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REPRODUCTIVE, MATERNAL AND CHILD SERVICES IN HEALTH NETWORKS

BASELINE ASSESSMENT OF REPRODUCTIVE, MATERNAL AND CHILD HEALTH SERVICES IN PROJECT NOVA SUPPORTED NETWORKS

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I. Table of Contents

II. Abbreviations and Acronyms

Ambulatory	Outpatient health care facility in a rural area, usually operated by general physicians, the same as Medical Ambulatory
ANC	Antenatal care
ASTP	Armenia Social Transition Program (former USAID Project, 2000 - 2005)
CPI	Client-Provider Interactions
ADHS	Armenia Demographic and Health Survey
EMG	Emerging Markets Group, Ltd.
FAP	Rural Feldsher and Midwife Station; health care facility staffed with nurses and midwifes providing medical care, and preventative and sanitary services, same as Health Post
FD	Family Doctor
FM/FMC	Family Medicine/Family Medicine Center
FP	Family Planning
Feldsher	Rural healthcare worker providing a wider range of services as compared with nurse
GIS	Geographic Information Systems
GoA	Government of Armenia
GP	General Practitioner (therapeutist)
HC	Health Center
HP	Health Post, same as FAP
HSP	Hospital
IC	Infant Care
IH	IntraHealth International, Inc.
IMCI	Integrated Management of Childhood Illness
MA	Medical Ambulatory, same as Ambulatory
Marz	Province; there are 10 marzes, plus Yerevan (capital city), which has marz status
MCH	Maternal and Child Health
MIS	Management Information System
MOH	Ministry of Health
OB/GYN	Obstetrician/Gynecologist
PC	Polyclinic; state health care facility providing ambulatory outpatient care at the place of residence, located in urban areas
PHC	Primary Health Care
PHCR	Primary Health Care Reform (USAID project)
PMP	Performance Monitoring Plan
PP	Postpartum
PP/IC	Postpartum/Infant care
RH	Reproductive Health
SC	Save the Children Federation, Inc.
SPSS	Statistical Program for Social Sciences (statistical software package)
STI	Sexually Transmitted Infections
USAID	United States Agency for International Development
WB	World Bank
WCC	Women's Consultation Center
WHO	World Health Organization

III. Executive Summary

Since declaring independence from the Soviet Union in 1991, Armenia has been in a state of political, economic and social transition, which impacts the entire health system of the country and the general health status of the population. Reproductive and Maternal and Child health (RH/MCH) has suffered as a result of this upheaval. In 2004 the United States Agency for International Development (USAID) awarded the Emerging Markets Group, Ltd. (EMG) together with IntraHealth International (IH) and Save the Children (SC) a five-year contract to improve RH/MCH services in Armenia through Project NOVA.

During October 2004 – September 2006, Project NOVA worked in two parallel tracks, providing technical assistance in reproductive health in Lori, Shirak, Tavush, Kotayk and Gegharkunik Marzes, and building national capacity to ensure that project outcomes would be sustained over time. Among its activities Project NOVA did the following:

- Established 12 clinical training sites and trained over 500 physicians and nurses;
- Developed two training curricula: Safe Motherhood Clinical Skills for health post nurses and Key Reproductive Health Competencies for family physicians and family nurses;
- Created Quality Assurance Teams (QAT) in six rural health care facilities in five marzes;
- Produced a handbook for primary health care (PHC) managers that serves as a guide for better management practices and approaches;
- Trained 78 managers in modern management practices and supportive supervision;
- Conducted in-depth policy reviews, wrote reports and produced informational posters to improve the regulatory environment in the area of reproductive health;
- Developed and tested a new service delivery model for the integration of family planning referral and counseling into pediatrics services;
- Rejuvenated health services at over 178 health posts through training, provision of clinical supplies strengthening supervisory systems and improving working conditions; and in 60 of the health posts also through renovation.

During the next 3-year period Project NOVA will work in five new marzes: ***Armavir, Aragotsotn, Ararat, Syunik, and Vayots Dzor***. In October 2006 the Project launched activities in these five marzes, selecting one health network * per marz for program implementation.

Prior to the initiation of program activities, Project NOVA conducted a baseline assessment of healthcare facilities in these five target networks. The baseline assessment was designed to:

- Collect data on the performance of health care providers in delivering antenatal care (ANC) and postpartum/infant care (PP/IC);
- Assess the physical infrastructure and environment of the healthcare facilities;
- Explore utilization of RH/MCH services in rural PHC facilities;
- Assess clients' experience, attitudes and satisfaction with various aspects of RH/MCH care.

