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NOVA 2: Maternal and Child Health Improvement Project in Armenia

Final Project Report



January 2011

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NOVA 2: Maternal and Child Health Improvement Project in Armenia

Final Project Report

Contract GHS-I-03-07-00005-00

Submitted to:

United States Agency for International Development

Submitted by

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EXECUTIVE SUMMARY

In January 2010, U.S. Agency for International Development (USAID) initiated a one-year maternal and child health (MCH) improvement project in Armenia known as NOVA 2. Building on the accomplishments of its predecessor, Project NOVA, NOVA 2 continued providing support to five regions in southern Armenia (Armavir, Talin, Vedi, Vayk, and Sisian) while expanding key interventions to five additional regions in the north of the country (Stepanavan, Akhuryan, Ijevan, Martuni, and Hrazdan). In just one year, the Project has reached over 500,000 people and provided support to 270 healthcare facilities in 10 regions. USAID |NOVA 2 has worked in close collaboration with the Armenian Ministry of Health (MOH), marz health departments, healthcare facilities, Yerevan State Medical University (YSMU), Erebuni State Medical College (ESMC), and select local nongovernmental organizations (NGOs).

NOVA 2's objectives focused on improving the quality of MCH/reproductive health (RH)/family planning (FP) services in target regions through enhanced performance of healthcare providers, strengthened management and supervision, and increased consumer demand for high-quality MCH/RH/FP services through community education and mobilization. The Project worked to foster leadership, accountability, and ownership for the quality services offered by health workers through

- promotion of accessible, integrated, and high-quality client-oriented services;
- evidence-based design and integrated research; and
- empowering communities to promote healthy lifestyles and encourage care-seeking practices.

Illustrative Project successes include the following:

- Establishing Quality Assurance (QA) Teams to increase quality of MCH care at Project-supported regional hospitals by 10% in less than one year
- Developing Continuing Medical Education (CME) training courses and training over 400 health workers using newly developed, evidence-based curricula. Following the training, health workers' knowledge increased on average by 40%, and healthcare providers were significantly more likely to talk to their clients about pregnancy, postpartum health danger signs, FP options, newborn health danger signs, lactation amenorrhea method (LAM), as well as explain the benefits of exclusive breastfeeding; 70% of all health workers trained in intrapartum care were able to perform active management of the third stage of labor (AMTSL) to standards.
- Establishing five new Schools of Motherhood (SOMs) to provide support to mothers-to-be and their partners. In less than a year, the number of women who attended classes at the SOMs increased from 12.8% to 59.7%.
- Training healthcare managers in supportive supervision methodology and approaches and assisting with the implementation of the supervision process
- Providing medical equipment to 114 healthcare facilities
- Leveraging additional resources in the amount of \$78,000 to purchase MCH equipment and supplies, support renovations, and reproduce health education materials
- Assisting the MOH to develop and introduce new policies surrounding an innovative *National Preconception Care Program and National Guidelines for Normal Obstetrics*
- Providing technical assistance to the development of the National Hospital Child Care Program
- Developing, producing, and disseminating health education posters on the basic benefits package, preconception care, national immunization calendar, healthy timing and spacing of pregnancies, and male involvement
- Reprinting 15,000 copies of NOVA's patient education brochures on preconception, antenatal care (ANC), postpartum/newborn care, FP, and post-abortion care
- Establishing 88 community-based health action groups (HAGs) and mobilizing rural communities for better health care

- Strengthening the capacity of four local NGOs to conduct results-oriented community mobilization activities to improve healthcare services
- Renovating 23 rural healthcare facilities—health posts (HPs) and medical ambulatories (MA)—and establishing/replenishing 88 mini health libraries
- Developing and producing two public service announcements (PSAs) on preconception care. As a result of NOVA’s multifaceted health education activities, the proportion of women visiting healthcare facilities for preconception care in Project-supported regions increased from 16.4% to 31.7%.
- Conducting 118 public health events. One out of five (20.4%) postpartum women interviewed participated in at least one public event or saw at least one PSA broadcast by NOVA 2.
- Conducting MCH emergency preparedness exercises in 88 communities to better prepare and organize community responses in the event of an emergency
- Empowering front-line health workers to routinely conduct health talks in key Project-supported areas. A total of 750 health talks were conducted in rural communities by family doctors and community nurses, reaching out more than 8,000 rural dwellers with key health messages. Despite the limited duration of the Project interventions, NOVA 2 efforts in health education and health promotion have brought impressive results, demonstrated by significant increases in knowledge of danger signs.

NOVA 2’s support over a one-year period has improved the MOH’s and partners’ abilities to address significant deficits in MCH services in the intervention areas. The close collaboration and technical support provided by NOVA 2 staff to health personnel and communities has re-energized their work and helped better prepare them to address specific MCH issues that affect their lives.

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ABBREVIATIONS

AMTSL	active management of the third stage of labor
ANC	antenatal care
BCC	behavior change communication
CME	continuing medical education
CMP	Community Mobilization Plan
CPH	Community Partnership for Health
EBM	evidence-based medicine
ESMC	Erebuni State Medical College
FGD	focus group discussion
FP	family planning
GOA	Government of Armenia
HAG	Health Action Groups
IUD	intrauterine device
LAM	lactation amenorrhea method
LMIS	logistics management information system
MCH	maternal and child health
MIS	management information system
MOH	Ministry of Health
NGO	nongovernmental organization
NOVA 2	Maternal and Child Health Improvement Project
Ob	Obstetrical
ob/gyn	obstetrician/gynecologist
OSI	Open Society Institute
PHCC	primary healthcare center
PHCR	Primary Healthcare Reform
PSA	public service announcement
QA	quality assurance
RH	reproductive health
SOM	School of Motherhood
TOT	training of trainers
UNFPA	United Nations Population Fund
UNICEF	United Nations Children’s Fund
USAID	U.S. Agency for International Development
USG	U.S. Government
WHO	World Health Organization
YSMU	Yerevan State Medical University

INTRODUCTION

Over the past decade, the Government of Armenia (GOA) has made significant advances toward their goal of establishing a more cost-effective, efficient, transparent, equitable, and sustainable health system through health policy; financing; human resources for health; information; service delivery; and provision of medical products, vaccines, and other technologies. By comparison to its neighbors, Armenia's maternal and infant mortality statistics are fairly promising, with an estimated maternal mortality rate of 29/1000, and an infant mortality rate of 20/1,000 in 2008, reflecting significant improvements made to antenatal care (ANC), medical emergency services, and community education. Still, many challenges remain, limiting the existing system's ability to deliver universal quality care. A global economic crisis saw the national gross domestic product plummet from 13.7% in 2008 to an astounding -14.2% in 2009.¹ The GOA currently budgets about 1.6% of that on health expenditures. As a result, a large proportion of health spending is out-of-pocket by consumers, disproportionately affecting the poorest and most vulnerable in the population.

Since 2002, the U.S. Agency for International Development (USAID) has made significant investments in maternal and child health (MCH) to assist in these improvements, including the PRIME project, PRIME 2, and Project NOVA. The most recent project, the Maternal and Child Health Improvement Project (NOVA 2), began in January 2010, implemented by a consortium of international organizations headed by the RTI International, in partnership with IntraHealth International, Inc. and Save the Children, and in close collaboration with the Armenian Ministry of Health (MOH), marz (regional) health departments, healthcare facilities, Yerevan State Medical University (YSMU), Erebuni State Medical College (ESMC), and select local nongovernmental organizations (NGOs).

Building on the successes of its predecessors, NOVA 2 worked directly with the GOA to continue advances in quality of MCH, reproductive health (RH), and family planning (FP) services. Our work at the national and community levels focused on improving knowledge and skills of practicing health workers; strengthening overall management and supervision and improving the physical infrastructure of healthcare facilities; institutionalizing a quality assurance (QA) system for health services; and mobilizing and empowering rural and semi-rural communities in health education, policy, and individual rights to treatment. (See **Annex 1**: Project Design.)

USAID|NOVA 2 has continued supporting the five southern networks² of Armavir, Talin, Vedi, Vayk, and Sisian regions while expanding to five additional northern networks in Stepanavan, Akhuryan, Ijevan, Martuni, and Hrazdan. The Project has reached over 500,000 people in these 10 networks and benefited 270 healthcare facilities, supporting over 8,000 births.

¹ CIA World Fact Book, December 30, 2010.

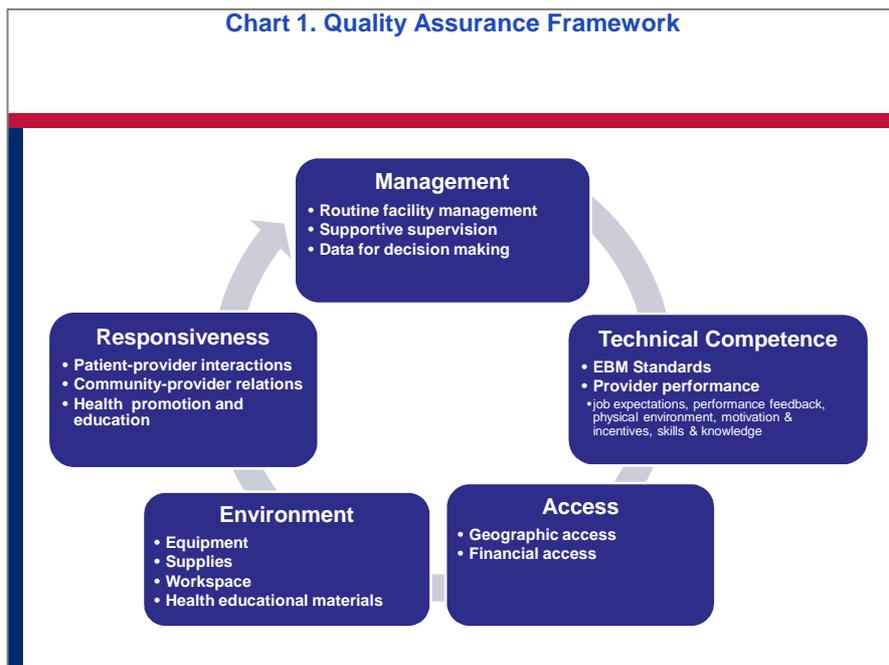
² Health Network is defined as healthcare facilities linked both by ownership structure and referral patterns; it includes in-patient and out-patient service delivery sites (e.g., maternity hospitals [medical centers], women's consultation centers, ambulatories, health centers, and health posts). For the most part, health networks in Armenia correspond to the geographical sub-division by districts within marzes (regions).

1. IMPROVED QUALITY OF MCH/RH/FP SERVICES

The QA framework used by the Project was developed by IntraHealth International and accepted by Armenian MOH for national use, supported by USAID’s Primary Health Care Reform (PHCR) Project. The framework defines quality with five key dimensions (Chart 1) and serves as a foundation for all NOVA 2 programmatic efforts to create long-lasting and sustainable changes in healthcare service delivery, empowering staff with the skills to analyze services, identify problems, develop solutions, and incorporate new approaches to improve their working environment.

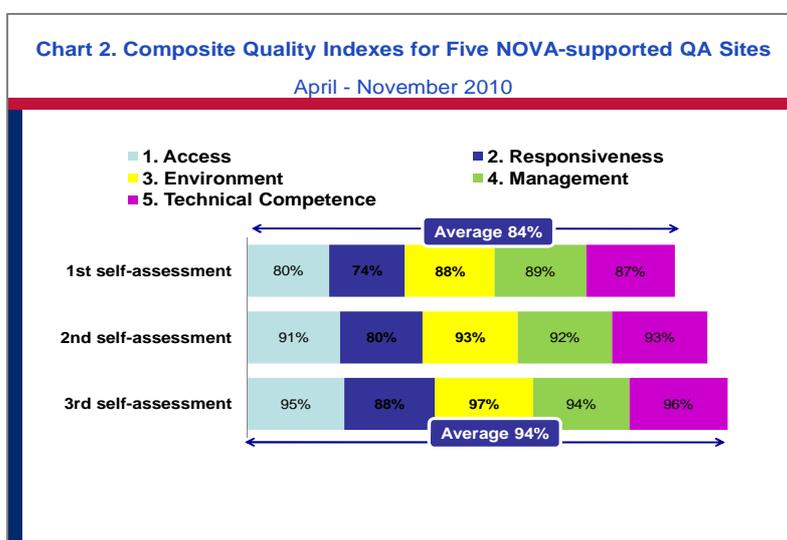
1.1 QUALITY ASSURANCE SYSTEM ESTABLISHED

QA teams: Over the life of the Project, a multidisciplinary QA team was set up at each of the five Project-supported hospitals in the north of Armenia: Ijevan Medical Center, Akhuryan MCH Center, Martuni Maternity Hospital, Stepanavan Medical Center, and Hrazdan Medical Center. QA team members included representatives from facility senior managers, practicing obstetricians/gynecologists (ob/gyns), neonatologists, and midwives of the respective facility. Each QA team was trained in key



components of the QA framework, identification of the principles behind quality health care and supportive supervision, addressing motivation and incentives for healthcare providers, utilization of self-assessment exercises, mastering the methodology of the “Five Whys,” and the benefits of routine data collection and analysis of statistics.

