really view nurses as partners and they are starting to spread this way of thinking to their colleagues and to the patients, but not everyone is so quick to change," Markova admits. "The first encounter most of our patients have these days is with a nurse," she says, explaining that the team structure at DELOR helps staff provide comprehensive care, while ensuring they operate in a more cost-effective manner. "In the past we had a relatively high rate of hospitalizations, but our American partners showed us that many of our patients did not require hospital care. What they really needed was social care—someone to teach them how to manage their conditions, to talk openly with them, and to oversee their treatment," Markova concludes. "For many patients, especially the elderly or chronically ill, this means home visits."

program in which participants develop the skills and knowledge necessary to become successful leaders in today's healthcare environment. The Institute offered varied teaching methodologies to develop an integrated curriculum, borrowing from several successful adult learning models. Topics covered during the training included quality improvement and nursing scholarship and research. Twenty-three of the program graduates were subsequently promoted to nursing leadership positions due, in part, to the skills they developed during the program. After graduating from the program, INLI participants were eligible to apply for small grants of up

“The first AIHA nursing conference I attended was the beginning of the change in my attitudes toward my own profession. I will never forget the tears of joy I saw in the eyes of many of my colleagues as they began to realize what they could accomplish. We who have worked in the AIHA partnerships and continue to do so are pioneers in the field of nursing in our countries. We will become the teachers of the future.”

— Lia Mamaladze, Chief Nurse,  
Georgian Ministry of Health,  
Tbilisi, Georgia  
(Tbilisi/Atlanta partnership)

to \$1,000 to work on projects that would benefit their partnership or local communities. AIHA funded 11 of these projects, which focused on nursing association building, clinical practice, leadership, and curriculum development. An evaluation of the INLI program conducted in 2003 found that all but three of the program participants had implemented projects to improve the knowledge and skills of nurses at their institutions after graduation from the program. The majority (72 percent) felt that the program had helped them to gain respect from physicians.

Distance Education Program – Working with the University of Nebraska College of Nursing, AIHA established a pilot distance education program in 2002 for nurse educators at the Erebuni College of Nursing in Armenia. This innovative Internet-based program provided opportunities for master's level training for 10 Armenian nurses, enabling them to pursue graduate studies without vacating their positions. Through the program, 10 baccalaureate-prepared nurses from the Erebuni College completed six core courses toward a Masters of Science in Nursing (MSN) degree.

Nursing Resource Centers – With the goal of providing nursing faculty, students, and practitioners with a facility to support alternative forms of learning, AIHA identified 24 partnership sites throughout the NIS and CEE for the establishment of Nursing Resource Centers (NRCs). AIHA supplied each NRC with computers, textbooks, videotapes, and educational posters addressing all clinical, managerial and psychosocial aspects of healthcare. These centers encourage independent learning and

enhance traditional teaching methodologies. The NRCs have also served as meeting sites for local nursing associations and enabled nursing colleagues to collaborate on a diversity of nursing issues. Through the region-wide agreement, AIHA provided limited continued support (primarily Internet access and educational materials) to successful NRCs. A 2003 evaluation found that 21 of the 24 continued to be fully operational after funding support from USAID/AIHA had ended.

Nursing Toolkit – To encourage replication of nursing program successes, AIHA produced a Web-based toolkit that contains four separate modules representing different approaches to capacity-building and developing the skills of nurses: Primary Healthcare Nursing, Nursing Associations, Nursing Leadership, and Nursing Resource Centers.

### C. Women's Health

Increased rates of tobacco use, alcohol and drug abuse, unsafe sexual practices, intimate partner violence (IPV), and a host of other medical, behavioral, and economic concerns in the NIS and CEE, have led to reduced life expectancy for women in more than half of the countries in these regions. To improve the health of women in the NIS and CEE, AIHA established a network of 21 Women's Wellness Centers (WWCs) in 10 countries. The WWCs represented a new model of healthcare delivery for women, providing a client-centered approach to women's primary care needs throughout their life continuum. WWCs provide a comprehensive range of clinical and educational services in an ambulatory care facility, including early detection, screening and disease prevention, and health-promotion services.

## Tashkent Clinic Offers Hope to Women Battling Cervical Cancer

When it comes to providing women's healthcare services, a patient's age is not at all important, according to Delfusa Kurnanbekova, an obstetrician and gynecologist at the Tashkent Women's Wellness Center (WWC). "After all, every one of our patients is someone's mother, someone's wife, or someone's daughter. No family can enjoy life to the fullest without the care and affection of these women," she points out.

The strength of Kurnanbekova's commitment is evident in the passion she has for the work she does each day at the WWC. Her many satisfied patients offer further testament to her professional skill and compassion. Not one to rush through a consultation, Kurnanbekova makes sure each woman gets the care and attention she needs.

"People need to be educated to ensure they stay as healthy as possible. That means I must take the time to chat with each one. Very few women know that cervical cancer—which is one of the leading causes of mortality among women in Uzbekistan—can be caused by sexually transmitted infections such as human papilloma virus," she remarks. While this client-centered approach is the hallmark of the Tashkent WWC, it is still relatively uncommon in much of the former Soviet Union.

Situated in the Uzbek capital, the WWC provides a broad range of clinical care and related services to women of all ages. The facility opened in 1997 through the efforts of an AIHA partnership linking the Second Tashkent State Medical Institute with the University of Illinois Medical Center in Chicago.

Because cervical cancer is so prevalent in Uzbekistan, combating the disease is critical, Kurnanbekova says. "If diagnosed at its earliest stages, it is a completely curable disease. Unfortunately, many medical institutions here still use histological analysis to identify cervical cancer, which often produces inaccurate results. Thanks to our partnership, we were the first clinic in the country to introduce Pap tests. This method makes it possible to identify cancerous changes on a cellular level when the disease can still be successfully treated," she explains. This has resulted in considerably higher early detection rates than in other women's clinics. More importantly, it has translated into a greater number of women who have won their battle with cervical cancer and families who were spared the pain of losing them.

Zhamilya Sadykova is one of these women. Four years ago, the 53-year-old Tashkent school teacher was diagnosed with cervical cancer. Although the prospect of undergoing a hysterectomy was terrifying at first, Sadykova's fears were short-lived thanks to Kurnanbekova and the other WWC staff.

"I was so lucky to come across this center. This was the first time in my life that a doctor told me in detail about an illness, the operation itself, and its consequences," the mother of three says. "Dr. Kurnanbekova presented all the information so logically and competently. She easily convinced my husband and me that our personal life would not come to an end after the operation—a common belief here. After speaking with her, we decided to proceed with the operation as soon as possible and that is what I did."

The operation was a complete success thanks to Kurnanbekova, Sadykova says. "I was in her capable hands from beginning to end. When I awoke after surgery, my whole family was in the ward with me and so was Dr. Kurnanbekova. As soon as I looked into her eyes, I felt a sense of calm because I could tell everything went well. I feel wonderful and I am happy that I can now live peacefully and help my children raise our grandchildren. Our family has always been a strong and friendly one. Now, it is also a healthy one!"



**Dr. Delfusa Kurnanbekova counsels cervical cancer patient Zhamilya Sadykova, providing her with the information she needs to make**

The initial group of WWCs was created within the framework of 12 AIHA hospital partnerships, utilizing the existing programs, administrative structures, and professional relationships that were developed by the partnerships in the areas of family planning, health education, and clinical training in obstetrics and neonatal resuscitation. Each AIHA partnership implemented the WWC model, specializing services to address the needs of their target population. Three WWCs in Ukraine received additional funding to establish enhanced breast care programs, which included mammography screening.

AIHA supported the WWCs and the women's health initiative through the following activities supported by the region-wide agreement:

Women's Wellness Center Clinical Practice Guidelines Reference Manual and Training Workshop – To promote the practice of evidence-based medicine within WWCs, a *Clinical Practice Reference Manual* was prepared and distributed to all WWCs. The reference manual covered a broad range of topics, including recommendations for routine screening assessments, evaluation of and counseling on sexual and reproductive health functions, and gynecological disorders. A 2001 assessment indicated that few WWCs were using a quality assessment approach that determined if clinical practice guidelines were actually being utilized. To address this gap, AIHA organized a Clinical Practice Guidelines Workshop, which focused on the process of formulating guidelines into user-friendly formats, tailoring guidelines that are practical for implementation in a WWC practice environment, and quality assessment processes to determine if clinical practice guidelines adopted by a WWC are being used as intended. In addition, the workshop identified new guidelines that needed to be developed for topics that were not adequately addressed in the original edition of the *Clinical Practice Reference Manual*.

“Our partnership enabled us to travel to the United States to participate in clinical trainings on crucial topics. Regional conferences also allowed us to exchange ideas and information with counterparts from other countries. We become part of a larger regional network of women's health specialists.”

— Dr. Hasmik Davtyan, Chief Radiologist, Armenian American Wellness Center, Yerevan, Armenia (Yerevan/Washington partnership)

Regional Capacity-building Workshops – The women's health initiative coordinated a number of training workshops for representatives from the WWCs, as well as from the community-based primary healthcare partnerships. This included workshops on domestic violence, pre- and post-HIV test counseling, behavioral health, anti-trafficking, and case management for sexually transmitted infections.