* Health Network is defined as health facilities linked both by ownership structure and referral patterns. A NOVA RH/FP/MCH Health Network could include in-patient and out-patient service delivery sites, e.g. Maternity Hospital, Women's Consultation Center, Ambulatories, Health Centers and Health Posts.

To conduct the baseline assessment Project NOVA developed and administered 12 data collection instruments for health facilities and household interviews. It visited all healthcare facilities in the selected networks, observing physicians and nurses providing RH/MCH in two areas of performance (ANC and PPC). In addition, Project NOVA conducted a household survey, interviewing a sample of 468 women who gave birth in the 12 months preceding the baseline assessment to measure their satisfaction with the ANC, PP/IC services they received and to assess their knowledge and practices related to safe pregnancy and child care.

Results of the assessment demonstrated that rural medical ambulatories and health posts are impeded in providing quality health care by the fact that they lack essential medical equipment and supplies and providers lack RH/MCH knowledge and skills. The following major findings were derived from this assessment:

- ***Overall patient flow in health posts was low.*** Very few pregnant women attended rural health posts for PHC. The mean number of pregnant women seen at rural health posts was 20.5 in the past year, given the average population area is about 1,050 (based on the secondary analysis of the Armenian Census data).

- ***Physical conditions*** at the majority of rural health posts and medical ambulatories ***were extremely poor and they lacked basic medical equipment and supplies***. Health posts were in the worst physical condition with about half needing renovation.

- ***Healthcare providers were not performing to the level of internationally-accepted standards*** (85% of the tasks expected) in assessed performance areas:
  - The nurses only performed 29% of the basic ANC tasks, midwives 43%, and physicians 58%.
  - Nurses performed 35% of the tasks needed to provide basic PP/IC satisfactorily and physicians performed 52%.
  - Counseling on ANC and PPC is the weakest among both mid-level personnel and physicians: ANC counseling averages at 20% and PP/IC counseling at 40% (a significant portion of PP/IC counseling is allocated towards IC)
  - Basic clinical skills are also low: 33% for ANC and 24% for PP/IC.

- ***On average women had 4.8 ANC visits during their last pregnancy***. As expected, women with non-complicated pregnancies paid fewer visits to healthcare providers (on average 4.4 visits) than those with complicated pregnancies.

- ***The gestational age at first antenatal care visit was on average 3.63 months.*** Only half of the women conduct the first ANC visit within the first trimester of pregnancy. However, more than three-fourth of women conduct the first visit within first 16 weeks of pregnancy.

- ***Women's general awareness and knowledge of safe pregnancy and child care practices was low:*** on average women were able to report only one post-partum-related and one child care-related danger sign.

- ***Breastfeeding was practiced by 93% of women, though only 87% breastfed exclusively at any point during their last pregnancy.*** The mean duration of breastfeeding was shorter than recommended by the WHO and RA MOH.

- ***Early initiation of breastfeeding was low:*** only 44% of the women put the child to the breast within the first hour after delivery.

- ***Postabortion and postpartum counseling offered to women was insufficient:*** the vast majority of postpartum and postabortion women reported that they were not counseled on family planning options. Women reported receiving information on postpartum/post-abortion danger signs, however majority of respondents were unable to list them correctly.

In summary, the baseline assessment conducted in the five selected health networks highlighted several key problems in the health system, which Project NOVA will address during the next three years of the program. These baseline findings in the five southern marzes were concordant with those observed at baseline in the five northern marzes in which Project NOVA worked during its first two years of activities.

IV. Background

Since declaring independence from the Soviet Union in 1991, Armenia has been in a state of political, economic and social turmoil. Despite the difficulties of transitioning from a centrally planned to a free market economy, Armenia has experienced positive economic growth over the past 10 years.[i] Changes in the health sector, however, have not been as positive. Comparative trend analysis of the 2000 and 2005 Demographic and Health Surveys (DHS) indicate that while the health status of the population, particularly women and children, is generally improving there are important exceptions.