Quarterly QA reviews: Following training, QA team members conducted self-assessment exercises at their respective hospitals, using a structured questionnaire with over 150 questions, broken down by accessibility, facility environment, staff technical competence, staff responsiveness, and facility management. Results are calculated to create Composite Quality Indexes, providing a quantitative figure on which to gauge improvement and to compare facilities’ performance in each area. The first self



assessment of all five regions revealed an overall average of 84% spread across all five dimensions (Chart 2). Three assessments were performed in each Project site over the life of the Project, with each assessment showing an increase in all sites' overall performance across all dimensions. The most notable improvements were observed in access to care and responsiveness, with both areas demonstrating an improvement of 12%.

Quarterly self-assessment exercises gave QA team members a tool to review the status of their action plans, monitor facility staff and activities, and discuss and introduce solutions considering facility-specific strengths and weaknesses.

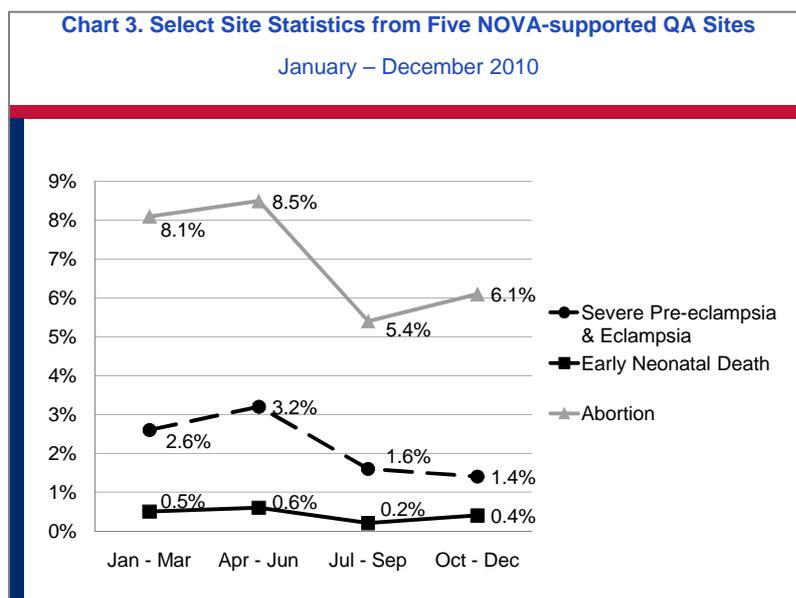
The most common problems identified by QA teams included the following:

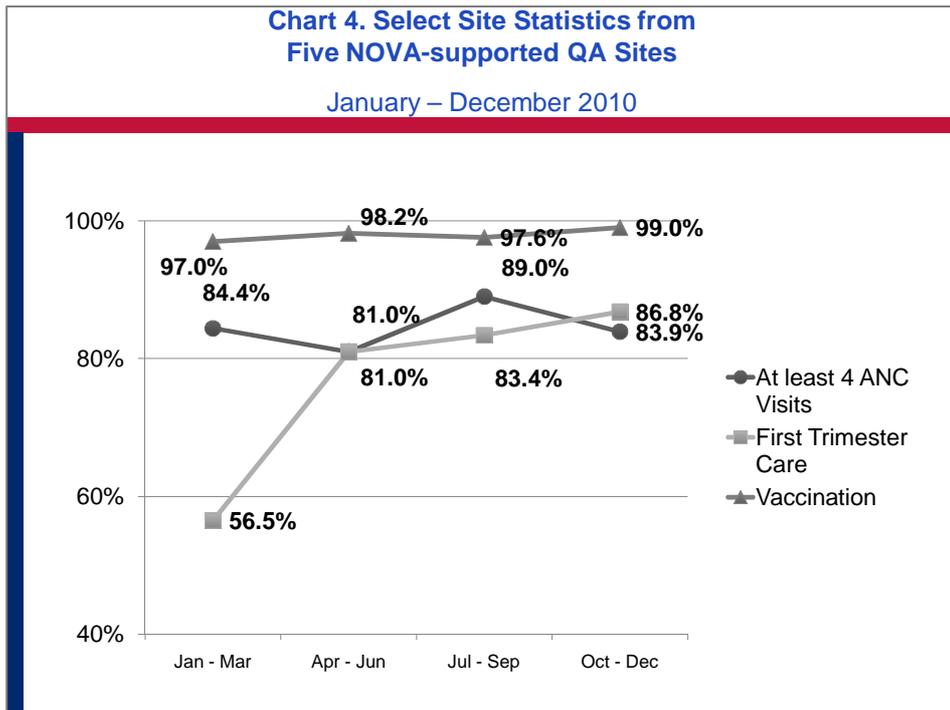
- Health providers not regularly visiting primary healthcare facilities, as required by the MOH
- Lack of Schools of Motherhood (SOMs) at facilities, in spite of MOH mandates
- No system to monitor patient satisfaction with healthcare services
- Lack of health education materials for patients
- Absence of motivation and incentives strategy for healthcare providers
- Outdated knowledge and skills of health workers in intrapartum and neonatal care
- Lack of health facility staff familiarity with national infection prevention protocols

Common interventions to address identified gaps included the following:

- Targeted continuing medical education (CME) training courses
- Establishment of additional SOMs
- Development and dissemination of health education posters and booklets to Project-supported networks
- Development of action plans based on site statistics analysis
- Reviews of protocols and history of actions taken to address critical cases and referrals to higher-level facilities

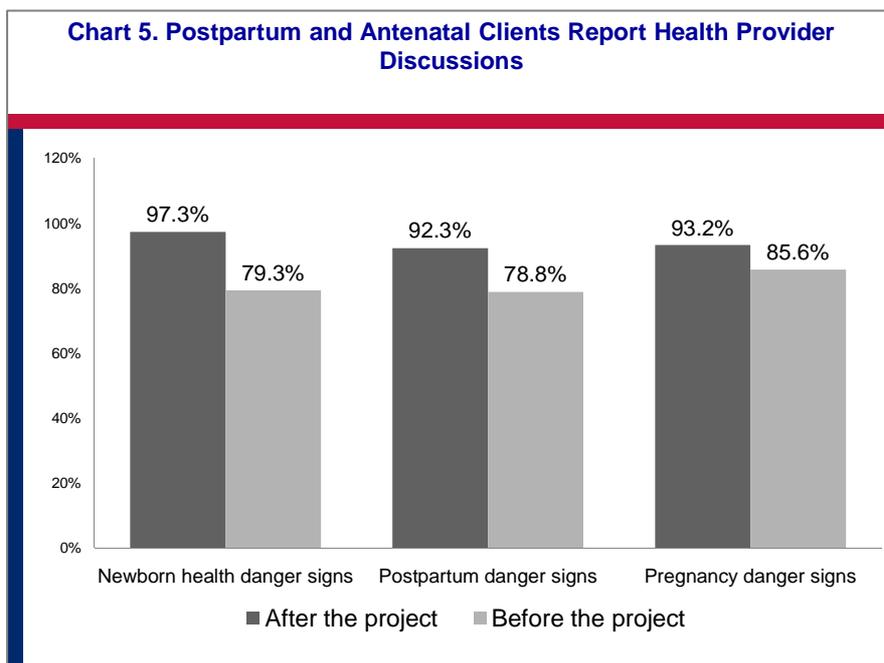
Charts 3 and 4 show trends in essential MCH indicators based on data collected by QA teams in Project sites during each assessment from January to December 2010. In this period, the percentage of abortions to births dropped 23% overall from 8.1% to 6.1%, and pregnant women suffering from pre-eclampsia or eclampsia dropped 46% from 2.6% to 1.4%. Neonatal deaths remained stable at less than 1%, and vaccination remained above 97%, rising to 99% in December.





Dramatic changes were seen in the number of women seeking prenatal services at facilities during their first trimester of pregnancy. In January 2010, 57% were recorded as attending early prenatal service. By December 2010, 87% were seeking prenatal care within their first trimester, a 53% increase. This success can be attributed in part to the opening of SOMs in these areas. No appreciable change in sustained prenatal care was seen during the Project period; however, the number of women receiving at least four ANC visits remained above 81%, with a brief spike to 89% in July–September. While results represent changes over a limited timeframe, all indicators demonstrated that health services are accessible and utilized by the majority in Project areas.

Setting up Schools of Motherhood (SOMs): NOVA 2 established five additional SOMs in Akhuryan MCH, Stepanavan Medical Center, Hrazdan Medical Center, Artik MCH Center, and Armavir Medical Center. SOMs quickly gained popularity, not only among pregnant women eager to learn about their pregnancy and childbirth, but also among health workers who use the schools to better prepare mothers-to-be for childbirth and newborn care. Future fathers have also been encouraged to participate in the classes to better understand



pregnancy and childbirth and learn how to support their partners. **According to the Project's internal evaluation conducted in October 2010, the number of ANC clients who attended classes at the SOMs increased significantly from 12.8% before to 59.7% after Project interventions.** In general, following NOVA 2 training courses and changes in practice, women reported that

healthcare providers were significantly more likely to talk to their clients about pregnancy, postpartum, and newborn health danger signs (Chart 5).

Improving physical environment: To ensure an environment conducive to the provision of quality healthcare services, 114 healthcare facilities were assessed in the initial phases of the Project to identify specific facility needs based on the World Health Organization's (WHO's) recommended list of supplies and equipment necessary for secondary-level MCH facilities. Based on assessments held in conjunction with facility managers and staff, equipment lists were defined and requested. USAID|NOVA 2 procured and delivered approximately US\$40,000 worth of non-expendable medical supplies to Project-supported facilities.

Supplemental funding secured by NOVA 2 from the Burns Supper Committee, the Save the Children Holiday Catalogue, and Open Society Institute (OSI) Assistance Foundation in Armenia were also used for the purchase of medical equipment and supplies that facilitated the introduction of new evidence-based medicine (EBM) practices at Project-supported sites and, in some instances, to cover gaps in basic equipment and supplies.

1.2 PERFORMANCE OF HEALTH WORKERS IN MCH/RH/FP IMPROVED

Because of NOVA 2's limited duration, health worker performance improvement activities focused on the development and institutionalization of service delivery guidelines in select aspects of MCH/RH/FP, improvement of knowledge and skills of health workers, the integration of supportive supervision practices, as well as medical equipment and supplies provision.

NOVA 2 applied performance improvement processes addressing gaps in knowledge and skills, including the creation of and training on job aids, increasing motivation through the provision of incentives, and instituting tools for constructive supervision and performance feedback.

Support for development of national evidence-based guidelines: At the national level, NOVA 2 worked with the Armenian MOH to develop two critical policy documents to streamline overall healthcare service delivery into two key MCH/RH/FP areas:

1. **Preconception health care:** The National Preconception Care Program was approved by the MOH in April 2010 as a comprehensive program to cover target information education and communication interventions at the service delivery and community levels. The MOH-endorsed Preconception Care Package consists of national service delivery guidelines and a 2-day training curriculum, including Trainer's Guide and Training Participants' Handbook for family doctors and ob/gyns. A total of 450 copies of the National Preconception Care Guidelines were printed by the Project and disseminated through NOVA 2 preconception care training courses, monitoring/training follow-up visits, and official MOH channels.
2. **Normal obstetrics:** National Guidelines on Normal Obstetrics were also approved. These state-of-the-art recommendations in antenatal, intrapartum, and postpartum care incorporate internationally recognized high-impact practices, including active management of the third stage of labor (AMTSL), use of magnesium sulfate for preeclampsia management, and application of partogram for monitoring progress in labor; as the guidelines also provide information on FP options available to women during the postpartum period. NOVA 2 has produced 450 copies of the guidelines for distribution and incorporated key messages into both the Intrapartum Care and Neonatal Resuscitation and the Antenatal and Postpartum Care training packages (see below).