Women's Health Toolkit – AIHA developed an online toolkit that provides resources that can be utilized to replicate, step-by-step, the development of a Women's Wellness Center or to enhance the capacity of existing healthcare providers working in women's health.

Women's Health Program Evaluation – In 2003, AIHA developed a patient satisfaction survey, as well as a self-assessment tool for WWCs. In addition to helping AIHA report on the achievements and progress of the centers, these tools were designed to help the WWCs in their own continuous quality improvement efforts. The self-assessment tool was designed to evaluate the consistency of the AIHA WWC model by documenting the range of women's health services provided by the centers, as well as the ability of WWCs to reach segments of women across their life span. The 2003 assessment found that AIHA's women's health initiative had helped WWCs to expand the range of services they provide, particularly in the areas of support services for elderly women, patient education, and reproductive health. Centers were less consistent in their provision of HIV/AIDS counseling and testing, substance abuse, and mental health (though about one-quarter to one-third of the centers were providing each of these types of services). The vast majority of centers (90 percent) felt confident that they would be able to sustain their capacities for at least the next 10 years.

## D. Emergency and Disaster Medicine

According to WHO, deaths due to accidents and cardiac incidents are roughly three times greater in the NIS/CEE region than in the United States. A lack of well-trained first responders coupled with a relatively weak

## Kyiv EMSTC Helps Ukraine Respond to Disasters at Home and Abroad

Established in 1995 by AIHA's Kyiv/Brooklyn partners at the Ukrainian Scientific and Practical Center of Disaster Medicine (USPCDM), the Kyiv EMSTC was founded on the spirit of international cooperation—a spirit that shines through each time Center staff and students respond not only to countless emergencies in Ukraine, but also rescue efforts following wide-scale international disasters, such as the earthquakes that ravaged Turkey in 1999 and India in 2001.

Every member of the Mobile Hospital Unit (MHU)—a self-contained emergent care center complete with everything necessary to treat mass casualties, from generators and surgical equipment on down to the pharmaceuticals and bandages—is extremely skilled at what he or she does, says Pyotr B. Volyansky, head of the medical department at Ukraine's Ministry for Emergency Situations.

"Each person has considerable experience responding to emergency and disaster situations," he continues. "Virtually every MHU member, including the rescue and recovery workers and the emergency medical professionals, has had some type of hands-on training at the Kyiv EMSTC. The practical, skills-based courses there most definitely improve staff's knowledge, confidence, and ability to perform well under tremendous stress."



**Trauma surgeon Georgiy Roschin cares for a young boy at the Mobile Hospital Unit set up in Bhachau following the 2001 earthquake.**

"India suffered the most powerful quake in 50 years on January 20, 2001; it registered 7.9 on the modified Mercalli scale and killed as many as 20,000 people," Volyansky explains, noting that 50,000 more were injured and nearly a quarter of a million were left homeless. The MHU team set up operations in the area with the greatest population and need for critical care—the city of Bhachau in the state of Gujarat.

"In Bhachau, one quarter of the city's 40,000 people died and another 20,000 were wounded. What made the situation even worse was the fact that the entire healthcare infrastructure was completely destroyed and more than 70 percent of the area's medical personnel were killed," Volyansky says, noting that the MHU was one of the few facilities capable of providing care to the people of Bhachau and its environs.

"The team arrived on the fourth day following the earthquake with roughly 24 tons of medical supplies—enough to last 30 days. It took our convoy of one ambulance, four trucks, and two busses about 12 hours to travel the 350 kilometers from Gujarat's capital, Akhmadabad, to Bhachau," Volyansky states. The triaging department was up and running within one hour of their arrival and, within 24 hours, the team of 50 specialists were treating more than 400 patients each day, he reports.

"Before we arrived in Bhachau, the Indian government had sent some military medical personnel to the areas affected by the quake, but they weren't physicians. They also weren't equipped to handle such a mass-casualty situation, so we soon came to be recognized as the primary clinical care facility for the region," says USPCDM anesthesiologist Victor Padalka.

"The mobile Hospital Unit operated 24-hours a day for nearly one month. When it was all over, we had provided care for about 5,500 patients," Padalka says. "Even in the midst of the massive destruction in Bhachau, people there would ask us how a country as small as Ukraine was able to help one as big as India. They were incredibly kind to us and grateful for our assistance. We were able to tell them a lot about Ukraine and we were also able to build many friendships that last to this day."

emergency response infrastructure reduce a country's ability to successfully respond to unexpected illnesses, accidents, and disasters thereby greatly contributing to the higher death rates. As a result, many NIS/CEE nations have assigned a high priority to improving pre-hospital and hospital-based emergency care. Attention has also focused on the need for coordinated responses to mass casualty incidents such as earthquakes and other natural and man-made disasters.

AIHA's overall goal in its program on Emergency and Disaster Medicine (EDM) was to reduce morbidity and mortality associated with emergencies by creating sustainable capacity within countries to effectively respond to emergencies ranging from routine medical cases and trauma to disasters involving mass casualties. To this end, AIHA and its partners established 16 national or regional EMS Training Centers (EMSTCs) throughout the NIS/CEE with trained instructors and a basic uniform curriculum designed specifically for use in the region. In addition to the standard 80-hour curriculum, a variety of both shorter and longer courses were developed to meet local and regional needs, including courses in urgent care for primary care providers and basic life-saving skills for teachers and schoolchildren. The EMSTCs have collectively trained well in excess of 35,000 physicians, nurses, and others since the first center opened in Armenia in 1994. As described below, through the region-wide agreement AIHA has provided ongoing support to the centers through follow-up training, networking meetings, and facilitated discussions of a regional professional association.

"I believe the EMS courses have given me the knowledge and confidence to handle complications both at work and in other places. For example, my own son recently swallowed something and was choking and I was able to react calmly and quickly while my mother and my husband—who is also a physician—panicked. I wasn't frightened or confused . . . I was in control of the situation."

— Dr. Liziko Peikrishvili,  
Pediatric Hematologist, Tbilisi  
State Medical University Clinic,  
Tbilisi, Georgia

Emergency Medical Services Training Curricula – AIHA's EMS partners first developed the basic 80-hour EMS curriculum in 1994. It was based on key elements of the following clinical protocols: Basic Life Support (BLS); Advanced Life Support (ALS); Advanced Cardiac Life Support (ACLS); and Pediatric Advanced Life Support (PALS). With support from US partner experts in Boston, AIHA, brought together EMSTC directors in 2000 to review and revise the curriculum based on state-of-the-art knowledge and practices. Based on a growing demand from EMS partners for a curriculum specifically designed for first responders in the NIS, AIHA commissioned US partner experts to develop a skills-based curriculum based on the US Department of Transportation's First Responder National Standard Curriculum. Both of these curricula were reviewed by NIS partners, translated, and distributed in hard copy, CD-ROM, and online in 2003 and 2004.

Emergency Medical Services Training-of-Trainers Workshop – To orient partners on the new curricula described above, AIHA conducted a 2004 workshop for EMSTC trainers, during which they were able to practice teaching selected modules. The meeting provided participants with the opportunity to share recent developments at their own centers and discuss sustainability and evaluating the impact of EMS training.

Emergency Medical Services Training Centers – At each of AIHA's 16 EMS TCs, healthcare professionals learn emergency techniques including CPR, emergency obstetrics, intubation, spinal immobilization, disaster response, and triaging practices that can be performed at the accident site, en route to, and in the hospital setting. National EMSTCs play a critical role in upgrading urgent care skills necessary to the management of medical emergencies among primary healthcare personnel. Centers also teach life-saving skills to non-medical professionals, such as flight attendants, firefighters, traffic police, oil company employees, and others who may be called upon to provide emergency care. Through the region-wide agreement, AIHA provided limited support to provide EMSTCs with necessary supplies or equipment for training courses, as well Internet connectivity.

Radiation Disaster Preparedness Training – In collaboration with the International Atomic Energy Agency, AIHA organized a series of workshops on radiation disaster preparedness, which was attended by instructors from each of the EMSTCs.

## E. Infection Control and Prevention

In response to increasing evidence of nosocomial infections in the NIS, AIHA began cooperating with health ministries in Georgia, Kazakhstan, Russia, and Ukraine to assist in the development of national infection control programs. Working in collaboration with The Society for Health Care Epidemiology of America (SHEA), the Association of Professionals in Infection Control and Epidemiology (APIC), the Centers for Disease Control and Prevention (CDC), and the World Health Organization (WHO), AIHA's infection control and prevention initiative focused on two main activities:

- establishing model regional Infection Control Training Centers (ICTCs) for the purpose of training hospital epidemiologists and other infection control professionals in the identification, surveillance, and treatment of nosocomial infections;
- upgrading the level of microbiology laboratory services, facilitating the appropriate use of antimicrobial agents in NIS hospitals, and maintaining a database record of outbreaks to report to the WHO Boston Collaborating Center on a yearly basis.