Perinatal mortality has slightly decreased over the last years; however, due to poorly managed pregnancies and deliveries, low birth weight, premature births, and maternal conditions such as anemia, pre-eclampsia and eclampsia, the rates are still higher as compared with European countries.[ii] Late onset of antenatal care may be a contributing factor. There has also been an increase in maternal mortality and the rural-urban disparity in health status and access to health care remains significant: in general, the maternal/child morbidity and mortality rates are higher among the rural population than among urban dwellers and the rates continue to worsen. In addition, the use of both modern and traditional methods of contraception has decreased since 2000 and traditional methods remain more widely used than modern methods.[iii]

Severe financial limitations impede the ability of health care providers to provide quality care. Most primary care facilities are unable to buy medications and other essential supplies or maintain their equipment. In lieu of their public servant salary, health personnel resort to asking for unofficial cash payments for services. Clients bring medications, medical supplies and even the linen necessary for services. With over 50% of the population living below the poverty line, the inability to pay for health care services is a substantial barrier to receiving care. Possibly due to economic hardship, the total fertility rate has declined steadily over the last decade at 1.7; it is well below the replacement level (2.1) .[iv]

To address the health needs of the most vulnerable rural populations, one must look to where those communities would first seek care: at rural medical ambulatories* and their satellite health posts (HP), also referred to as FAPs ('feldsher-acousher punkt'). Generally in HPs, one nurse or midwife works independently in a one-room structure providing basic first aid to the community. Although well-supported during the Soviet healthcare system, this level of care has been virtually abandoned over the last 10 years. Providers in health posts, paid less than subsistence wages, have limited opportunities to upgrade their knowledge and skills and rarely receive technical supervision from the health facilities to which they report. The posts are shabby, often lacking electricity, water, basic medical equipment and supplies.

Currently, health post providers play a rather limited role in maternal and child service delivery. Although they are ideally situated geographically to provide a broad spectrum of primary healthcare, including basic antenatal (ANC), postpartum and infant care (PP/INC), community nurses working at health posts are only expected to identify and refer pregnant women to urban-based out-patient facilities.

* Medical Ambulatory is a rural primary healthcare facility operated by physician

Project NOVA

In October 2004, the United States Agency for International Development (USAID) awarded Emerging Markets Group, Ltd. (EMG) together with IntraHealth International (IH) and Save the Children (SC) a contract for a 5-year program to improve RH/MHC in rural areas throughout Armenia, known as Project NOVA. Program activities began in 2005 in Lory, Shirak and Tavush marzes and in 2006 in Gegharkunik and Kotayk marzes (all in the north). In the next three years the project will work in five southern marzes: Armavir, Aragatsotn, Ararat, Syunik, and Vayotz Dzor.

For its upcoming interventions, Project NOVA has identified five RH/FP/MCH networks, one in each of the northern marzes. These health networks were selected on the basis of a set of criteria including: health indicators (annual number of deliveries, complications during delivery), physical conditions of facilities; number of physicians; number of health posts; and the extent of existing involvement by the international NGO community. Project NOVA developed a scale for ranking each network on these criteria, allowing for the selection of one in each marz (Appendix 1).

Taking into account results and lessons learned during Project NOVA's first two years, including findings from the 2006 mid-term evaluation by USAID, as well as changes in context (the evolving nature of legislation, service delivery and donor environments, as well as preliminary data from the 2005 Armenia DHS) Project NOVA has restructured its work moving from solely primary healthcare level to higher level, i.e. hospitals and maternity wards.

A health network is defined as health facilities linked both by ownership structure and referral patterns. A health network selected for inclusion in Project NOVA could include in-patient and outpatient service delivery sites, e.g. Maternity, Women's Consultation Center, Ambulatories, health centers and health posts.

To date, each year Project NOVA has included approximately 100 rural health facilities in its activities. These include rural ambulatories operated by doctors and health posts operated by nurses or midwives. Its activities are focused on the four areas described below.

Area 1: Improve RH/FP/MCH Performance of Select Networks

Previously (2004-2006) Project NOVA established clinical training sites in the five northern marzes. These clinical training sites are used to train healthcare providers in comprehensive MCH. This includes: (1) antenatal and postpartum care, (2) infant care, (3) essential newborn care and resuscitation, (4) emergency obstetric care and (5) infection prevention. Training is also provided in other domains.

The core training program of Project NOVA is the 8-modular competency-based learning (CBL) program called "Safe Motherhood Clinical Skills" (SMCS) for HP nurses. The project will train over 100 nurses from the selected networks in the six month program and provide basic medical equipment to facilitate nurse training activities and field practice.

Safe Motherhood Clinical Skills CBL Program

Module 1: Foundations of Nursery
Module 2: Infection Prevention
Module 3: Antenatal Care
Module 4: Providing Quality Intrapartum Care
Module 5: Postpartum and Newborn Care
Module 6: Infant Care
Module 7: Working with your Community
Module 8: Expanded Role of Midwife

Further, building on the previous experience of the PRIME II project (led by IntraHealth) in Lori marz, Project NOVA will conduct a series of 10-day training programs for family physicians from the selected networks in key RH/MCH competencies. The Project will also conduct 5-day training programs in Sexually

Transmitted Infections (STI) Integrated Care Management for primary care ob/gyns and dermato-venerologists from the five newly selected health networks in the south.