To further promote the integration of evidence-based guidelines and practices, NOVA 2 conducted an Evidence-based Medicine Update in MCH for a core group of national experts and trainers. The update included feature presentations covering the latest developments in maternal care and the effect of first- and second-hand smoking on health outcomes for mothers and newborns. In recognition of the role that the Project has played in the introduction of evidence-based MCH practices in Armenia, NOVA 2 was invited to co-

facilitate a national EBM conference alongside leading ob/gyn service delivery and clinical medical training institutions.

Medical education capacity building: To enhance the existing capability of select medical education institutions to carry out CME activities, the Project worked closely with YSMU and ESMC. Capacity building interventions have not only enhanced their ability to conduct performance-based CME activities in the future, but also improved teaching/training methodology and curricula development skills of faculty members teaching at both the graduate and post-graduate levels. Following separate training-of-trainers (TOT) courses for YSMU and ESMC faculty members, NOVA 2 adapted materials developed under Project NOVA and created the following evidence-based CME training curricula:

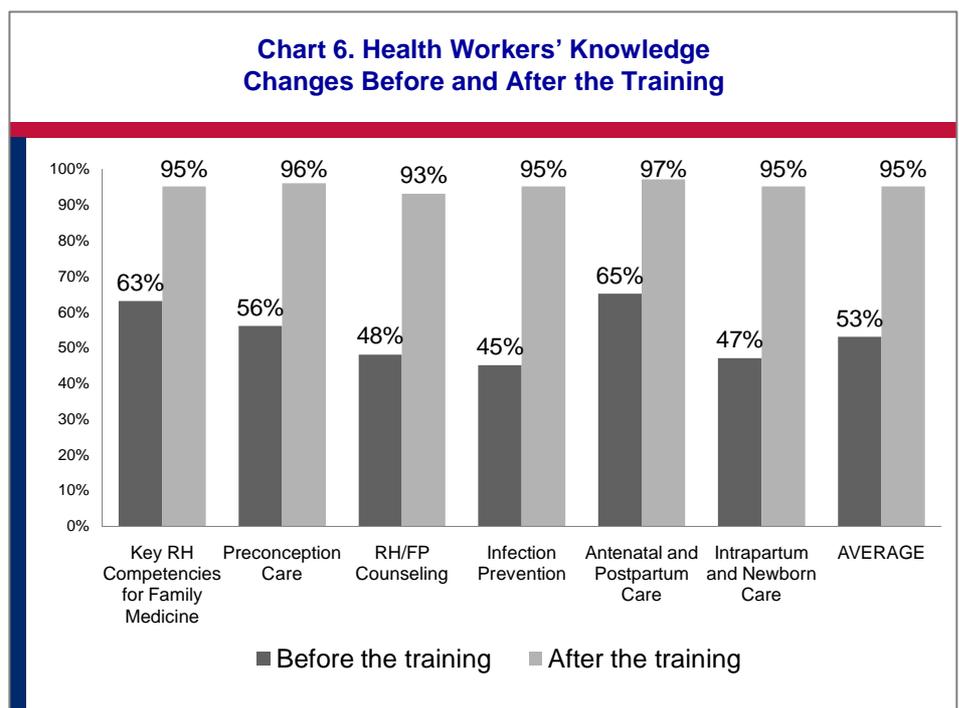
- Reproductive Health and Family Planning Counseling: 4-day training course (YSMU)
- Infection Prevention: 2-day training course (YSMU)
- Antenatal and Postpartum Care: 4-day training course (YSMU)
- Intrapartum Care, Newborn Care and Resuscitation: 5-day training course (YSMU)
- Counseling and Behavior Change Communications: 2-day training course (ESMC)

YSMU and ESMC faculty co-facilitated a series of CME training courses using newly developed training curricula in five Project-supported northern Armenian regions: Stepanavan, Ijevan, Akhuryan, Martuni, and Hrazdan. Upon completion of CME training events, YSMU trainers were also involved in follow-up visits to healthcare facilities where trainings took place to assure institutionalization of newly acquired skills and knowledge among healthcare providers.

Improving knowledge and skills of health workers: The QA self-assessment exercises showed that health worker technical competence was outdated and their knowledge and skills needed to be strengthened through performance-based CME training courses. The following training courses were adapted, targeting a broad array of healthcare workers, including ob/gyns, midwives, nurses, neonatologists, family doctors, and pediatricians:

- Preconception Health Care
- Key Reproductive Health Practices for Family Medicine
- Reproductive Health and Family Planning Counseling
- Antenatal and Postpartum Care
- Intrapartum and Newborn Care
- Infection Prevention

All training under NOVA 2 followed adult learning principles, focusing on trainee mastery of targeted clinical skills to complete the coursework. Curricula included opportunities for interactive discussions as well as practical experience through role plays, using anatomical mannequins and clinical guidelines and checklists. Overall, the Project conducted sixteen performance-based training courses for health workers from five Project-supported

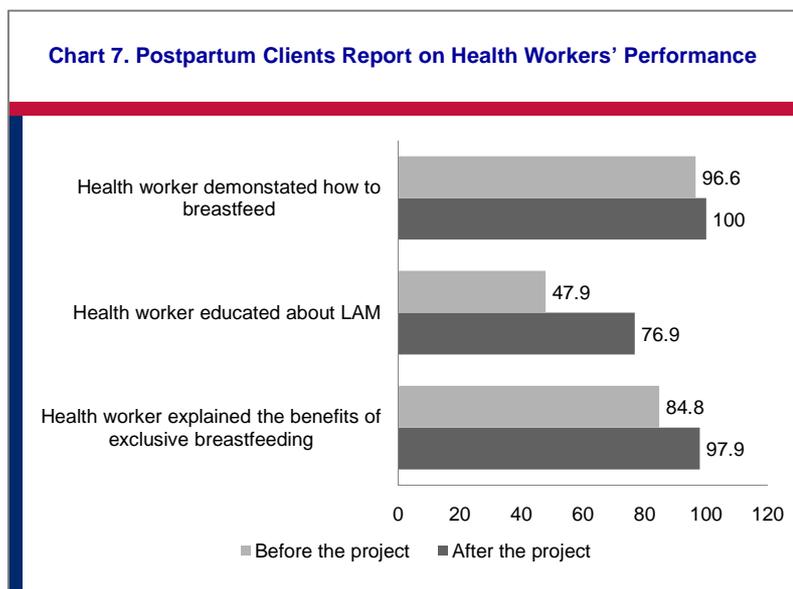


health networks. In total, 386 healthcare workers involved in MCH/RH/FP services delivery directly benefited from these training courses. Results of the pre- and post-tests administered among training course participants revealed an average of a 42 percentage point increase in knowledge following the training. Knowledge in infection prevention more than doubled after training, with similarly impressive improvements in all other areas (Chart 6). This dramatic increase in participant knowledge speaks volumes for the effectiveness of Project training methodology and curricula.

All practitioners undergoing training courses implemented in partnership with YSMU were eligible for CME certificates and credits upon completion of a course, which could be counted toward professional licensure. (See *Annex 2* for a summary of CME courses.)

Training follow-up and monitoring: Training follow-up visits provide newly trained staff the opportunity for on-the-job coaching, support, and guidance, reinforcing newly acquired knowledge and skills and identifying and addressing performance-hindrances factors. Experience has shown that training follow-up visits 4–6 months after completion of training events are strong guarantees of achieving full compliance with newly gained skills, and newly trained health workers can clarify questions and practice under guided support in their own clinical settings. NOVA 2 staff (jointly with YSMU to build capacity) conducted monitoring and coaching visits, in both northern (new) and southern (old) Project-supported health networks, focusing on the reinforcement of the following evidence-based practices:

- **Intrapartum care** follow-up visits provided guidance on the proper use of the partogram, AMTSL techniques, and other modern approaches and practices as required by the newly approved National Guidelines on Normal Childbirth. Health workers also received copies of the new Guidelines on Normal Childbirth and Preconception Care Guidelines recently approved by Armenian MOH for national use. ***An AMTSL performance assessment conducted among health workers approximately 4 months after completion of intrapartum care training illustrated that 70% of health workers performed AMTSL to standards—compared to 0% before the training.***
- **FP counseling** follow-up visits revealed gaps in the integration of FP counseling into routine healthcare service delivery during preconception, antenatal, postpartum, and newborn care offered by ob/gyns, midwives, family doctors, and pediatricians. The importance of FP counseling was reinforced and the importance of continuous access to FP services was emphasized. ***According to postpartum client exit interviews, significantly more health workers discussed FP options with their clients after Project interventions (55% vs. 76%).*** However, as long as FP continues to occupy a relatively low standing on the national agenda and access to contraceptive commodities in the public sector remains limited, it will be difficult to enforce these messages.
- **Essential newborn care and resuscitation** follow-up visits assured proper umbilical care to prevent infection; newborns were no longer tightly swaddled, were breastfed within one hour after delivery with skin-to-skin contact, had hats on to prevent hypothermia, and had been exclusively breastfed.



In addition, **according to postpartum client exit interviews, health workers were more likely to educate women on the lactation amenorrhea method (LAM), explain the benefits of exclusive breastfeeding for the first six months, and show women how to breastfeed** (Chart 7).

- **Infection prevention measures**—apart from routine training follow-up visits, additional infection prevention rounds were conducted to ensure full integration of the new National Infection Prevention Protocols for maternity wards/hospitals developed by MOH and introduced during NOVA 2 Infection Prevention training courses. Itemized feedback was also provided to the sites to assist providers in streamlining changes introduced by NOVA 2 and required by the State and Regional Sanitary-Epidemic Stations.

1.3 MANAGEMENT AND SUPERVISION STRENGTHENED

Supportive supervision emphasizes mentoring, joint problem-solving and two-way communication, ensuring health workers at all levels have clear job expectations; receive timely performance feedback, motivation, and incentives; and have access to adequate physical environment and tools and training for appropriate skills and knowledge to perform their duties. Through its programmatic interventions, NOVA 2 has worked to reinforce the supportive nature of supervisory activities, developing and implementing a one-day training curriculum on Management and Supportive Supervision for a total of 44 health managers and administrators (head doctors, deputy head doctors, department heads, head nurses, and head midwives) in five Project-supported QA sites. Training focused on strategies, tools, and approaches, both in theory and through practical exercises.

“I liked the idea of root cause analysis and the “Five Whys” methodology as elements of a well-done supervisory visit; these were quite new to me, and I considered it very relevant to all of our work.”

*Supportive Supervision Training
Participant from Ijevan MC*

1.4 CONTRACEPTIVE LMIS IMPROVED

One of the Project’s mandates included a review of Armenia’s logistics management information system (LMIS) to determine the reach and functionality of the current system and the accuracy and quality of data collected. The review contained an in-depth assessment of access to services, forecasting systems, procurement and delivery, and national management of supplies and data surrounding FP. Performed in the fall of 2010, it revealed a weak LMIS entirely dependent on external resources and still in early development, featuring limited forecasting and tracking capacity, and no ability to integrate with additional national systems. Stakeholders felt that, under the circumstances, focusing solely on LMIS and commodity delivery would be premature and ineffective, so the decision was made to broaden the scope to explore RH policies and existing components of the national contraceptive management system, and their impact on commodity availability and contraceptive trends in FP throughout Armenia. The assessment report focused on providing short- and long-term recommendations to support a fully functioning, fully transparent system that will increase access to a method mix at multiple levels of health facilities, as well as recommendations to increase GOA support through adjusting existing or implementing new RH policies and exploring task shifting for increased access to services. The Project developed sample LMIS forms to guide the development of future commodity report requests, which can be molded to suit systems as they are implemented.

2. INCREASED CONSUMER DEMAND FOR QUALITY MCH/RH/FP SERVICES

When consumers are armed with proper information, they will demand quality services from the health system as well as become active participants and managers of their own health and health care.