The region-wide agreement supported the infection control and prevention initiative in the following areas:

Infection Control Training Centers – Through its infection control and prevention initiative, AIHA established four ICTCs—one each in Almaty, Kyiv, St. Petersburg, and Tbilisi. Region-wide funds were used to support Internet connectivity, educational materials, and basic office supplies for some of the ICTCs in years where funds were not otherwise available. ICTCs also occasionally received funding to support participation in various workshops and meetings. AIHA continued data collection on active studies in hospitals in all four regions. One representative from each ICTC was sent to the Annual SHEA meeting in 2002 to present the results of studies on surgical site infections and antibiotic use conducted collaboratively between all four ICTCs.

Revised Infection Control Manual – The Infection Control Manual developed, translated, and disseminated by AIHA in 1997 underwent extensive revision in 2001-2003. The revised manual was reviewed by representatives from the four ICTCs, NIS health ministers, and participants attending the Mechnikov International Infection Control Conference in September 2003. The 2<sup>nd</sup> edition of the Infection Control Manual was published and distributed in online and in CD-ROM format in 2003-04.

WHONET Labs – The goal of the Surveillance of Antimicrobial Resistance (WHONET) Project was to assist health ministries and AIHA partner hospitals in the NIS in implementing interventions that facilitate the appropriate use of antimicrobial agents in hospitals. Initiated in collaboration with WHO in 1997, AIHA and the developers of the WHONET program worked with six pilot sites to upgrade their microbiology laboratories, gather data on resistance to antimicrobial agents and, based on the data analysis, to implement mechanisms to minimize the misuse of antimicrobial agents. Developed by the WHO Collaborating Center in Boston, a software program was designed to capture this data. The first six pilot sites included three partnership hospitals and three reference labs in Russia and Ukraine. Analysis of the data collected showed that all six sites were collecting increasing amounts of data from more and more hospitals and that the quality of the data collected, according to WHO standards, was excellent. Through the region-wide agreement, AIHA supported re-supply of susceptibility disks and media to working WHONET labs so they could properly culture and identify drug resistance and report it to WHO.

Russian Prikaz for Infection Control – In 2001, the Russian Minister of Health asked the St. Petersburg ICTC to lead an effort to re-write

“It was challenging to learn a new system of infection control... to understand so much new information. But it was fascinating, too, particularly learning from our US partners, who had not only knowledge, but also a systematic approach that we lacked at that time.”

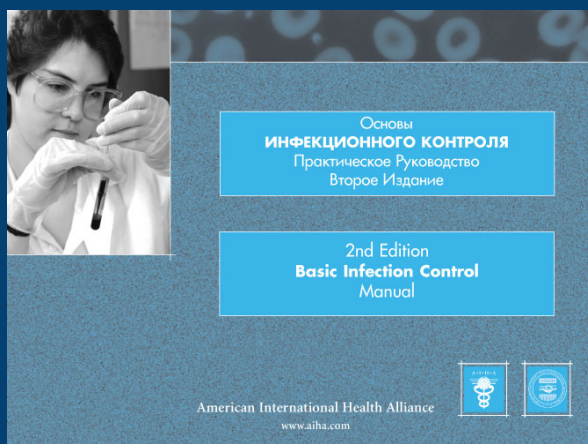
— Dr. Paata Imnadze, Director,  
Georgian National Center for  
Disease Control, Tbilisi, Georgia  
(Tbilisi/Minneapolis partnership)

sections of *Prikaz No. 720* on surgical and wound infection, ICU infection control, and bacteriological monitoring. In November 2002, AIHA convened a meeting in Moscow of ICTC faculty and staff to continue discussions and deliberations about the potential for the Russian Ministry of Health to adopt evidence-based standards for hospital-based infection control. Region-wide agreement funds were used to support translation and reproduction of materials, interpretation, and travel for non-Russian participants.

Infection Control and Prevention Program Monitoring and Evaluation – AIHA worked with a US expert to develop and implement survey instruments for the ICTCs. In addition, a collaborative study of the incidence and type of drug-resistant urinary tract infections and e-coli infections from patients presenting at the WWCs in Almaty, Kyiv, Kutaisi, St. Petersburg, and Yerevan was conducted between 2001 and 2003.

Blood Safety and Blood Bank Development – Despite numerous technological advances in science and medicine, countless nations and millions of people lack access to a safe blood supply. The blood supply infrastructure in the NIS/CEE had significantly deteriorated since the breakup of the former Soviet Union. To overcome this problem, AIHA teamed with Global Healing, a nonprofit based in San Francisco, California, to develop a model blood bank in Georgia and to conduct assessments of the magnitude of the blood safety problem in both Georgia and Ukraine. This partnership resulted in the establishment of Georgia's first voluntary blood bank in 2000.

## Infection Control Training Centers: Strengthening Policies and Practices



While hospital infection control in the former Soviet Union has a strong hygienic tradition—most hospitals in the region are kept sufficiently clean—nosocomial infections are more likely to be spread through person-to-person contact. Additional emphasis must therefore be placed on patient care practices.

Building on the successful training center model used for its Emergency and Disaster Medicine and Neonatal Resuscitation programs, AIHA created a comprehensive plan for establishing Infection Control Training Centers (ICTCs) that address issues such as developing targeted curricula, educating faculty in evidence-based infection control standards and adult-learning techniques, and compiling

appropriate reference and teaching materials. Four training centers have been established—one each in Georgia, Kazakhstan, Russia, and Ukraine.

The cornerstone of each ICTC is a one-week Basic Infection Control course that was developed for hospital epidemiologists, assistant epidemiologists, and other physicians and nurses who are responsible for infection control practices in their hospitals. The first edition of AIHA's Basic Infection Control manual for nations in the region was co-authored by US and Russian infection control experts. It was published in 1997 and distributed to all partnership hospitals, major teaching institutions, and national and regional health authorities. The manual was updated in 2003 and the second edition was published and distributed widely throughout the region.

Infection control professionals are currently using it as a teaching tool and resource in their day-to-day practice. In addition, a special "Training of Trainers" program was designed to ensure ICTC faculty remain current on evidence-based infection control practices and continuing education methodology. This program allowed for the gradual involvement of faculty from the region in teaching the Basic Infection Control course and other specialized classes, first jointly with their US partners and then on their own.

## F. Infant Survival and Neonatal Resuscitation

In 2002, infant mortality rates in the NIS ranged from 20.33 per 1,000 live births in Russia, to 83.41 per 1,000 births in Azerbaijan—the same as in the lesser-developed nations of South America and Africa. Decades of professional and scientific isolation from the western world had created a significant void in access to current health and medical research and an absence of a scientific evidence-based approach to infant survival strategies and decision-making. The goal of the infant survival and neonatal resuscitation initiative was to increase the infant survival rate in the NIS and to improve the quality of care provided to infants in their first hours of life.

Based on the model developed by the L'viv/Detroit partnership in 1994, AIHA began replicating Neonatal Resuscitation Training Centers (NRTCs) at several other partnership sites. Altogether, 17 NRTCs were established in six countries. The NRTCs provide cost-effective clinical training to obstetrician/gynecologists, neonatologists, pediatricians, nurses, midwives, residents, and anesthesiologists. The curriculum utilized by the centers is the American Heart Association/American Academy of Pediatrics (AHA/AAP) Manual for Neonatal Resuscitation, translated and reproduced by AIHA in both Russian and Ukrainian. Over the years, partners have developed additional training materials and posters for delivery rooms and birth houses that demonstrate the techniques taught in the courses.

The NRTCs are responsible for conducting monthly training courses, conducting outreach courses to medical personnel who cannot travel to the center, and collecting and disseminating data. In addition, many of the training centers have taken a leading role in the development of a regional approach to addressing infant care. Based on the US model, neonatal units are assigned a level of care and infants are only transported to neonatal intensive care units, the highest level of care, when established criteria are met. Thus, resources can be more efficiently allocated and healthcare professionals better trained to meet the special needs of each level of care. For example, the NRTC established in Chelyabinsk, Russia, in 1997 succeeded in leading an oblast-wide effort in 2001 to coordinate the efforts of all other neonatal training and service institutions to reflect a regional model of neonatal care.

The region-wide agreement supported the following activities related to the infant survival and neonatal resuscitation initiative:

Neonatal Resuscitation Program Manuals and Slide Kit – In 2003-04, AIHA revised and translated the basic student and instructor neonatal resuscitation manuals used by the NRTCs to train healthcare personnel such as physicians, midwives, and nurses who may be called upon to do neonatal resuscitations. In addition, a Russian-language training-of-trainers manual, which is used to prepare those expected to serve as trainers/instructors in neonatal resuscitation, was developed and disseminated. AIHA also provided a slide presentation kit for use among trainers to reinforce the educational process.

Region-Wide Neonatal Resuscitation Program Steering Committee – A series of meetings was held in 2001-02 with AIHA staff, a group of international technical experts, and representatives from the NRTCs to further develop quality assurance guidelines and data analysis methodology. The committee also worked to collect and analyze data as part of a 10,000 births research study.