NOVA's Community Partnership for Health (CPH) approach applies Save the Children's Partnership Defined Quality Methodology in Project-supported health networks to strengthen healthcare services through community involvement in defining, implementing, and monitoring the quality of care. CPH works by establishing viable community-level partnerships among health workers, informal community leaders, local governments, and rural community dwellers as a means to improve the quality of care in their respective communities. The fundamentals of CPH call for commitment and active participation of key community representatives and a willingness of the healthcare system to incorporate the community and health consumer perspective into healthcare service delivery. The main purpose of CPH in Armenia is to increase consumers' demand for high-quality MCH/RH/FP services by

- mobilizing communities to establish sustainable health partnerships capable of responding to community needs;
- raising community awareness on key MCH/RH/FP issues;
- improving MCH/RH/FP care-seeking practices.

2.1 CAPACITY OF NGOS TO RESPOND TO COMMUNITY NEEDS ENHANCED

Selection of local NGOs: In an effort to develop long-lasting and sustainable interventions at the community level, the Project performed mapping and investigation of local NGOs in northern Armenia to identify and select those with the potential to support the Project's work. Selection was based on the following criteria:

- Armenian organization, registered and operating in one of NOVA 2 Project-supported marzes
- Experience in community development and mobilization, public education, and implementation of field-based community projects, preferably in rural communities
- Availability of experienced field staff
- Practices compliant with local laws, including taxation
- Willingness to cooperate and partner with NOVA 2
- Past experience in the implementation of projects funded by international donors

Based on these criteria and on a series of interviews with NGO staff, the Project selected *Ajakits, the Womens Community Council, Aragatsotn Social and Non-Trade Organizations Forum, and the Northern Health Care Foundation* to receive fixed obligation grants for community mobilization activities (**Annex 3**).

Capacity building: Grantee NGOs received a series of capacity-building trainings aimed to both enhance their role as a catalyst for constructive dialogue among civil society, local governments, and MOH structures and to better prepare them for future fundraising opportunities. Additionally, the representatives of the NGOs learned how to engage communities and increase demand for quality health care, organize health information campaigns to raise public awareness, and facilitate better health-seeking behavior. This enhanced local capacity will ensure continued and sustainable advocacy and civil society representation in each health network well beyond the life of the Project.

- *CPH Strategies and Methodologies Workshop* increased local NGO capacity in community education and mobilization. During this workshop, the participants learned the CPH process and its direct application for NOVA 2 activities, practiced action plan development, and identified creative means to enhance sustainability of changes introduced by the Project. Workshop participants discussed innovative ideas on sustainability, including actively engaging youth in the health care quality improvement process, applying for external funds, and strengthening capacity of Health Action

Groups (HAGs) in mobilizing internal and external community resources and active community involvement.

- *Orientation on the Status of MCH in Armenia* was conducted to develop an understanding of common goals and priorities as well as to better prepare selected local NGOs for their work under the terms of the Project and beyond. The purpose of this orientation was to cover existing Armenia-specific challenges, opportunities, gaps, and potential solutions, including the role of partner NGOs in promoting health-seeking behavior.
- *Workshop on Designing for Behavior Change* offered its participants knowledge, skills, and tools to apply a behavioral approach in designing MCH programs. The workshop aimed to build the capacity of local key players to design, plan, implement, monitor, and evaluate effective behavior change activities. By the end of the workshop, the participants learned the principal determinants of behavior change; were able to outline a process for developing, implementing, and monitoring effective behavior change communication (BCC) interventions; practiced how to develop simple BCC messages and approaches; and learned how to differentiate health education and health promotion.
- *Fundraising Workshop* strengthened the capacity of local NGO partners in fundraising from international donors, the Armenian Diaspora, and local enterprises with the development of results-oriented technical and cost proposals. Local NGO representatives learned strategies for defining their mission and vision, developing clear goals and results-oriented objectives, and identifying appropriate progress indicators; the basic principles of fundraising; proposal writing tips; and budget development essentials. A separate session was dedicated to the benefits of involvement of the communities and volunteers in the fundraising process.
- *Training on focus group discussions (FGDs)* built NGO capacity to conduct FGDs with health consumers together with in-depth analysis of the results. Following the training, NOVA 2 involved local NGO partners to perform FGDs with postpartum women in Hrazdan and Martuni health networks. These FGDs served as a pilot to collect better information on clients' perspectives of the quality of antenatal, intrapartum, and postpartum service delivery. The information collected complemented data from QA teams' self-assessment exercises, providing a more realistic perspective on healthcare services. Results of focus group discussions were shared with QA teams with the hope a new perspective will assist teams to improve in this area.
- *Ongoing technical assistance and guidance* was provided to local NGO partners by the Project's staff during the entire Project implementation.

2.2 COMMUNITY PARTICIPATION INCREASED

Assessment of community needs and implementation of action plans: With active involvement from local NGOs, the Project conducted an MCH/RH/FP needs assessment in 90 Project-supported rural and semi-rural communities. The major problems identified during assessments included insufficient quality of MCH/RH/FP services offered at rural healthcare facilities; poor general awareness of MCH/RH/FP issues among rural population; and ineffective referral mechanisms, including those for health emergencies. Following needs assessments, NOVA 2 facilitated town-hall meetings to analyze problems, find joint solutions, and develop tangible plans of action. As a result of these town-hall meetings, a total of 88 HAGs have been established for operation in the problem-solving activities. HAGs, supported by local NGOs, have

- established 88 Information and Education Centers in rural communities;
- renovated 23 rural health posts using communal financial and in-kind contributions;
- allocated new premises for rural health posts or medical ambulatories in three rural communities;
- established or replenished 88 mini health libraries;

- strengthened existing linkages between rural health posts and supervising healthcare facilities (medical ambulatories and polyclinics) through institutionalizing routine visits by doctors and providing essential medicines on a regular basis.

Table 1. Community Contribution for the Establishment and/or Renovation of Information and Education Centers in Project-Supported Health Networks

No	Marz Health Network	Location	Amount of Contribution	
			AMD	USD**
1	Shirak Marz Akhuryan Health Network	Voskehask HP	200,000	556
2		Basen/Musaelyan HP	100,000	278
3		Aygabac HP	175,000	486
4		Arevik HP	173,000	481
5		Jrarat HP	60,000	167
6		Haykavan HP	200,000	556
7		Hacik HP	122,000	339
8		Jajur MA	100,000	278
9	Tavush Marz Ijevan Health Network	Getahovit PHCC	305,600	849
10		Yenoqavan HP	102,000	283
11		Lusadzor HP	143,000	397
12		Tsaghkavan HP	101,700	283
13		Aghavnavanq HP	295,500	821
14		Aknaghbyur HP*	3,600,000	10,000
15		Khachardzan HP	150,000	417
16	Lori Marz Stepanavan Health Network	Katnaghbyur HP	118,000	328
17	Gegharkunik Marz Martuni Health Network	Dzoragyugh MA	130,000	361
18		Vardadzor	55,000	153
19		Tsovinar MA	190,000	528
20		N. Getashen MA	190,000	528
21		Vardenik HC	245,000	681
22		Lichq HP *	2,000,000	5,556
23		Tsaqar MA *	1,804,600	5,013
24		Geghhovit MA	96,000	267
25	Kotayk Marz Hrazdan Health Network	Bjni MA	37,000	103
26		Pyunik HP	80,000	222
Total			10,773,400	App. 29,926**
* New premises assigned to health posts or medical ambulatories by Village Municipalities as a result of community mobilization activities.				
** Exchange rate: 1 USD = 360 AMD; USD figures might not add up due to rounding.				
HC = health center; HP = health post; MA = medical ambulatory; PHCC = primary health care center				

Community Health Emergency Preparedness: According to the United Nations Population Fund (UNFPA), three known delays contribute to maternal and child mortality and disability: (1) delay in deciding to seek care, (2) delay in reaching appropriate care, and (3) delay in receiving proper care at the health facility. To address issues surrounding access to care at the family and community level, including transportation, communication means, and general public awareness, NOVA 2 conducted health emergency preparedness exercises with

HAGs in 87 communities. Training focused on assisting rural communities to assess their overall preparedness for MCH emergency situations, identify gaps in emergency preparedness, discuss respective solutions, and develop Community Mobilization Plans (CMPs) for emergency referrals in each community. The CMPs include but are not limited to the following activities:

- Identify a point person in case of a health emergency (usually this is a community nurse working in a rural health post)
- Produce and visibly display simple flyers outlining the danger signs during pregnancy and postpartum period
- Conduct community health talks focusing on danger signs during pregnancy and postpartum periods for both women and their newborns
- Determine and allocate the means of transportation and resources in case of a health emergency

2.3 COMMUNITY KNOWLEDGE OF MCH/RH/FP IMPROVED

To raise awareness of MCH/RH/FP issues and improve care-seeking practices throughout the communities, NOVA 2 has applied numerous health education and promotion approaches from television public service announcements (PSAs), reaching large segments of the population with general health-related messages, to individual counseling sections, designed to address unique circumstances of each health consumer on a personal level.

PSAs: To address non-obstetrical causes of maternal and newborn mortality and severe morbidity and encourage young couples to seek preconception care from family doctors and ob/gyns before getting pregnant, the Project identified PSAs as one of the most efficient media outlets. Through FGDs, the Project identified two specific target audiences (young rural couples as primary audience and mothers-in-law as influentials). Focusing on these groups, a communication framework was developed and preconception care PSAs were produced, pre-tested, finalized, and broadcast on national and regional television channels over a period of 7–28 days, depending on the agreement. Thanks to the efforts of NOVA 2 staff and to national support for the preconception care initiative, an additional donation by national and regional television channels of \$5,149's worth of free or reduced air time was provided to support NOVA 2 PSA broadcasts.

Health talks: The Project collaborated with ESMC to develop a 2-day modular training course for rural nurses on effective counseling and communication skills, focusing on balanced counseling methodology and BCC strategies and approaches. A TOT was conducted for selected health workers from Project-supported regions who went on to train an additional 80 family and community nurses in Project-supported primary healthcare facilities with the newly developed curriculum.

During and after the implementation of NOVA's health education activities, the proportion of pregnant women reporting visits to a healthcare facility for preconception care in the Project-supported regions increased almost two fold, from 16.4% to 31.7% after Project interventions. Moreover, 98% of all women attending preconception care visits found them to be helpful.

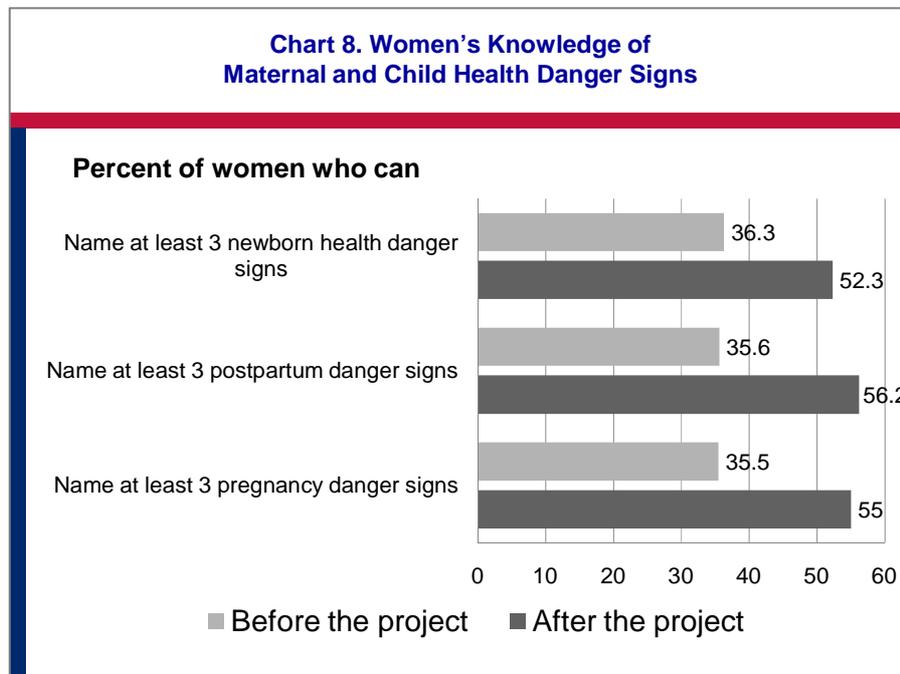
(Source: NOVA 2 Evaluation Reports)

Following training, community nurses, family nurses, and family doctors conducted health talks with pregnant women, young adults, young mothers, and other target groups to raise general population awareness on key MCH/RH/FP issues. A total of 750 health talks were conducted in 88 rural communities of Hrazdan, Akhuryan, Stepanavan, Martuni, and Ijevan networks, reaching more than 8,045 people. NOVA's MCH flipchart and brochures were used as job aids to guide health workers' discussions during interactive group health talks. Main topics of health talks included the following:

- ANC and healthy pregnancy
- Danger signs of pregnancy and postpartum period
- FP
- Ten things women need to know after having a baby

- Exclusive breastfeeding: benefits for mothers and infants
- Preconception care
- Maternal and Child Health Basic Benefit Package

Community education efforts have demonstrated a remarkable impact (an average of 12 percentage point increase) on women’s ability to identify key MCH danger signs (Chart 8).



Public health promotion events: Public health promotion events (*Annex 4*) were conducted in rural and semi-rural communities to raise general awareness in select public health areas, connecting individuals, healthcare services, and non-health community organizations (such as schools and local government) to improve health outcomes.

- Urqing to Say No to Tobacco: As a global health contributor, NOVA 2 organized community-level anti-smoking events, including special health talks on the consequences of second-hand smoking on pregnant women and children, children’s drawing contests and exhibits, theatrical performances at schools, and open-air painting. More than 250 people from four Project-supported networks participated in these community-level activities. Anti-smoking is also an essential part of NOVA 2 preconception care efforts.
- Women’s Health: In observance of World Women’s Health Day, a series of public awareness activities took place in 21 rural communities in Ijevan, Martuni, Akhuryan, and Hrazdan regions. Public awareness events included group health talks performed by family physicians, followed by question and answer sessions; individual counseling of women by ob/gyns; and distribution of health education materials (posters, brochures, booklets, etc.).
- Frequent Hand washing with Soap: In observance of Global Hand Washing Day, NOVA 2 supported community-level activities to promote frequent hand washing with soap in five Project-supported regions. On this day, front-line health workers (community nurses and family doctors), in unison with local partner NGOs, conducted special health talks with school children and rural dwellers in 70 communities, as well as children’s theatrical performances in schools, centered around this topic. Different flyers promoting frequent hand washing with soap among Armenian children, men, and

women to prevent many infections and diseases were distributed to children, parents, caregivers, and teachers. More than 1,500 children benefited from this event.

- **Male Involvement:** To give distinctive recognition to the roles of men in the health and well-being of their families and children, the Project dedicated special efforts to Armenian fathers by conducting a series of promotional activities to inspire fathers to contribute to and engage in the health and well-being of their families. NOVA 2-supported SOMs established across Armenia encourage and welcome future fathers to attend the lessons together with their wives to make sure both spouses are better prepared for the birth event and future parenthood. In addition, drawing competitions, television programs, children’s performances, and writing competitions in Martuni, Ijevan, and Akhuryan health networks were organized to encourage further participation from fathers.
- **Sixteen Days against Violence Campaign:** Project NOVA 2, in collaboration with local NGOs, supported the 16 Days Against Violence Global Campaign through a series of public events, including essay writing competitions in schools and children’s drawing competitions. Additionally, special health talks on violence against women and its consequences on health were conducted by community nurses, and special classes on male involvement were conducted by ob/gyns at the SOMs and MCH centers in Artik and Akhuryan.

PSAs and community health education events were well-received by their target audiences. According to the results of the Project endline assessment conducted in October 2010, one out of five (20.4%) women in Project-supported areas participated in at least one public event or saw at least one PSA broadcast.

Health-education materials: To raise awareness on key MCH/RH/FP issues and emphasize the role of male involvement in MCH, NOVA 2 developed, produced, and disseminated patient education posters. In some cases, posters developed by Project NOVA were reproduced.

- **Male Involvement poster:** A special *Family Is Our Treasure and Father Is Its Pillar* poster has been developed and distributed in all Project-supported Armenian regions, designed with the goal of inspiring men to be better fathers and partners through simple yet effective changes.
- **Preconception Care poster:** To draw general public attention to the importance of preconception health and health care for better pregnancy outcomes, the Project has developed a patient education poster on preconception care titled *Responsible for the Future Generation and the Health of my Child*. The new poster complemented a patient education booklet developed by Project NOVA in 2009 as part of the national preconception care program.
- **Healthy Timing and Spacing of Pregnancies poster:** in collaboration



with UNFPA, NOVA 2 developed the *Protect Yourself and Protect Your Children* poster to raise public awareness of the healthy timing and spacing of pregnancies. A total of 1,000 copies were printed by UNFPA as part of NOVA 2 leveraging efforts and disseminated nationwide through different channels.

- *Preconception care, ANC, postpartum/newborn care, FP, and post-abortion care brochures:* In response to the high demand from health providers and their patients, the Project also reproduced and disseminated 15,000 patient education brochures previously developed by Project NOVA. Written in line with the latest evidence available and Armenian MOH recommendations, these culturally relevant brochures are designed in an easy-to-read format, containing important facts and actions for raising awareness, promoting healthy behavior, and preventing severe life-threatening conditions. Schering Pharmaceutical has reprinted 6,000 copies of family planning and post-abortion care brochures to support Project needs.

For descriptions of patient education posters and provider materials, see **Annex 5**.

3. CROSS-CUTTING

Some of Nova 2's achievements cut across delineations of client or provider. This section discusses results that fall into both categories (see **Annex 6**).

3.1 ACCESS TO MCH/RH/FP SERVICES IMPROVED

2010 Basic Benefits Package poster: In its effort to improve access to MCH services, the Project has contributed to the national efforts on removing **financial access barriers** by raising general public awareness on both women's and children's rights to government-funded health and social benefits, as well as awareness of the National Obstetric Care Certificate, designed to promote patient choice and link financial resources to service outcomes. The National Obstetrical Care Initiative, introduced by the State in 2008, has significantly lowered "under-the-table" payments for obstetric services while increasing formal compensation for health workers. Using the information from the Basic Benefits Package for 2010, NOVA 2 designed a patient education poster on the *State Guaranteed Maternal & Child Health Care Services, Pregnancy & Delivery Care, Childbirth Social Benefits*. A total of 500 copies of the poster were produced and distributed nationwide.

National Vaccination Schedule poster: Routine childhood immunization saves lives and prevents diseases. The Armenian MOH, in collaboration with the United Nations Children's Fund (UNICEF), developed and institutionalized a comprehensive national childhood vaccination program. The program is implemented by pediatricians, family doctors, and family and community nurses across Armenia. The national vaccination schedule is regularly updated by MOH in response to new developments in medicine and public health, and healthcare workers are informed about the changes through formal channels. However, to reduce the **information access barrier**, parents also need to understand the importance of immunization, know the updated vaccination schedule, and bring their children in on time for their vaccinations. The Project has worked with UNICEF and the National Sanitary-Epidemic Station on the development of the vaccination poster. As a result, 3,500 *National Children Vaccination Schedule* posters were produced and disseminated nationwide.

Free Child Care poster: The Project supported the Armenian MOH in its efforts to introduce national Child Health Care Certificate program. Building upon the success of the Obstetrical Certificate initiative introduced with technical support from Project NOVA in 2008, the Child Health Care Certificate program is scheduled to launch on January 1, 2011, and is designed to guarantee free hospital care for children under 7 and to ensure access to quality hospital care. The Project conceptualized and designed a public education poster to raise general awareness on the new state certificate program and supported the MOH with the household survey design to measure new program effectiveness in the fight against corruption in the health sphere.

3.2 ADDITIONAL RESOURCES LEVERAGED

To maximize Project outcomes with supplementary financial and in-kind support and to develop the sense of mutual ownership of changes, the Project has established many partnerships—big and small—at the local level. Examples of NOVA 2 leveraging activities include, but are not limited to the following:

Burns Supper Charity Event: Since 1997, guests of the Burns Supper in Yerevan, organized by the Burns Committee, with the support of the British Embassy, and in honor of famous Scottish poet Robert Burns, raise funds for charity. In January 2010, the Burns Supper charity event raised almost \$20,000 to address local health and social needs, \$4,942 of which was awarded to NOVA 2 to support Stepanavan Medical Center with the purchase of newborn care devices, a gap identified through NOVA's rapid assessment activity.

Open Society Institute (OSI) Assistance Foundation in Armenia: With the grant from the OSI Assistance Foundation in Armenia, the Project procured and distributed 4,000 evidence-based Obstetrical (Ob) kits at Project-supported healthcare facilities where babies are born. Each Ob kit contained disposable items essential

to assure safety during labor, delivery, and the postpartum period for mothers and newborns. All items in the kit (see **Annex 8**) are evidence-based to impact patient and provider safety, and often survival. Ob Kit items were packaged in a recyclable paper bag printed with health messages, reminding women to come back for a follow-up visit in six weeks, to practice exclusive breastfeeding during the first six months, and to bring their children for immunization on time.

Save the Children “Holiday Gift Catalog”: A total of \$9,375 was secured by NOVA 2 from Save the Children’s annual “Holiday Gift Catalog” initiative. Save the Children’s Holiday Gift Catalog is posted online and distributed in print in time for Christmas giving among individual and corporate donors. It features sponsorships—large and small—involving all aspects of the agency’s work all over the world. In 2009, Save the Children Armenia Country Office was included in the Holiday Gift Catalog for the first time with its “Stock a Medical Clinic” basic supplies kit. Many individual donors responded to the plea for help to support deprived, rural Armenian healthcare facilities and purchased the kits from the catalog. Kits containing essential medical supplies (**Annex 9**) were distributed to a total of 103 rural primary healthcare facilities in five northern health networks and 22 rural health posts in Armavir and Ararat networks, targeted within the framework of Project NOVA.

Over the life of the Project, over \$78,000 was raised—donors ranged from local government units and local television channels to international foundations and charity unions—to complement funding from USAID (Table 2).

Table 2: Additional Funding Raised by NOVA 2		
Contributor	Purpose of the Contribution	Amount
Save the Children Holiday Gift Catalog	Basic medical equipment and supplies for rural health posts	\$9,375
Local NGO partners	Staff levels of effort, etc.	\$12,248
National and regional Armenian television channels	Donated air time for PSA broadcasting	\$5,149
Local government units and HAGs	Renovation of Information and Education Centers in rural communities	\$29,926
OSI Assistance Foundation in Armenia	Evidence-based Ob Kits	\$14,560
Burns Supper Committee	Newborn care equipment for Stepanavan Medical Center	\$4,942
UNFPA	Printing of Healthy Timing and Spacing of Pregnancies posters	\$239
Schering Pharmaceutical	Printing of family planning and post-abortion care health education brochures	\$1,734
Total		\$78,173

CONCLUSION

NOVA 2's internal project evaluation (partially reflected in the Project Performance Monitoring Plan [*Annex 7*]), service delivery statistics, and anecdotal evidence (see *Annex 10: Success Stories*) all confirm that outcomes in Project-supported areas have improved; communities and healthcare facilities are better able to offer MCH/RH/FP services and demand for services has increased.

At the service delivery level, internationally recognized, evidence-based, high-impact MCH/RH/FP practices, such as preconception care; focused ANC; sick and essential newborn care; AMTSL; appropriate management of severe pre-eclampsia/eclampsia, including magnesium therapy; patrogram use; and much more, were successfully introduced and had a significant impact at Project-supported sites. FP and RH counseling were also integrated into antenatal and postpartum service delivery as well as into the routine work of family physicians, contributing to the reduction of abortions at Project-supported health networks. The SOMs, established by the Project, quickly gained popularity by attracting both health workers and their patients alike and are now helping to shape the way the population sees their healthcare facilities.

At the community level, the introduction of innovative mobilization initiatives, such as CPH and the dissemination of health information through PSAs and public health education and promotion events, has contributed to the increased demand for services. Improving the way that the community views health services while also addressing quality issues has strengthened the link between healthcare facilities and communities they serve.

The midterm Project evaluation has shown that the utilization of healthcare services for preconception and ANC has increased; this is often considered an early indication of healthier pregnancy and better pregnancy outcomes. Knowledgeable and skilled, confident health workers have also changed their attitudes toward their patients, which has established more trustful client-provider relations and led to higher patient satisfaction.

The multi-level approach of working simultaneously at community and healthcare service delivery levels has contributed to improved health consumer knowledge and practices in MCH/RH/FP. Multifaceted activities have begun to create a bond between communities and their healthcare facilities and have helped rural communities to be better prepared to face health emergencies.