Infant Survival Trainer New Curriculum Training – In 2000, the American Academy of Pediatrics adopted a revised set of guidelines for infant resuscitation. All trainers currently working at NRTCs (approximately 50)

“In the early 1990s, the medical care of newborns still followed the standards set up under the former Soviet Union.

All births took place at maternity houses and infants who were premature or had severe health conditions stayed at these centers for 10 days. . . if they were still in distress after that, they were then brought to our facility for further treatment. Of course, many of the babies died before they made it to us.”

— Dr. Zoriana Salabay,  
Neonatologist , L'viv Regional  
Neonatal Center, L'viv Oblast  
Clinical Hospital , L'viv, Ukraine  
(L'viv/Detroit partnership)

## Training Helps Ensure New Lives Don't End at Their Beginning

"I remember everything leading up to Helena's birth," her mother, Anna, says quietly. "It started on October 6—that's my own birthday—at six in the morning. I was taken to a maternity house in L'viv immediately but, because I was only 27 weeks into the pregnancy, the doctors there tried to delay the birth with a variety of medications. They wanted to give the baby more time to develop." After two days, though, the physicians could do no more to impede the birth.

"When she was born, Helena weighed only 900 grams and was just 33 centimeters long," Anna explains, noting that the local maternity house was not equipped to handle infants with very low birth weights and the severe complications that so often accompany premature births. The decision was made to transport the tiny newborn to the L'viv Regional Neonatal Center—at that time called the Unit for Sick Infants and Premature Babies at the L'viv Oblast Clinical Hospital—which was the only facility in the area with the capability of treating such a critical case.

Helena was very weak and quickly developed a host of physical problems ranging from respiratory distress and apnea to infections and difficulties stemming from her inability to nurse. "It is a terrible thing to witness your own child struggling for her life . . . but the staff here explained everything to us in great detail. They never gave us false hopes and always told us the truth about what Helena's chances were," Anna says.

Over the course of the six weeks Helena stayed at the Center, the physicians and nurses painstakingly taught the tiny baby how to nurse—first from a tube, then a bottle, and later her mother's breast. Slowly, she began to gain weight until, finally, her mother and father were able to take her home. "Helena weighed two-and-a-half kilos when she was discharged and looking at her now, no one would ever believe she weighed so little at birth," Anna beams, noting that the caring attitude of the Center's staff did not end there. "The doctors gave us very detailed instructions on how to look after Helena once we brought her home and, as you can see, there are no problems with her growth and development—she caught up within two years."

Just like many girls her age, Helena says she loves playing with dolls and gives each one of them a special name. . . . One is called Anna in honor of her mother; another is named Jasmine after the character in the cartoon *Aladdin*, she explains shyly. Anna laughs and ruffles the little girl's hair. "She is a beautiful child and I owe her life to the doctors here. I would love to have another baby and dearly hope that the pregnancy and birth would run a normal course . . . but if something were to go wrong, I am certain that the staff here would do everything in their power to ensure that baby received the best possible treatment, just like Helena."



Although Helena had a difficult start in life, the skill and expertise of AIHA partners at the L'viv Regional Neonatal Center helped ensure a joyous outcome.



Dr. Zoriana Salabay tends to one of the newborns in her care at the L'viv Regional Neonatal Center in western Ukraine.

attended a two-day retraining to learn how to teach and follow the new guidelines.

Neonatal Resuscitation Training Centers – With the exception of the Central Asia region, each of the regional cooperative agreements funded the majority of the infant survival and neonatal resuscitation program activities. The region-wide agreement provided program funds to support the two Neonatal Resuscitation Training Centers in Uzbekistan and their participation in training events, as well as materials replication support for conference and training events.

## G. Clinical Practice Guidelines

An ongoing emphasis of AIHA's partnerships has been the provision of appropriate and effective care that is based on sound research and optimizes limited resources to improve clinical outcomes. On an international level, evolving trends in quality improvement and the development and use of clinical guidelines appeared to be ideally suited to supporting this objective. However, many barriers existed to the use of guidelines in the NIS/CEE context. These included the lack of reliable data collection systems, insufficient training resources and medical supplies/equipment to support guideline implementation, resistance to change on the part of providers, difficulty accessing up-to-date medical information, and the absence of legislative support and financial incentives to operationalize needed changes.

AIHA launched its Clinical Practice Guidelines/Quality Improvement (CPG/QI) program in 1998 in recognition of the valuable contributions that the fields of quality management and evidence-based practice have for healthcare systems in the NIS/CEE. Over the subsequent decade, many partners became very active in developing and using guidelines within the framework of their partnerships.

The overall program goal was to improve the quality of primary care services and related health outcomes in the NIS/CEE by introducing techniques of quality improvement and evidence-based practice. To meet this goal, the project set the following objectives:

1. Establish a region-wide infrastructure to develop, implement, and evaluate Clinical Practice Guidelines and Quality Improvement projects that involve key stakeholders able to influence and sustain change.
2. Create a system of ongoing training to improve healthcare providers' skills in selecting, developing, and implementing new clinical practice guidelines.
3. Develop and disseminate tools for providers and policymakers, including a manual describing the guideline development/implementation process and ten guidelines in selected clinical areas.
4. Evaluate the impact of implemented guidelines using both population-based and patient specific common measures.
5. Improve health resources exchange through the establishment of clinical 'collaboratives' in diabetes and asthma.

"Before the new protocols were instituted in 1999, the neonatal resuscitation techniques we used were very crude, very outdated, and often costly because they called for inappropriate use of medications. The new clinical guidelines we use are in accordance with modern standards of practice and enable us to work together much more effectively because each member of the delivery room team knows exactly what he or she is supposed to do."

— Dr. Maya Shengali,  
Chief Neonatologist,  
Kutaisi Maternity Hospital No. 2,  
Kutaisi, Georgia  
(Kutaisi/Atlanta partnership)

AIHA's early efforts focused on conducting an inventory of all guidelines developed to date, standardizing their format, and making them available through AIHA's Web site. An Internet mailing list was established to more effectively disseminate information on clinical care, guidelines, and best practices to partners throughout the region.

To minimize duplication of effort and encourage cooperation among partnerships, in 2001 AIHA formed a Primary Care Clinical Practice Guidelines Steering Committee composed of US and NIS partners working in primary care. Although initially focused on primary care, the work of this committee included other AIHA

programs within its scope as well. Steering Committees were established in three regions—Caucasus, Russia, and West NIS—to implement training and guideline development activities and measure results. In 2000-2001, a series of workshops and meetings were conducted to promote the CPG process within the NIS primary healthcare institutions. A fundamental component of the approach involved the use of a team of master trainers at each PHC partner institution. After an initial series of training workshops, these master trainers were charged with promoting the use of guidelines in their respective institutions and training providers in the various clinical areas. The information coordinators working at the partnership Learning Resource Centers and the US partner institutions were also integrated into the process.

Four clinical practice guidelines (on bronchial asthma, cervical cancer screening, chest pain, and peptic ulcer) adapted and approved by the region-wide steering committee were published and disseminated in 2002. Four additional guidelines (on diabetes, pneumonia, healthy patient examination, and menopause) were developed in 2003, along with a *Clinical Practice Guidelines Process Manual*, designed to guide institutions in the implementation of local clinical practice guidelines. All of these guidelines continue to rank consistently among the most popularly downloaded documents from the AIHA and EurasiaHealth Web sites.

## Using Information Technology to Develop Life-saving Neonatal Guidelines

When staff at the Kutaisi Women's Wellness Center (WWC) and Maternity Hospital No. 2 observed a steady increase in rates of neonatal mortality caused by central nervous system damage resulting from asphyxia, Dr. Nino Berdzuli immediately turned to the Internet. Berdzuli, an obstetrician/gynecologist and the information coordinator of AIHA's Kutaisi/Atlanta partnership, knows the value of evidence-based protocols; she has been working on adapting them for use in Georgia since 1996 when she was introduced to the concept while training at Grady Hospital and Emory University as a member of the now-graduated Tbilisi/Atlanta partnership.

"I soon came to believe that the neonatal resuscitation protocols we had been using here were really obsolete. So were the guidelines for neonatal and perinatal services in general," she continues, explaining that physicians in Georgia are often forced to use outdated methods of treatment simply because they do not have access to more recent research that would allow them to make changes. "After doing some Internet research using MEDLINE and several other information sources, I analyzed protocols commonly used for neonatal resuscitation and determined that the ones we were using were indeed less effective and more expensive. Some of the medications we used were completely unnecessary. In fact, the protocols were especially weak in their guidance for delivery room care when proper assessment and management of newborns with any type of disorder that may cause damage to the central nervous system is crucial," Berdzuli notes.

So the young physician, along with neonatologist Maya Shengali and other colleagues, set to work adapting a series of guidelines for use in various situations—cases of hypoxia, asphyxia, and cardiac distress, for example—that require neonatal resuscitation. The physicians and nurses who work in the delivery wards all received training in the new guidelines.