The Project has clearly demonstrated that a strategy which combines improvements in the quality and access to health services and the creation of demand and empowerment of surrounding communities can have a significant impact on promoting healthier lifestyles in Armenia. By working alongside its partners, the NOVA 2 Project has left better-educated, mobilized, and empowered communities who have been encouraged by their own results and are now better prepared to take further initiatives into their own hands.

RECOMMENDATIONS

Based on NOVA 2's experience in Armenia, the following recommendations for the future cover suggestions from specific interventions to continue improvements in the quality of health care, community mobilization, and education activities to broad, system-level changes.

1. Following NOVA 2 CME training events, the knowledge and skills of health workers improved significantly, but this impact will be sustained only if practical application of the newly gained skills and knowledge are supported and monitored on a regular basis until they become fully institutionalized. As a rule, MOH and leading state medical training institutions involved in CME training must ensure that training follow-up visits are made with health workers. However, in practice, the MOH, YSMU, and National Institute of Health have limited ability to effectively manage health human resources and provide the support to solidify gains in the overall health workforce. Additional efforts should be invested into monitoring and training follow-up activities by leading

training institutions and supervisors to further advance health workers' performance and reinforce newly acquired knowledge and skills.

2. National service delivery documents—*Guidelines on Preconception Care Organization and Management* and *Normal Childbirth Management Guidelines*—as well as national policies tailored to improve provision of MCH services (such as the Organization of Anti-Epidemic Measures in Maternity Hospitals, Hospital Newborn Care and Resuscitation Guidelines, etc.) suffer from the lack of a practical system to turn policy into practice. To operationalize any new national service delivery documents to the full extent, the Armenian MOH needs to develop standard “policy-to-practice” mechanisms and formally roll out policies at all relevant service delivery points and agencies. Local healthcare facility management should also be linked into implementation plans, so that they can play a critical role in the integration of new MOH policies into routine service delivery activities.
3. Although popular and well-regarded, SOMs set up with NOVA and NOVA 2 support are not yet functioning to their full capacity. Further technical support is needed to those health workers conducting classes at the SOMs to enhance their health education skills and to assist them in overcoming difficulties, such as the involvement of men and the management of workloads at some facilities. Moreover, given the results proven by NOVA and NOVA 2, more SOMs should be established across Armenia to better prepare pregnant women and their spouses for the birth event and postpartum period. Burns Supper Committee has expressed their willingness to offer financial support for the establishment of new schools in the future.
4. Armenia has an abundance of local NGOs—some of them are strong, but others need significant capacity building and technical support. Although several already possess extensive experience with community mobilization and education activities and have worked closely with PHCR, NOVA, and NOVA 2, additional efforts are required to improve their ability to support the MOH. Areas of possible support include quality-of-care improvement, patient's advocacy, ensuring feedback from the patients to health administrators and health providers, and inclusion of patients' views in quality assessment and accreditation processes.
5. An integrated, computerized national system for logistics management with updated procurement forms will significantly improve the ability of public facilities to monitor and order stock in an efficient and timely manner and will improve transparency in medical commodities distribution. In addition, integration of a national system into the essential drug pipeline will considerably increase system efficiency and promote its long-term sustainability.
6. In spite of MOH efforts, physicians and mid-level personnel are poorly distributed, being heavily concentrated in the capital city while small towns and rural areas are underserved. This leads to the paradox that in a nation with an overall high health workers-to-population ratio, parts of the country lack adequate access to health care. The relative oversupply in the health workforce compounds the problem of low salaries. This further distorts health worker behavior and reinforces a common practice of cross-referrals for services that are not needed. The MOH needs to develop, institutionalize, and monitor the integration of state-of-the-art policies that address the imbalanced distribution of health workers in the area of MCH. Potential interventions include but are not limited to the following:
 - Develop a detailed profile of health worker distribution
 - Develop specific objectives for health staff deployment
 - Review options for incentives to motivate health workers to accept and stay in rural areas, using recently released WHO recommendations on rural retention
 - Conduct a retention assessment using the discrete choice experiment methodology

- Measure the cost-effectiveness of alternative retention incentive packages
7. The existing continuum-of-care system for MCH in Armenia, including emergency referral, is weak and requires special attention. Future programs should focus on strengthening the system so that family physicians and nurses provide quality entry-level care. Family physicians in both urban and rural areas should act as more effective gatekeepers to the health system and assist their patients to navigate through the health system, avoiding unnecessary and expensive hospitalization and overuse of specialists.
 8. Although difficult to implement at first, future health workers' performance-improvement and capacity-building activities should step away from the cascade-based training approaches and give priority to performance improvement and assurance methodology that encompass supportive supervision as a cornerstone of quality improvement.
 9. Many MCH services in Armenia are still provided to patients without any evidence of their effectiveness. Led by the MOH, and in partnership with local professional associations, additional investments need to be made to institutionalize an evidence-based approach to health care as a standard practice nationwide in Armenia. Successful institutionalization of evidence-based practices nationwide will require
 - the expansion of performance-based training and re-training of health workers (undergraduate, postgraduate, and CME);
 - buy-in from key stakeholders into the development and operationalization of national standards, guidelines, and protocols;
 - the availability of adequate medical equipment and supplies;
 - a system of financial incentives, such as pay-for-performance, that will encourage quicker adoption of new practices.

Project Goal: Address key issues affecting maternal and child health outcomes in Armenia

Area 1: Improve the quality of MCH/FP/RH services at project-supported regions (aka Networks) through enhanced provider performance and strengthened management and supervision

Area 2: Increase consumer demand for high-quality MCH/FP/RH services through community education and mobilization

Quality Assurance Initiative

CME to improve knowledge and skills of healthcare workers

Supportive supervision training for managers and supervisors

Contraceptive Logistic Management Information System

Community Partnership for Health

Behavior Change Communication and health promotion

ANNEX 2: SUMMARY OF CME TRAINING COURSES FOR HEALTH WORKERS

Training Course Title	Dates (2010)	Network	No. of participants	Pre- test	Post- test	Knowledge change
Key Reproductive Health Competencies in Family Medicine	April 26–May 5	Hrazdan	19	63%	95%	32%
	May 24–June 3	Martuni	14	72%	99%	27%
Preconception Care	June 15–16	Hrazdan	14	56%	97%	41%
	June 30–July 1	Stepanavan	18	53%	90%	37%
	July 8–9	Ijevan	15	52%	97%	45%
	July 13–14	Martuni	12	53%	97%	44%
	July 15–16	Akhuryan	15	65%	99%	34%
Reproductive Health and Family Planning Counseling*	June 22–25	Hrazdan	32	47%	90%	43%
	July 19–22	Stepanavan	19	42%	96%	54%
	August 10–13	Akhuryan	21	55%	92%	37%
Infection Prevention*	June 29–30	Akhuryan	32	45%	98%	53%
	July 6–7	Martuni	13	44%	91%	47%
	July 28–29	Stepanavan	22	52%	94%	42%
	August 2–3	Hrazdan	16	47%	98%	51%
	September 14–15	Ijevan	20	35%	95%	60%
Antenatal and Postpartum Care*	July 27–30	Hrazdan	10	71%	99%	28%
	August 3–6	Stepanavan	12	58%	95%	37%
	September 14–17	Akhuryan	11	65%	98%	33%
Intrapartum Care and Newborn Care and Resuscitation*	July 19–23	Hrazdan	21	53%	99%	46%
	August 9–13	Ijevan	9	46%	90%	44%
	August 17–21	Akhuryan	19	27%	94%	67%
	August 23–27	Stepanavan	10	51%	99%	48%
	September 6–10	Martuni	12	58%	94%	36%
TOTAL/AVERAGE			386	53%	95%	42%

* For all CME courses conducted in partnership with YSMU, the participants received full YSMU CME credits.

ANNEX 3: LIST OF LOCAL NGOs PARTNERS

I. Ajakits (Helping Hands)

Address: 223/028 G. Njdehi Street, Gyumri, Shirak marz

Telephone: (374 41) 3 45 04; 3 45 04 (fax); E-mail: ajakitsshirak@gmail.com

Team: Heghine Mkrtchyan, Head of NGO
Vahe Tagvoryan, community mobilizer
Mariam Nalbandyan, community mobilizer

II. Martuni Women's Community Council

Address: 8 Proshyan Street, Martuni, Gegharkunik marz

Telephone: (374-262) 4-22-01; (374-91) 21-13-96; E-mail: kananc@arminco.com

Team: Anahit Gevorgyan, Head of NGO
Lyudmila Grigoryan, community mobilizer

III. Forum of Non-Government and Non-Trade Organizations of Aragatsotn

Address: 20 A. Manukyan Street, Ashtarak, Aragatsotn marz

Telephone: (374-99) 07-87-77; (0233) 3 10 26 (fax); E-mail: marinesh@rambler.ru

Team: Marine Shahazizyan, Head of NGO
Narine Khachatryan, community mobilizer

IV. Northern Health Care Foundation

Address: 68a Shahumyan Street, Armavir, Armavir marz

Telephone: (374-237) 6-30-34; (374-91) 50-20-39; E-mail: nghazoumyan@gmail.com

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ANNEX 4: COMMUNITY PUBLIC EVENTS

Public Event Theme	Date	No. of Activities	Activities Description	No. of Beneficiaries
World No Tobacco Day	May 31	4	<ul style="list-style-type: none"> ▪ Special health talks ▪ Children’s drawing contest and exhibition ▪ Theatrical performances ▪ Open-air painting 	250
World Women’s Health Day	June 11	21	<ul style="list-style-type: none"> ▪ Health talks followed by question and answer sessions ▪ Individual counseling of women by ob/gyns in rural health posts ▪ Distribution of health education materials 	600
Global Handwashing Day	October 15	74	<ul style="list-style-type: none"> ▪ Special health talks with school children ▪ Theatrical performance by local children ▪ Distribution of flyers 	1,500
Male Involvement	October 29 November 5	13	<ul style="list-style-type: none"> ▪ TV-blitz interviews ▪ Drawing competitions ▪ TV programs ▪ Essay writing competitions ▪ Nominations of best fathers 	400
16 Days Against Violence Campaign	November 25– December 10	6	<ul style="list-style-type: none"> ▪ Essay writing competitions ▪ Nominations of best fathers ▪ Special lessons at Schools of Motherhood 	146
TOTAL		118		2,896

ANNEX 5: MATERIALS CATALOGUE

Patient Education Posters



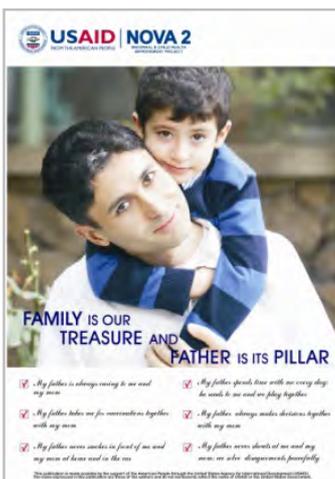
Preconception Care, 2010, poster, English & Armenian

The poster draws general public attention to the importance of preconception health and health care for better pregnancy outcomes.



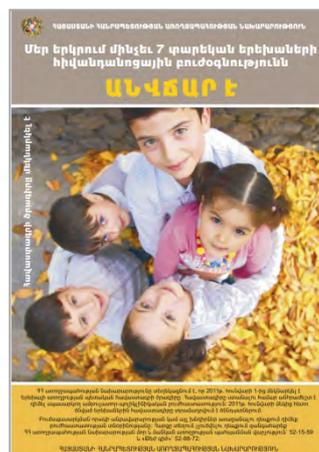
Healthy Timing & Spacing of Pregnancies, 2010, poster, English & Armenian

The poster, developed in partnership with UNFPA, raises awareness of women on healthy timing and spacing of pregnancies for better recovery and spending more time with the growing child.



Fathers' Poster, 2010, English & Armenian

The poster contains a set of messages for fathers, emphasizing the importance of their involvement in family care, health, and upbringing of their children.



Free Child Care poster, 2010, Armenian

The Project designed an informative poster to raise public awareness on the launch of the new state certificate program, which guarantees free hospital care for children under 7 and ensures access to and high quality of hospital care.



State Guaranteed Free MCH Services, Pregnancy and Delivery Care, Childhood Social Benefits, 2010, poster, English & Armenian

The poster raises general public awareness on both women's and children's rights to government-funded health and social benefits, and the National Obstetric Care Certificate.



National Immunization Schedule, 2010, poster, English & Armenian

The poster, developed in partnership with UNICEF, presents the updated vaccination schedule for the parents to bring their children in on time for their vaccinations.