"Many of the protocols that have their roots in the old Soviet system may very well be effective, but the problem is that there is no reliable evidence-based research that backs them up," Berdzuli concludes. "With the amount of medical information available today, it is crucial to understand which studies are reputable. This is especially true for clinicians practicing in the NIS countries where the funding available for healthcare is so very limited. I can only say that I am proud to play a part in bringing high-quality and cost-effective medical care to people in my own country."



**Dr. Nino Berdzuli (seated) performs a diagnostic procedure on a patient at the Kutaisi WWC.**

## V. REGIONAL AND PILOT PROGRAMS

In addition to supporting information technology and communications activities and cross-partnership initiatives, the region-wide agreement also made it possible for AIHA to develop pilot programs to address one of the greatest healthcare challenges that emerged in the region during this timeframe—the rapidly growing HIV/AIDS epidemic.

With support from the region-wide agreement, AIHA spearheaded two key programs designed to help countries in the region build the institutional and human resource capacity needed to more effectively provide treatment, care, and support to people living with HIV and stem the further spread of the virus.

### A. Odessa Model Pilot Program for the Prevention of Mother-to-Child Transmission of HIV/AIDS

During the period of the region-wide agreement, HIV/AIDS had begun to spread rapidly in the countries of the NIS and CEE. By the year 2000, the number of children born with HIV was steadily increasing every year. Ukraine, in particular, faced skyrocketing HIV infection rates and UNAIDS reported that the nation was home to the highest infection rate in the region. In 2002 for example, 1,379 children were born to HIV-positive women in Ukraine, representing an almost 50 percent increase from the 727 reported cases in 2000. Ukraine was also home to some two-thirds of all children born to HIV-positive mothers in the entire region. At the same time, the country had been experiencing a rapid depopulation and HIV prevalence was approaching one percent of the entire adult population. The percentage of registered HIV cases among pregnant women was also rapidly increasing, with some regions reporting rates of more than 0.4 percent. Within Ukraine, Odessa Oblast had the highest HIV prevalence rate (361.3 per 100,000) and the number of births to HIV-positive mothers there were double the rate for Ukraine as a whole (1.0 percent in 2003).

AIHA's pilot project for the prevention of mother-to-child (PMTCT) in Odessa was designed to improve systems of referral, treatment, and counseling for HIV-positive women and decrease risk of occupational exposure to HIV among healthcare workers who treat patients living with HIV or AIDS by implementing infection control procedures at participating institutions. The specific objectives were as follows:

- Improve the system of primary HIV prevention using AIHA's existing comprehensive women's wellness model;
- Improve the early identification and referral of HIV-positive pregnant women to ensure 100 percent case management and program participation;
- Decrease the risk of HIV transmission from mother to child using internationally recognized PMTCT protocols adapted to healthcare settings with limited resources;
- Improve the system of follow up care for women with HIV and babies born to HIV-positive women in cooperation with UNICEF and MSF;
- Develop guidelines, curricula, and other materials for use by healthcare providers and health policymakers throughout the NIS and CEE; and
- Promote the dissemination, adaptation, and replication of the Odessa PMTCT model to other communities within Ukraine, as well as other NIS and CEE countries.

Through the pilot PMTCT project initiated in 2001, AIHA established a center of programmatic excellence and training called the Southern Ukraine AIDS Education Center (SUAEC) at the Odessa Oblast Hospital. In close collaboration with partners and other key stakeholders, AIHA also developed PMTCT guidelines, protocols, and case management systems that are readily adaptable to the needs of other communities and regions in the NIS and CEE.

SUAEC draws on the wealth of experience of AIHA partners in the hospital's OB/GYN department, the Women's Wellness Clinic established on site through the Odessa/Coney Island partnership (1992-1998), and the Odessa Medical University, which was at the time participating in a PHC partnership with Boulder Community Hospital (BCH) that was funded by the USAID/West NIS Regional Mission (1999-2003). The

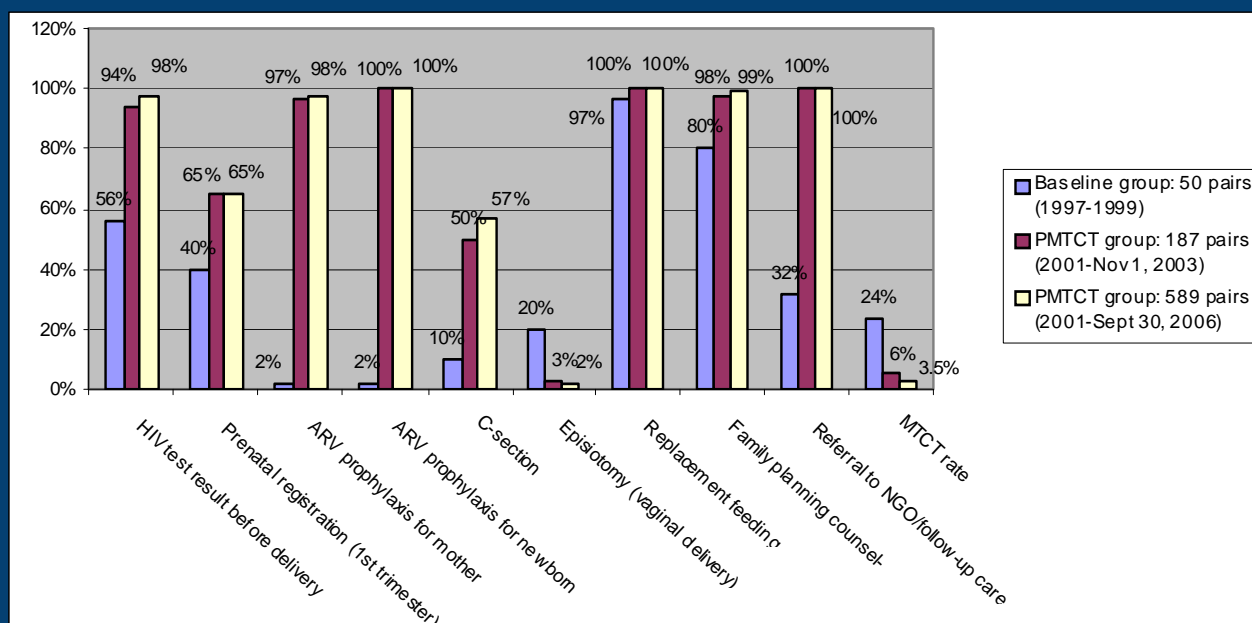
model PMTCT pilot program built on these established relationships. Training activities for the Odessa care providers were coordinated by the BCH partners and consisted of:

- Training delivery room personnel in prenatal, antenatal, and follow up prophylaxis and care for HIV-positive pregnant women and their infants;
- Training post-delivery teams in appropriate antenatal and follow up care for HIV-positive pregnant women and their infants;
- Training laboratory staff in modern testing and diagnostics;
- Clinical training for obstetricians and midwives on intra-partum care for HIV-positive patients;
- Training on patient and family counseling for nurses and midwives;
- Training in clinical practice guidelines and protocols and implementation into the medical school curriculum; and
- Applicable evaluation methods.

The partnership also supported the development of practice guidelines, manuals, patient brochures, and other information/documentation on primary HIV prevention for both high-risk groups and healthcare workers; PMTCT during pregnancy, delivery, and post-partum periods; and follow-up care for HIV-positive mothers and their babies.

During the next two years, the pilot PMTCT program in Odessa achieved significant success, reducing the rate of transmission by more than 75 percent (see table below).

### Odessa Oblast Hospital PMTCT Clinical Results As of September 30, 2006



Building on its significant success, in 2003-2004 the pilot project's focus shifted toward:

- Improving outreach to high-risk, vulnerable populations;
- Improving the care and treatment of women and children with HIV/AIDS, including the use of Highly Active Antiretroviral Therapy (HAART);
- Improving integration of HIV/AIDS prevention and care services within an effective public health and primary care system; and
- Promoting the dissemination, adaptation, and replication of the pilot program to other communities within the NIS and CEE.

SUAEC officially opened in July 2003. Since that time it has continuously provided training on PMTCT and occupational exposure for representatives from replication sites throughout Ukraine and other NIS countries, including Azerbaijan, Georgia, Kazakhstan, Moldova, and Russia. Soon after it opened, SUAEC became an affiliated training center for the WHO Regional Knowledge Hub for the Care and Treatment of HIV/AIDS in Eurasia and has been responsible for delivering courses related to PMTCT, pediatric AIDS, and occupational exposure. In many cases, region-wide funds were used to support the central costs of the training programs, while other sources such as USAID regional missions, UNICEF, Global Fund covered participant costs.

In December 2003, the Ukrainian Ministry of Health selected the case management-based monitoring and evaluation system AIHA developed through the PMTCT pilot project as the basis for a national PMTCT M&E system. The Ministry subsequently requested that AIHA staff participate in its related working group to assist with the nationwide adoption of the system. Ukraine's Ministry of Health later issued a decree requiring every oblast in the country to use the AIHA system. With additional funding from UNICEF, AIHA worked with the Odessa partners to adapt the M&E system for nationwide use, develop a training curriculum, and implement the system in all 26 oblasts of Ukraine.

In September 2004, CDC and WHO jointly published the WHO/USG PMTCT Generic Training Package (GTP), a comprehensive generic curriculum for developing a national strategy to combat vertical transmission of HIV, along with a series of manuals and modules for implementing PMTCT programs in resource-limited settings throughout the world.

AIHA, in collaboration with other major donors, NIS health ministry representatives, and AIDS Center directors, convened a series of consensus meetings to adapt the generic curriculum for use in the NIS. Based on this adaptation, which was piloted in March 2005, SUAEC has continued its training mandate using the targeted curriculum. In addition to the above-mentioned PMTCT Generic Training Package, the region-wide agreement supported the development of a number of PMTCT-related curricula and guidelines, including PMTCT practice guides on family planning, counseling and testing, infant feeding, STI prevention, and STI treatment.

In collaboration with the POLICY Project, in 2005 the Odessa PMTCT team assisted the Ukrainian Ministry of Health in the development of protocols and a national PMTCT strategy based on the latest WHO protocols on HIV/AIDS care and treatment for the NIS. Doctors from SUAEC participated in a series of PMTCT national strategy development meetings in Kyiv, and AIHA's PMTCT expert participated in a national meeting of AIDS service organizations in L'viv and the Ministry's MCH/PMTCT projects coordination meeting in Kyiv.

As a direct result of the Odessa PMTCT pilot project's success, USAID awarded the "Capacity Building to Prevent Mother-to-Child Transmission of HIV/AIDS" project to AIHA in early 2005. Operating under USAID's program on "Mitigating the Impact of Those Affected by HIV/AIDS," this project was implemented from February 2005 through August 2007 and was designed to contribute to the agency's overall goal of providing comprehensive PMTCT services to 90 percent of affected women in eight target oblasts—Dnipropetrovsk, Kyiv, Mykolayv, Cherkassy, Donetsk, Odessa, Kherson and Crimea—by 2008. The project focused on replicating the Odessa PMTCT model to help 32 healthcare institutions and community-based AIDS service NGOs in these high-prevalence regions build the human and organizational capacity needed to provide high-quality PMTCT services.

"The partners in Odessa have acquired a great deal of experience dealing with HIV-positive women and their families. They know how to integrate all the various components of care—clinical services, social support, peer counselling, and more. We need to draw on this precious knowledge rather than struggle to reinvent the wheel when every minute can be a matter of life or death."

— Dr. Marina Antimonova,  
Head, Samara Oblast Healthcare  
Administration's Maternal and Child  
Health Department,  
Samara, Russia

## Helping Women Living with HIV Give Birth to Healthy Babies

“The WWC here in Odessa is unique in that it takes not only patients from the city, but also referrals from other facilities throughout the Oblast,” explains Dr. Svetlana Posokhova, who has been the WWC’s director since it opened in 1998.

“Odessa is a crossroads where there is a good deal of drug trafficking and prostitution. Not only do we have heroin and cocaine coming into our ports, we also have people living here who produce an opium-based product that is even more dangerous because it is cheap and readily available,” Posokhova says, noting that the number of HIV-positive people in the city started to grow dramatically in 1995. “For pregnant women here, the problem of mother-to-child transmission (MTCT) of the disease is very serious. In the United States, MTCT rates hover around one percent while, in Ukraine, they can reach as high as 30 percent. Healthcare workers are also at high risk for infection if they don’t know how to protect themselves when they were treating HIV-positive patients.”



**Dr. Svetlana Posokhova with one of the infants she delivered at Odessa Oblast Hospital’s maternity ward.**

Explaining that surveys conducted in the early stages of the partnership with Coney Island Hospital indicated that 41 percent of the maternity unit’s staff came in contact patient blood during vaginal births and 30 percent did so during Caesarean deliveries, she says, “We implemented some general infection control protocols that included mandatory use of universal precautions and various employee training seminars and this helped lay the foundation for the Hospital’s—and the WWC’s—work with HIV-positive patients.”

According to Posokhova, some five percent of all deliveries at the maternity ward are to HIV-positive women and physicians at the WWC treat some 100 women with the disease on an on-going basis. “Although there is a special HIV/AIDS Center in Odessa, these women choose to come here because they have developed a bond of trust with our staff,” she says, describing Irina, one of her own patients with whom she has just such a relationship.

come to the Center for the first time when they are close to term. “She had obviously been a heavy drug user—the only vein we could find was in her groin—but even so, she was different from most women who came in to the Hospital in such a condition. Irina was the only one who ever admitted that she needed help to quit.”

Helping Irina was not an easy task. “We provided counseling and constant care for her up until the moment she delivered, trying to wean her off the drugs. Even so, she would sneak out of the hospital and walk to ‘The Palermo,’ a place where people go to buy drugs,” Posokhova notes, saying that Irina was high when her daughter, Sophia, was born.

“We gave Nevirapine to Irina four hours before she delivered the baby and we gave Sophia two doses of the same drug within the first three days following her birth,” Posokhova continues, smiling broadly when she points out that Sophia is now a very healthy, happy 8-year-old and Irina has been drug-free since the delivery. “Any time we successfully prevent an infant from developing HIV, we are thrilled that we were able to help. Our ultimate goal is to ensure that these unfortunate women live on through their children—through their healthy, beautiful children.”

As of June 2008, the replication project had achieved the following results:

- Reduction of vertical transmission rates from 21 percent in a baseline group to 6 percent in the PMTCT group as direct result of interventions implemented during the project;
- Early identification and referral of HIV-positive pregnant women for prenatal care before the second trimester rose from 27 percent in baseline groups to 45 percent in PMTCT groups;
- Systems of prenatal care for HIV-positive pregnant women, labor and delivery practices, and postnatal care for HIV-infected mothers and their infants increased significantly, with 84 percent of HIV-infected women and 96 percent of newborns receiving ARV prophylaxis in PMTCT groups compared to 67 and 50 percent respectively in baseline groups;
- The number of HIV-positive pregnant women referred to NGOs to receive non-medical care and support increased to 70 percent in PMTCT project groups from 7 percent in the baseline groups; and
- PMTCT results/lessons learned were disseminated and coordination with broader MCH and HIV/AIDS programs was achieved through regular meetings.

During the period 2004-2006, AIHA established replication PMTCT training centers in Temirtau, Kazakhstan, with satellite facilities in Almaty, Karaganda, and Pavlodar. Working with instructors from SUAEC, AIHA trained six Kazakh specialists from these sites as master trainers. Temirtau faculty provide courses in PMTCT, voluntary counseling and testing, and the WHO Generic Training Package courses, as well as targeted courses for policymakers.

At the end of 2006, a total of 80 healthcare professionals and policymakers had received training in different areas of PMTCT at the Temirtau center. In Pavlodar, the local partners reported that the instructors trained at Temirtau have provided training for 444 physicians and nurses, including ob/gyns, pediatricians, and PHC providers in 2004-2005.

Thanks to funding provided through the region-wide agreement between 2001 and 2006, USAID and AIHA were able to create a successful, effective model for PMTCT services and the training of health and allied professionals. With funding from both USAID and other donors, the Odessa PMTCT model has been replicated at other partnership sites throughout the NIS and has led to the adoption of regional and national policies and standards that are preventing the spread of HIV from mother to child.

## **Regional HIV/AIDS Curriculum Development and Capacity Building**

As NIS countries began to develop and scale up national programs for HIV/AIDS care, treatment, and prevention, the critical need to develop the capacity of healthcare providers and policymakers to implement such programs emerged. In response, AIHA collaborated with WHO, UNAIDS, UNICEF, and other international agencies, as well as NIS experts and health policymakers, to identify training priorities, adapt and translate existing resources and guidelines, and develop curricula and related materials.

AIHA spearheaded adaption and translation of a wide range of existing internationally recognized standards, training programs, curricula, and related textbooks and materials, making them available online through the EurasiaHealth AIDS Knowledge Network. These crucial resources have been used by a variety of training and capacity-building organizations in the NIS and CEE, including AIHA's own HIV/AIDS partnerships in the Russian Federation, national AIDS centers in Russia and Ukraine, the AIHA-supported Regional Knowledge Hub for Care and Treatment of HIV/AIDS in Ukraine, and the Southern Ukraine AIDS Education Center in Odessa (described in the previous section).

“In Odessa, we were able to draw upon the richest pool of knowledge and experience regarding HIV/AIDS in general, and PMTCT in particular, that exists in the region today. The training provided critical practical experience for clinicians—especially gynecologists and obstetricians who play a key role in educating their patients about the importance of preventing HIV in the first place.”