Provider Materials



Guidelines on Preconception Health Care, 2010, Armenian

The Guidelines, developed by a National Working Group, include organization and management of preconception health care, covering service delivery and community-level interventions.



Guidelines on Normal Obstetrics, 2010, Armenian

Guidelines developed by a National Working Group include recommendations in antenatal, intrapartum, and postpartum care; and internationally recognized best practices and information on postpartum family planning.



Preconception care, Trainer's Guide, 2010, Armenian

This handbook is developed by a National Working Group for the facilitation of two-day training in preconception health care.



Preconception care, Participant's Handbook, 2010, Armenian

This handbook is developed by a National Working Group as a reference material for family doctors and ob/gyns attending the training on preconception care.



Reproductive Health, Trainer's Guide, 2010, Armenian

This Reproductive Health training package is developed in partnership with Yerevan State Medical University faculty for continuing medical education.



Reproductive Health, Participant's Handbook, 2010, Armenian

It comprises a detailed training course outline and syllabus, training instructions, knowledge evaluation questionnaires, clinical cases, and core reading materials.



Infection Prevention, Trainer's Guide, 2010, Armenian

The Infection Prevention training package is developed in partnership with Yerevan State Medical University faculty for continuing medical education.



Infection Prevention, Participant's Handbook, 2010, Armenian

It comprises a detailed training course outline and syllabus, training instructions, knowledge evaluation questionnaires, clinical cases, and core reading materials.



Antenatal and Postpartum Care Training Manual, 2010, Armenian

The Antenatal and Postpartum Care training package is developed in partnership with Yerevan State Medical University faculty for continuing medical education.



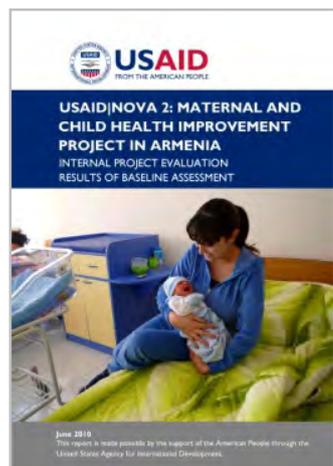
Intrapartum Care and Neonatal Resuscitation Training Manual, 2010, Armenian

The Intrapartum Care and Neonatal Resuscitation training package is developed in partnership with Yerevan State Medical University faculty for continuing medical education.



Balanced Counseling and Behavior Change Communication Training Manual, 2010, Armenian

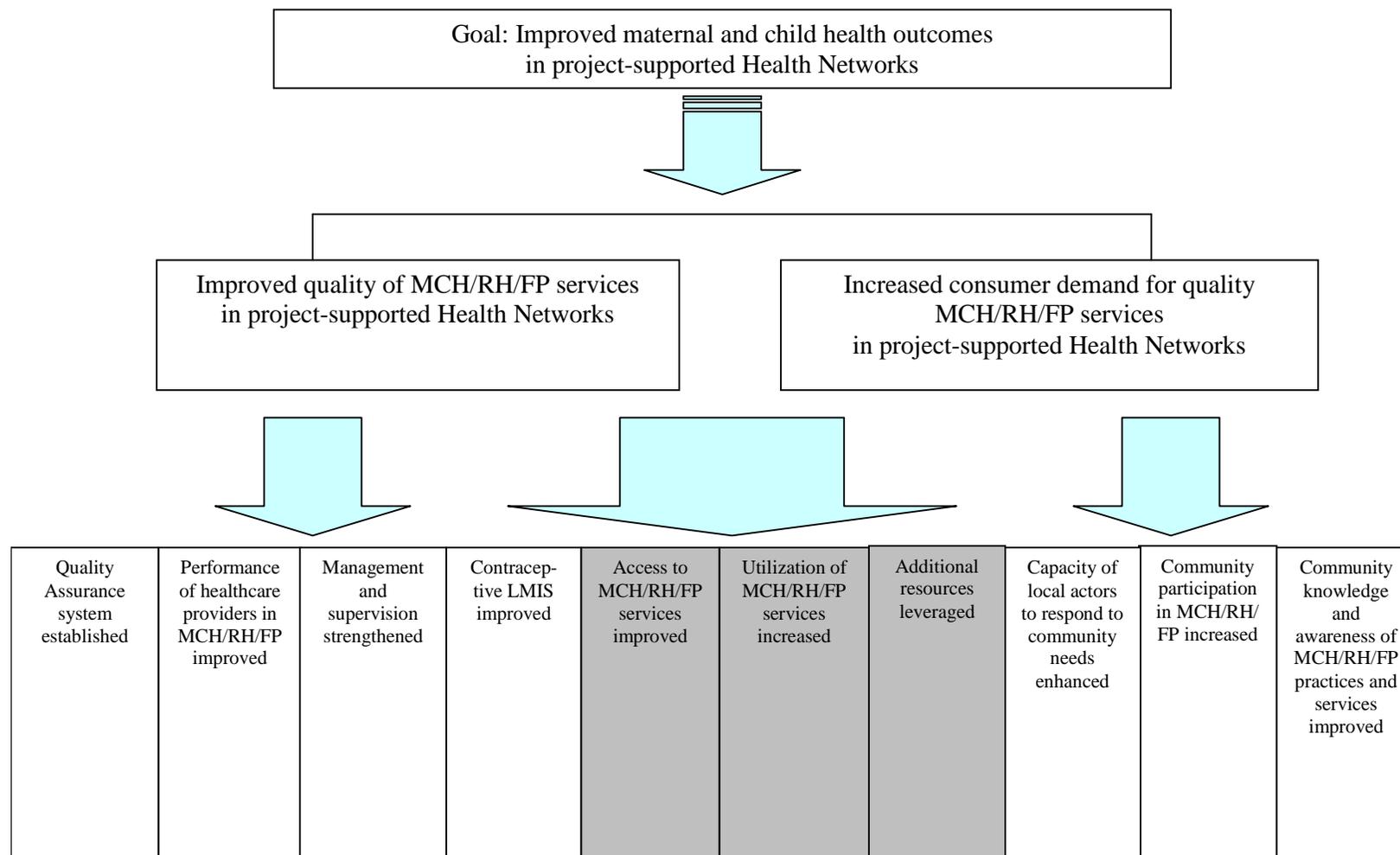
Balanced Counseling and Behavior Change Communication training package is developed in partnership with Erebuni State Medical College.



Internal Project Evaluation: Results of Baseline Assessment, 2010, English

The baseline assessment, conducted in the five Project-supported health networks, provides baseline measures for evaluating Project achievements.

ANNEX 6: RESULTS FRAMEWORK



ANNEX 7: PERFORMANCE MANAGEMENT PLAN

Indicator ³	Data Source	Data Collection Frequency	Baseline Value	End-of-Project (EOP) Value	EOP Target	Notes
Area 1: Improve the quality of MCH/RH/FP services provided at Health Networks in Armenian regions through enhanced performance of healthcare providers and strengthened management and supervision.						
Number of people trained in FP/RH through USG-supported programs	Project reports Project MIS	Quarterly Baseline End-line	0	144	120	
Number of people trained in maternal and newborn health through USG-supported programs	Project reports Project MIS	Quarterly Baseline End-line	0	178	160	
Number of people trained in other areas through USG-supported programs	Project reports Project MIS	Quarterly Baseline End-line	0	217	190	
Average percent change in knowledge among people trained by the Project ⁴	Project reports Project MIS	Quarterly Pre/post tests	50.4%	91.5%	30% ↑	Calculated with pre- and post- knowledge evaluation questionnaire on a subject
Average Quality Index for target networks	QA Teams reports	Baseline End-line	83.6%	93.9%	10% ↑	Index is calculated on over 100 different questions
Percent of target networks that have Quality Assurance System in place and fully operational	QA Teams reports	Baseline End-line	50% (RFTOP)	100%	100%	RFTOP Target includes 5 old marzes at the baseline and 5 new marzes to be covered by NOVA 2
Number of new Schools of Motherhood (SOMs) established	Project reports Project MIS	Baseline End-line	0	5	4	

³ Indicators marked in bold are either standard U.S. Government Investing in People Health indicators or were identified in the RFTOP.

⁴ Illustrates average increase for all Project NOVA 2 trainings

Indicator ³	Data Source	Data Collection Frequency	Baseline Value	End-of-Project (EOP) Value	EOP Target	Notes
Percent of pregnant and postpartum women in target networks who attended at least one class at the SOM	Postpartum Client Exit interviews	Baseline End-line	5% (RFTOP) 12.8% (antenatal care client exit interview – pregnant women) 37.7% (postpartum client exit interview – postpartum women)	59.7% (antenatal care client exit interview – pregnant women) 51.4% (postpartum client exit interview – postpartum women)	40%	RFTOP Target
Percent of pregnant and postpartum women in target networks who made their first antenatal care (ANC) visit within the first trimester of pregnancy	Health facility reports Postpartum Client Exit interviews (postpartum women) Antenatal Care Client Exit interviews (pregnant women)	Quarterly Baseline End-line	56.5% (health facility reports) 34.3% (antenatal care client exit interview – pregnant women) 32.2% (postpartum client exit interview – postpartum women)	86.8% (health facility reports) 48.6% (antenatal care client exit interview – pregnant women) 39.0% (postpartum client exit interview – postpartum women)	10% ↑	RFTOP Target
Percent of postpartum women in target networks with at least 4 ANC visits	Health facility reports Postpartum Client Exit interviews	Quarterly Baseline End-line	84.4% (health facility reports) 86.4% (postpartum client exit interview)	83.9% (health facility reports) 83.1% (postpartum client exit interview)	20% ↑	
Abortion rate in target networks per 100 births	Health facility reports	Quarterly Baseline End-line	8.2	6.1	5% ↓	
Number of women receiving AMTSL through USG-supported programs	Health facility reports	Quarterly Baseline End-line	0	1,940	2,500	

Indicator ³	Data Source	Data Collection Frequency	Baseline Value	End-of-Project (EOP) Value	EOP Target	Notes
Percent of trained healthcare workers from target networks skilled in AMTSL	Observations	Pre/post training observations	0	70%	85%	
Percent of vaginal deliveries with postpartum hemorrhage in target networks	Health facility reports	Quarterly Baseline End-line	3.1%	2.9%	2.8%	RFTOP Target
Percent of pregnant women in target networks who made at least one preconception care visit	Antenatal Care Client Exit interviews	Baseline End-line	16.4%	31.7%	5% ↑	RFTOP Target Due to limited timeframe, it is not possible to conduct large-scale household survey to identify percent of women of reproductive age who had a preconception visit out of total women of reproductive age as it is requested in RFTOP.
Percent of children under 24 months who were vaccinated according to national vaccination calendar	Health facility reports	Quarterly Baseline End-line	97%	99%	5% ↑	RFTOP Target This is a composite indicator consisting of: Percent of children under 12 months of age who receive BCG (1), DPT-Hep B-Hib (3), and Polio (3); Percent of children under age of 24 months who received MMR (1), DPT (1), and Polio (2)
Early neonatal death rate at target networks	Health facility reports	Quarterly Baseline End-line	0.49/100 births	0.41/100 births	5% ↓	
Number of new USG-assisted service delivery points providing FP counseling or services	Project report Project MIS	Quarterly Baseline End-line	0	19	30% ↑	
Percent of postpartum women at target sites who receive FP counseling before discharge	Postpartum Client Exit interviews	Baseline End-line	54.9%	75.5%	20% ↑	
Number of client education materials developed, produced, and disseminated	Project reports	Quarterly Baseline End-line	0	6	4	BBP Poster, Preconception Care Poster, updated National Vaccination Calendar Poster, Healthy Timing and Spacing of Pregnancy Poster; Father Involvement Poster, and Free Pediatric Hospital Care Posters (additional)