— Dr. Zhanna Trumova,  
Outpatient Department Head,  
Kazakh National HIV/AIDS Center,  
Almaty, Kazakhstan

## HIV/AIDS Training Curricula Developed with the Support of the Region-wide Agreement

- Introduction to HIV/AIDS Care and Treatment for Adults
- Pediatric Care and Treatment - Care Team Series
  - Initiation of Pediatric Antiretroviral Therapy
  - Pediatric Antiretroviral Therapy Onsite Mentoring
  - Advanced Pediatric Antiretroviral Therapy and Opportunistic Infections Management
- Adult Care and Treatment - Care Team Series
  - Initiation of Antiretroviral Therapy for Adults
  - Adult Antiretroviral Therapy Onsite Mentoring
  - Advanced Antiretroviral Therapy for Adults and Opportunistic Infections Management
- Adult Care and Treatment in Correctional Settings - Care Team Series
  - Initiation of Antiretroviral Therapy for Adults in Correctional Settings
  - Adult Antiretroviral Therapy Onsite Mentoring in Correctional Settings
  - Advanced Antiretroviral Therapy for Adults and Opportunistic Infections Management in Correctional Settings
- Antiretroviral Therapy During Pregnancy
- HIV/AIDS Nursing
- HIV/AIDS Basics for Nursing Professionals
- HIV/AIDS Clinic Administration and Management
- HIV/AIDS Palliative Care
- Management of HIV and TB Co-Infection
- Management of HIV Co-infection with Hepatitis B and C
- ART for Injecting Drug Users (with or without Substitution Therapy Component) (developed together with OSI/IHRD)
- Laboratory Monitoring of HIV Infection and Antiretroviral Therapy and Quality Assurance
- Adherence to Antiretroviral Therapy
- Training of Trainers (TOT) on Initiation of ART
- Training of Trainers (TOT) on Introduction to HIV/AIDS Care and Treatment
- HIV/AIDS Case Management
- Provision of Social Support for Adults Living with HIV or AIDS
- Psychological Support for Children Living with HIV or AIDS
- Update on Antiretroviral Therapy for Adults (Refresher Course)
- Prevention of Mother-to-Child Transmission of HIV (PMTCT):
  - General Knowledge (WHO/USG training course adapted to incorporate country-specific needs)
  - PMTCT: HIV Testing and Counseling
  - PMTCT: Pediatric Issues
  - PMTCT: Obstetrics and Gynecology
  - PMTCT for Decision Makers

As of August 2008, AIHA had developed curricula and related training materials for 31 different HIV/AIDS-related training courses. A total of 205 trainings have been delivered to more than 4,900 physicians, nurses, social workers, and NGO outreach workers who provide treatment, care, and support to people living with HIV or AIDS in Azerbaijan, Belarus, Estonia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Ukraine, and Uzbekistan.

The purpose and substance of these courses were based on training needs determined through a collaborative process that involved national implementing bodies, international donor agencies, the UN organizations referenced above, and US and international experts from organizations such as the US Association of Public Health Laboratories. Curricula related to clinical care and treatment relied heavily on national ART protocols, WHO Protocols on HIV/AIDS Care and Treatment, and training modules developed

by the International Association of Physicians in AIDS Care. Materials were translated and adapted for use in small-group, adult learning environments that meet the immediate and practical needs of multi-disciplinary teams of health and social services providers. Once a preliminary curriculum was developed by AIHA, national and international experts reviewed it in terms of its relevance to NIS needs and its adherence to recognized standards and evidence-based approaches. With respect to PMTCT, AIHA has led the effort for regional and national adaptations of the Global Generic Training Program for PMTCT (GTP) developed under the leadership of WHO and CDC.

For each of the 31 courses listed below, AIHA supported the development, adaptation, and translation of textbooks, lecture presentations, and other training materials. For the purposes of adaptation and review of key textbooks and curricula, AIHA brought together leading national experts on HIV/AIDS to sit on an NIS editorial board, which provided key textbooks with introductions that put recommendations into the context of the resources and services provided in an NIS healthcare environment. As guidelines, protocols, and textbooks from WHO, CDC, and other sources were updated—often on an annual basis—AIHA coordinated the process of translating each revision and incorporating these revisions into all relevant curricula. (For a complete list of the key textbooks and protocols translated by AIHA, please refer to the section on the EurasiaHealth Knowledge Network earlier in this report.)

AIHA also often served as a liaison, bringing together representatives from US and UN agencies with representatives from national NIS governments to seek consensus on priorities for human resource capacity-building and the development of protocols and national standards for HIV/AIDS care and treatment.

## **Overview of HIV/AIDS Training Courses Developed for the NIS**

Introduction to HIV/AIDS Care and Treatment for Adults – Developed in collaboration with the Clinton Foundation's HIV/AIDS Initiative, this five-day course for infectious disease physicians and nurses addresses HIV/AIDS testing options, counseling; psycho-social support, initial clinical review of newly diagnosed HIV-positive individuals, overview of opportunistic infections and sexually transmitted infections, and basic principles of ART and adherence issues. This course was first piloted in February 2007 in Ukraine.

Adult Care and Treatment Care Team Series: Initiation of Antiretroviral Therapy for Adults – A five-day didactical/clinical course that provides ART care teams (infectious disease physician, nurse, social worker/ART aid) with an understanding of the three major parameters to define prognosis and priorities for ART, the classes of ARV medications, standard recommendations for ARV use, basic skills for counselling patients with HIV, and factors that influence adherence.

Adult Care and Treatment Care Team Series: Adult Antiretroviral Therapy Onsite Mentoring – A two-day mentoring course conducted onsite for participants of the Initiation of ART for Adults course.

Adult Care and Treatment Care Team Series: Advanced Antiretroviral Therapy for Adults and Opportunistic Infections Management – A five-day didactical/clinical course for ART care teams that have participated in the two previous courses, this session focuses on counseling and support during ART; special issues in adherence; intolerance to some drugs and making necessary adjustments in therapy; WHO protocols on management of opportunistic infections and other HIV-related illnesses; specifics of ART for IDUs; referrals and needed care; case management; and addressing stigma and discrimination issues.

“These courses give healthcare professionals the skills they need for use at a patient’s bedside. Thanks to the training cycles, physicians are administering treatment with greater skill. They learn the importance of closely monitoring each patient and work to improve the relationship between clinicians and patients. Doctors should set an example of treating patients as human beings. That is the only way they can provide effective care to PLWHA because doing so requires understanding their problems.”

— Dr. Svetlana Antoniuk, Head, HIV/AIDS Treatment and Care Department, Gromashevsky Institute of Epidemiology and Infectious Diseases, Kyiv, Ukraine.

“We previously had little or no experience with the multidisciplinary team approach to care, but the courses not only describe the method, they actually show it in practice.

They clearly illustrate the important role social workers and non-medical caregivers play in care for people living with HIV or AIDS.”

— Dr. Olga Dashovets,  
Infectious Disease Specialist,  
Kyiv City AIDS Center,  
Kyiv, Ukraine

Adult Care and Treatment in Correctional Settings Care Team Series: Initiation of Antiretroviral Therapy for Adults in Correctional Settings – A five-day course for specialist teams working in correctional facilities, this course covers similar content to the Initiation of ART for Adults course with a special emphasis on the unique challenges and circumstances in correctional settings. The course was developed in 2006 using an adapted version of the newly revised guidelines on HIV treatment published by the New York State Department of Corrections.

Adult Care and Treatment in Correctional Settings Care Team Series: Adult Antiretroviral Therapy Onsite Mentoring in Correctional Settings – A two-day mentoring session held onsite for participants of the previous course.

Adult Care and Treatment in Correctional Settings Care Team Series: Advanced Antiretroviral Therapy for Adults and Opportunistic Infections Management in Correctional Settings – A five-day follow-up course for participants of the previous two courses, focused on counseling and support; drug intolerance; adherence; management of opportunistic infections; case management, and stigma and discrimination issues in correctional settings.

Pediatric Care and Treatment Care Team Series: Initiation of Pediatric Antiretroviral Therapy – Addressing topics similar to the course on “Initiation of ART for Adults,” this course emphasizes special issues related to treatment of ART in children, including criteria for starting ART in pediatric patients and special issues for initiating ART in orphanages, IDU families, migrant families, and other environments.

Pediatric Care and Treatment Care Team Series: Pediatric Antiretroviral Therapy Onsite Mentoring – A two-day mentoring session held onsite for participants of the previous course.

Pediatric Care and Treatment Care Team Series: Advanced Pediatric Antiretroviral Therapy and Opportunistic Infections Management – A five-day follow-up course for participants of the previous two courses, focused on counseling and support; drug intolerance; adherence; management of opportunistic infections; case management, stigma and discrimination issues, and psychological support for pediatric patients and their families.

Antiretroviral Therapy During Pregnancy – Lasting three or four days, this course provides OB/GYNs and infectious disease physicians with an understanding of the specifics of HIV infection in women; the classes of ARVs, fetal/infant adverse effects, and recommendations for ARV drugs use; the side effects and toxicities of ARV drugs; national and WHO protocols for ART in pregnant women; adherence; and PMTCT prophylaxis.