Indicator ³	Data Source	Data Collection Frequency	Baseline Value	End-of-Project (EOP) Value	EOP Target	Notes
Percent of public FP service delivery points in Project-supported networks with at least three types of modern contraceptives in stock	FP Compliance Monitoring reports	Quarterly Baseline End-line	33.3%	40%	20% ↑	
Percent of women satisfied with health care (antenatal, obstetric, and newborn) at target networks	Postpartum Client Exit interview	Baseline End-line	97.2%	100%	15% ↑	Percent of women satisfied with newborn care will be limited to newborn care provided at the maternity only
Number of health facilities with essential MCH equipment and supplies provided by the Project	Project reports	Baseline End-line	0	136	50	Primary and higher-level health facilities at target networks
Area 2: Increase consumer demand for high-quality MCH/RH/FP services through community education and mobilization.						
Number of people reached with key MCH/RH/FP messages through health talks	Project reports Project MIS	Quarterly Baseline End-line	0	8,045	8,000	
Number of awareness-raising events (public and media events) with key MCH/RH/FP messages conducted	Project reports Project MIS	Quarterly Baseline End-line	0	47	20	
Percent of postpartum women exposed to health promotion and education events	Postpartum Client Exit interview	Baseline End-line	0	20.4%	10%	Exposed is defined as participation in at least one public event or seeing at least one media campaign organized through USG-supported program
Number of people trained in the delivery of health messages to the public	Project reports Project MIS	Quarterly Baseline End-line	0	98	80	
Percent of postpartum women who can name at least three pregnancy danger signs	Postpartum Client Exit interview	Baseline End-line	47.9%	61.6%	10% ↑	
Percent of postpartum women who can name at least three newborn health danger signs	Postpartum Client Exit interview	Baseline End-line	36.3%	52.7%	10% ↑	

Indicator ³	Data Source	Data Collection Frequency	Baseline Value	End-of-Project (EOP) Value	EOP Target	Notes
Percent of postpartum women who can name at least three postpartum danger signs	Postpartum Client Exit interview	Baseline End-line	35.6%	56.2%	10% ↑	
Percent of postpartum women who can name three LAM criteria correctly	Postpartum Client Exit interview	Baseline End-line	37.6%	44.5%	10% ↑	
Percent of postpartum women who can name correct intervals for healthy timing and spacing of pregnancies	Postpartum Client Exit interview	Baseline End-line	68.5%	39.7%	10% ↑	
Number of health facilities rehabilitated	Project reports Project MIS	Baseline End-line	0	25	TBD	“Rehabilitated” ranges from cosmetic upgrades (e.g., whitewashing walls) to structural improvements and mending broken furniture
Number of rural communities in target networks with MCH emergency mobilization plans	Project reports	Baseline End-line	0	87	TBD	
Amount of public and private financial resources leveraged by USG programs to support the Project	Project reports	Baseline End-line	0	6% (USD 78,173)	10% of the Project budget	

ANNEX 8: CONTENT OF EVIDENCE-BASED OBSTETRICAL KIT

No.	Item	Evidence
1	Exam gloves	Use of disposable exam gloves in obstetrical manipulations is key to assuring proper infection prevention measures during delivery and the postpartum period, contributing to a decrease in postpartum and neonatal infections, as well as protecting healthcare workers.
2	Oxytocin	Postpartum hemorrhage (PPH) is the leading cause of maternity mortality and disability in Armenia, accounting for over 30% of all maternal deaths. According to research, for every woman that dies in childbirth, 30 more are left disabled. One intervention proven to prevent PPH is an Active Management of the Third Stage of Labor (AMTSL). According to the World Health Organization (WHO), AMTSL requires routine administration of 10 cc of Oxytocin, combined with controlled cord tractions and uterine massage, to ALL postpartum women as a means to prevent PPH. Separate training on the administration of this practice will be conducted by NOVA 2.
3	Syringe for Oxytocin injection	
4	Set of newborn clothes (hat, pants with booties, and shirt)	Evidence-based medicine proves that tight swaddling is dangerous for a newborn. It jeopardizes newborns' breathing and normal blood flow and leads to hypothermia during winter and hyperthermia during summer. To eliminate this long-standing practice, we will conduct health-education activities among rural women and will encourage the use of loose clothing. We will provide a set of clothing, including a newborn cap and shirt, both of which are proven to prevent hypothermia and hyperthermia among newborn babies, and pants with booties to new mothers.
5	Cord clamp	Application of sterile plastic cord clamps rather than the extensive use of antiseptics and aseptics is a proven practice in the prevention of umbilical infection. A sterile, single use, and easy-to-apply plastic cord clamp holds the newborn umbilical cord safely. Its dual gripping surface prevents slipping during application.
6	Disposable mask	Disposable masks and sheets are required for all medical procedures, including childbirth, to protect both healthcare workers and patients from infections.
7	Disposable sheet	

ANNEX 9: “STOCK A MEDICAL CLINIC” PACKAGE CONTENT

No.	Item Description	Quantity
1	Sphygmomanometer with stethoscope and blood measure cuff (3 sizes for newborns, infants, teenagers)	1
2	Flexible measuring tape same	1
3	Stethoscope for infants and children	1
4	Thermometer	6
5	Disposable syringes with needles, 3 cc each	100
6	Disposable adhesive bandages	1 box
7	Disposable spatula	1 box

ANNEX 10. SUCCESS STORIES

REAPING WHAT YOU SOW

Women in rural areas of Armenia, especially those having their first baby, are quite often psychologically and physically unprepared for the delivery and scared of labor. To address these issues, Schools of Motherhood welcome pregnant women to better prepare them for this important event in their life. Schools of Motherhood are a part of the Government-funded Basic Benefits Package, covering prenatal, delivery, and postpartum care.

Since 2008, USAID's Project NOVA helped the Armenian Ministry of Health to set up Schools of Motherhood in the healthcare facilities providing maternal and child health services. The first four Schools established by the Project in the spring of 2008 quickly gained popularity among both women and healthcare providers. The Project received many requests from different healthcare facilities for the establishment of the new Schools. Martuni Maternity, with over 1,500 annual births and serving almost 70,000 rural dwellers from the most deprived region, was among many facilities seeking support from the Project. As a result, in spring 2009 the new School was launched at Martuni Maternity commemorating the All-Armenian Day of Motherhood and Beauty; one room of the hospital was equipped and renovated, personnel trained, and clients informed.

From the very beginning, the Head of Martuni Maternity, Dr. Arthur Hovhannisyan, applied an innovative approach in running the School of Motherhood to ensure the success of its operations in the future. An experienced and skillful administrator, he understood that to make the School effective and sustainable, he would need to designate staff to specifically manage it. The results are proven! Today, three out of four pregnant women visiting Martuni Maternity attend classes at the School of Motherhood, even though Project NOVA ended last year. The results are more impressive than elsewhere; the majority of women reported being very satisfied with the antenatal, obstetric, and postpartum care and planned to deliver at Martuni Maternity. All pregnant women participated in talks on pregnancy and postpartum danger signs, and most of them recognized at least three danger signs.

“Women feel more comfortable here. They voice out their concerns and share their experience,” says Naira Manukyan, the midwife who manages the Martuni Maternity School of Motherhood. “They increase their knowledge on women’s physiology, pregnancy, and the delivery; acquire or improve their childcare skills; and obtain information on healthy lifestyle and exclusive breastfeeding.”

“I highly appreciate the existence of the school. This is my third pregnancy; however, I still have many questions,” says Mary Nersisyan, who attends the Martuni Maternity School of Motherhood classes. “Here we find answers to all questions related to the pregnancy, delivery, and newborn care.”

The School of Motherhood is now an integral part of pregnancy care at Martuni Maternity. Many efforts are put into the management of the School to ensure its effective operation, and Naira Manukyan has her important role in it. She is very inspired with the popularity of the School and the increasing number of women attending it. The results of the fruitful work motivate her to broaden her knowledge in preparing pregnant women for motherhood and childcare.

A JOURNEY OF A THOUSAND MILES BEGINS WITH A SINGLE STEP

Deep in the Gegharkunik region of Armenia lies a rural village called Lichk with about 5,500 residents. Just one year ago, the status of Lichk's one and only public healthcare facility was changed from a rural Health Post into a Medical Ambulatory by order of the Ministry of Health. The facility lacked the prerequisites to fully operate as an Ambulatory with inadequate space, basic furniture, medical equipment and supplies, and a water and sewage system which was insufficient to meet the medical needs of the community.

In 2010, in collaboration with local NGO partner Martuni Women's Council and Lichk village government, USAID's NOVA 2 facilitated a community needs assessment, which revealed the need for access to higher-quality healthcare services and improvements to their only healthcare facility. As a result, the village mayor allocated several rooms at the larger Culture House for Ambulatory use.

In August 2010, Lichk Ambulatory moved into their new premises at the Culture House. The equipment received from the World Bank helped to outfit the health center with modern medical technology, and additional medical equipment and supplies will soon be provided by NOVA 2. The facility is wired with electricity, but construction of water and sewage systems is still ongoing. Construction is scheduled to be concluded in summer 2011. Once complete, this Ambulatory will have all needed attributes of a full-service Ambulatory clinic, thanks to a community that decided to take matters into their own hands and a flexible and wise leader who understood the needs of the community and the importance of improved infrastructure for quality services.

Health workers are already pleased with the new, improved working conditions that enable them to provide better quality health care for their patients. As a result of improved conditions, the number of rural dwellers coming to the new facility is on the rise. Now, in addition to regular services, nurses trained by USAID's projects are also conducting health talks to increase community knowledge of maternal and child health, as well as promoting care-seeking practices through counseling and behavior change communication techniques and methodologies.

"I'm thankful to the village Mayor Gnel Grigoryan for his offer to move the medical ambulatory to this new building from the stifling one room in the secondary school," says Dr. Jivan Fidoyan, the Lichk Ambulatory director. "Despite the promises from the authorized organizations to solve the problem of premises, we felt desperate as nothing seemed to be happening."

"We could never imagine that one day we would have a large and comfortable facility and all the necessary equipment to provide services to the community," says Ruzanna Grigoryan, the chief nurse of Lichk Medical Ambulatory.

This unique USAID NOVA 2 initiative supported an in-depth understanding of community needs and shared responsibility, assisting Lichk in identifying their immediate problems, creating a sense of ownership and accountability for their own solutions, and facilitating activities to put those solutions into action.

A NEW ROLE FOR FAMILY DOCTORS

Armenia is known for its unique identity, where East meets West and modern reality coincides with traditional beliefs. Armenia's birth rate has declined steadily over the past 30 years due to the collapse of the Soviet Union and the overall unstable socioeconomic situation, further aggravated by the recent economic crisis. Today, Armenian women on average have fewer than two children, contributing to the country's negative population growth. In the attempt to unravel Armenia's demographic emergency, the government is offering a social benefits package and free obstetrical care to encourage families to have more children. Some changes are already evident in the Martuni region, where many families are having their third and fourth child, but most still turn to abortions as a means to control their fertility.

Astghadzor village is an ordinary rural community in the Martuni region. Astghadzor women exhibit traditional Armenian behavior—they take care of their families' needs at the expense of neglecting their own health. Although they want to have families with many children, quite often they face the reality of undesired pregnancy. According to doctors working at Astghadzor Ambulatory, almost all women of reproductive age have had at least one abortion during their married life. In the past, some women tried using different forms of contraception—from traditional methods to condoms and intrauterine devices (IUDs)—but lacking essential information on advantages and side effects of each method, women did not know how to use condoms correctly and were not aware of the high failure rate of traditional methods. The lack of correct information about IUDs resulted in a high discontinuation rate among most women in the community. "Some women with IUDs claimed to have hypertension or headaches as a result of an IUD insertion," says Dr. Gayane Grigoryan, the head of Astghadzor Ambulatory. "With no understanding that the cause of a headache and hypertension is quite different, they were spreading misinformation among other women and raised the fear of using IUDs."

In 2010, Dr. Gayane was among 33 family doctors trained by USAID's Maternal and Child Health Improvement Project in key reproductive health competencies. The training equipped Armenian frontline workers (family doctors serving rural populations) with critical knowledge and skills in antenatal, postnatal, and newborn care; family planning; and sexually transmitted infection and cancer prevention. Supported with job aids, patient education posters, and brochures, today Dr. Gayane is among the first family doctors to offer family planning counseling to her patients to prevent unwanted pregnancies and help women of Astghadzor stay healthy. As a result of her effective counseling, many women in the community know more about

"The counseling of the doctor made me think about the use of [birth control] pills as I had some medical contraindications for IUD use. Having several abortions—ten altogether—after each of my children, now I really feel happy with a sense of relief," says a 33-year-old woman with three children.

modern contraception and will try to put their new knowledge and skills to a good use. Today Dr. Gayane's efforts are barely seen and difficult to measure, but over time they will translate into a powerful tool that will help Armenian women not only to reduce reliance on abortion but also to improve their family relationships, education and employment opportunities, and their quality of life.