HIV/AIDS Nursing – A five-day course for nurse educators and HIV/AIDS nurses that addresses basic counseling skills, methods to improve ART adherence, treatment of opportunistic infections, nutritional evaluation and management, basic principles of palliative care, psychological issues, and prevention of caregiver burnout.

HIV/AIDS for Nursing Professionals – A three-day course for nurses who don’t specialize in HIV/AIDS that addresses basic care, including symptom management, patient education, ART adherence, and proper nutrition.

HIV/AIDS Clinic Administration and Management – A five-day course for AIDS Center directors, this module provides an understanding of models of HIV/AIDS care and support; training and management for treatment work; assessing needs and resources; monitoring and evaluation of HIV/AIDS-related treatment; improving performance; building partnerships with NGOs; principles of clinic management; multidisciplinary approach to

AIDS healthcare provision; team building; quality improvement processes; and information management.

HIV/AIDS Palliative Care – A four-day course for specialist teams which addresses the purpose and principles of palliative care for people diagnosed with HIV/AIDS; WHO protocols for pain evaluation and pain syndrome relief; caregiver counseling on rules for care; principles of basic HIV symptom management; use of complementary or alternative medicine; psychological issues in palliative care for adults and children; and prevention of burnout syndrome in caregivers.

Management of HIV and TB Co-Infection – A five-day course for infectious disease physicians that focuses on the complexities of diagnosis and treatment of tuberculosis in HIV/AIDS patients. This course was developed in collaboration with WHO and several WHO tuberculosis collaborating centers.

Management of HIV Co-infection with Hepatitis B and C – This three-day course focuses on diagnosis and treatment of viral hepatitis in HIV/AIDS patients and can be tailored to infectious disease specialists, surgeons, family practitioners, and dentists.

ART for Injecting Drug Users (with or without Substitution Therapy Component) – Developed in collaboration with the Open Society Institute's International Harm Reduction Development program, this five-day course focuses on specifics of ART for IDUs, counseling and support during ART and substitution therapy, special issues in adherence for IDUs on ART, drug interactions, management of opportunistic infections, and outreach work.

Laboratory Monitoring of HIV Infection and Antiretroviral Therapy and Quality Assurance – This five-day course for laboratory personnel at all levels addresses HIV/AIDS-related laboratory testing, laboratory quality assurance, and prevention of occupational exposure. The original curriculum was developed in collaboration with the Association of Public Health Laboratories (APHL) and initially piloted in 2006.

Adherence to Antiretroviral Therapy – This five-day course for specialist teams of physicians, nurses, and social workers focuses on principles and methods for improving adherence to ART.

HIV/AIDS Case Management – A three-day interactive course for specialist teams that provides an understanding of the major principles of HIV/AIDS case management, including the different models of care, key components of case management related to HIV/AIDS, continuity of care, common client issues related to HIV/AIDS and client assessment, development of a case management service plan, stages of HIV and counseling, and prevention of caregiver burnout.

Provision of Social Support to Adults Living with HIV or AIDS – A five-day course targeted to social workers, psychologists, peer educators, and others who provide HIV counseling and support. AIHA piloted this new curriculum in Tajikistan in September 2008.

Psychological Support for Children Living with HIV or AIDS – This five-day course includes information for healthcare providers, parents and other caregivers, and children themselves.

Update on Antiretroviral Therapy for Adults (Refresher Course) – This highly interactive three-day course is designed for experienced physicians and includes summaries of the latest research and clinical trials.

Prevention of Mother-to-Child Transmission of HIV (PMTCT): General Knowledge – Based on the WHO/HHS-CDC generic training package for the prevention of mother-to-child transmission of HIV/AIDS, which was then adapted for NIS countries, this four or five day course for all types of caregivers provides an

“The course gave me a clear understanding of the need to create a healthcare team capable of addressing both the medical and social aspects of care for people living with HIV. Sessions helped me clarify my own role in the provision of care—especially how effective counseling can help ensure patients are adherent to Treatment recommendations.”

— Marina Barinova,  
Social Worker,  
Dnipropetrovsk, Ukraine

understanding of HIV/AIDS, PMTCT, testing and counseling, stigma and discrimination, psychosocial support, and issues related to infant feeding.

**PMTCT: HIV Testing and Counseling** – This three-day course introduces caregivers to HIV testing and counseling and other types of counseling for HIV/AIDS prevention among infants and children based on WHO, UNICEF and UNAIDS recommendations.

**PMTCT: Pediatric Issues** – A five-day course for pediatricians, neonatologists, pediatric nurses and other members of the pediatric care team, this module provides training on prevention of HIV infection in infants and children, counseling and testing, outpatient follow-up of children born to HIV-infected women, and ART in children.

**PMTCT: Obstetrics and Gynecology** – A five-day course for care teams from prenatal clinics, women's consultation centers, and maternity facilities, this session covers the comprehensive WHO/UNICEF/UNAIDS approach to preventing HIV infection in infants and young children; prevention of HIV among women of reproductive age; family planning among HIV-infected women; HIV prevention during pregnancy; prenatal care for HIV-infected women; PMTCT during delivery and postpartum; prevention of postpartum complications; infant feeding counseling and safe feeding options; PMTCT for female IDUs; care and support to women with HIV, their children, and families; follow-up care for infants born to HIV-infected women; and prevention of occupational exposure to HIV.

**PMTCT for Decision Makers** – This three-day course for decision-makers involved in PMTCT provides an understanding of approaches program monitoring and evaluation, models of PMTCT case management, and integration of PMTCT programs into maternal and child health services.

**Training of Trainers (TOT) on Introduction to HIV/AIDS Care and Treatment for Adults** – This three-day course provides future course instructors with an understanding of the principles of adult learning, how to define learning objectives and assess student performance, presentation skills, use of role-play and case study exercises, and how to organize clinic visits for learning purposes. This course was originally developed in 2005 and then revised in 2006.

**Training of Trainers (TOT) on Initiation of ART** – This eight-day course, which includes certification for specialization in HIV treatment for physicians, provides physicians and faculty at postgraduate and graduate medical schools with an understanding of the principles of adult learning, curriculum development, and course design as well as the basics of HIV/AIDS, ART, opportunistic infections, and the specifics of care and treatment of HIV/AIDS for different populations.

A complete description of all courses, as well as additional information about related capacity building activities, is available at the Knowledge Hub web site: [www.aidsknowledgehub.org](http://www.aidsknowledgehub.org).



## VI. PROGRAMMATIC SUSTAINABILITY: A LIVING LEGACY

Over the past decade, AIHA programs supported by the region-wide agreement have built a strong, sustainable foundation for ongoing healthcare reform. The systemic changes ushered in by these partnerships and programs have resulted in tangible, lasting improvements in healthcare services and delivery throughout the region.

While this report discusses many of the significant accomplishments achieved by AIHA and its partners during the last 10 years, it is important to highlight key elements of the living legacy that remains as a testament to the efficacy of the partnership model, as well as to the value of USAID's vision of supporting programs that create a strong network of health and allied professionals dedicated to health system reform. Some of the most notable achievements are shown in the table below.

### Sustainable Capacity Resulting from AIHA's Region-wide Programs

- The partnership model of technical assistance, which facilitated the creation of national, regional, and international networks of highly skilled professionals and policymakers well prepared to lead ongoing healthcare reform efforts far into the future.
- A new and extensive knowledge base rooted in evidence-based clinical practice and supported by the wealth of English and native-language resources housed by the EurasiaHealth Knowledge Network and reinforced by professional conferences, workshops, and training events.
- A network of 120 Learning Resource Centers — 102 of which were self-sustaining at the end of 2008, well after USAID support had ended — that have effectively institutionalized information and communication technologies and evidence-based medicine at partner sites throughout the region.
- A network of more than 70 model clinics and demonstration sites that provide high quality, comprehensive primary care, women's health, and integrated family health services, including innovative, cost-effective programs for asthma, diabetes, hypertension, social work, and community-oriented care.
- A network of 37 training centers that provide comprehensive, skills-based training in emergency medical services, neonatal resuscitation, and infection control thereby greatly improving clinical practices and quality of care throughout the region. In many countries, these centers have driven national education and health system policies.
- A stronger nursing profession in the region, supported by innovative education and professional development programs, the creation of national and regional nursing associations, the establishment of 24 Nursing Resource Centers at partnership institutions, and the nurturing of nurse leaders through opportunities such as the International Nursing Leadership Institute.
- An extensive catalog of high quality, evidence-based training curricula, reference materials, texts, guidelines, and toolkits on topics such as HIV/AIDS, infection control, tuberculosis, emergency and disaster medicine, prevention of mother-to-child transmission of HIV, healthcare management, nursing, primary care, and neonatal care.
- Model training centers and community-based programs for HIV/AIDS treatment and care, as well as the prevention of mother-to-child transmission of HIV, including the Regional Knowledge Hub for the Care and Treatment of HIV/AIDS in Eurasia in Kyiv, the AIDS Training and Education Center in St. Petersburg, the Southern Ukraine AIDS Education Center in Odessa, and its satellite centers in Karaganda, Pavlodar, and Temirtau, Kazakhstan.

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