Project NOVA will also integrate family planning into postpartum and postabortion service delivery. This will include the development of integrated training curriculum, and training of trainers in postabortion and postpartum (PAC/PP) family planning (FP). An advanced training will also be provided to obstetrician-gynecologists, nurses, midwives and family physicians from the project's target Maternities, Medical Ambulatories and Women Consultation Centers (WCC).

Area 2: Strengthen management and supervision of rural RH/MCH services

During the first two years of project implementation, Project NOVA developed a project-wide Quality Framework that serves to guide and integrate quality in all project interventions. The Quality Framework defines quality in terms of five dimensions: technical competence, management and supervision, access, responsiveness, and environment. Based on this framework, the Project designed a site-level quality assurance (QA) initiative that highlights the role of internal quality teams in guiding the QA process.

Area 3: Improve RH/FP/MCH Policy Formulation and Implementation and Establish a Culture of Data-Driven Decision-Making

Project NOVA seeks to accelerate the momentum of policy change and improve the overall regulatory environment for RH/MCH healthcare services delivery. The project continuously supports policy change in the areas of improved clinical protocols, better targeted health financing and expanded authority of primary care providers. The project focuses on specific activities that seek to address those gaps and inefficiencies in the overall health system that hinder access to quality RH/MCH services in the rural areas.

In addition to policy activities, Project NOVA will document and disseminate lessons learned during the project. In the scope of Area 3, the Project will develop knowledge management capacity within NOVA and country-wide and will work to develop a culture of data-driven decision making. Further, Project NOVA will develop and produce a number of educational and communication materials on key RH/FP/MCH subjects for both clients and health care providers.

Area 4: Increase Consumer Demand for RH/FP/MCH Services through Community Education and Mobilization and the Renovation and Equipping of Health Posts

The Community Partnership for Health (CPH) is a hallmark program for Project NOVA. The Partnership increases community and local government involvement in the improvement of RH/FP/MCH in five project-supported networks. It works with local non-governmental organizations (NGO) to build marz capacity in community mobilization and to ensure sustainability of the program. The project has selected 60 communities in the five selected networks for engagement in these partnerships (see Appendix 2 for the list of communities). In addition, Project NOVA continues its community health education activities to increase general awareness of RH/FP/MCH issues through development of health education materials, institutionalization of health talks and increasing community nurse's capacity to conduct health talks, as well as strengthening links between health posts and their supervisory facilities.

V. Objectives of Baseline Assessment

Prior to implementing program activities in the five southern marzes Project NOVA has conducted a thorough assessment of all primary healthcare facilities in each project marz to:

- Select health networks for program activities;
- Gather information to guide decisions in program implementation and to select facilities to be targeted in different program components;
- Establish baseline values for most indicators in the Project Performance Management Plan (PMP);
- Collect information for the development of the project-wide Management Information System (MIS) and Geographic Information System (GIS).

The specific objectives of the baseline assessment were as follows:

a) To assess performance of physicians, nurses, midwives and feldshers working in health posts, medical ambulatories and health centers, polyclinics and hospitals/maternity wards in providing antenatal, postpartum and infant care.
b) To explore utilization rates of RH/FP/MCH services by conducting client-flow analysis at PHC facilities.
c) To explore the physical infrastructure and environment of PHC and higher level facilities involved in provision of RH/FP/MCH.
d) To assess the population's knowledge, attitudes and practices related to RH/FP/MCH.
e) To gather data on providers' postabortion and postpartum counseling practices.
f) To explore relationships between rural communities, local government authorities and medical facilities.
g) To explore clients' experience, attitudes and satisfaction vis-a-vis various aspects of reproductive health care.

VI. Methodology of Assessment

The overall methodology of the baseline assessment is based on IntraHealth assessment experience and Project NOVA Year 1 and 2 experience with several adjustments done as a consequence of the Project NOVA restructure and work on the network level[ivv].

The baseline assessment was designed to gather background data on the marz health system, fine-tune program planning and enable the project to target interventions in communities and facilities with the greatest need. Based on Project NOVA's Performance Management Plan (PMP), the monitoring and evaluation activities begin with a full survey of all PHC facilities within each of the five health networks.

A total of 12 instruments (Appendices 3-14) were used for the baseline community and facility assessments. Most of these instruments were adapted from previous tools used in PRIME II in Armenia, while a few were developed specifically for Project NOVA. Table 1 provides descriptions of each instrument.

Sampling and Sample Size

Sampling for Facility and PHC Providers' Assessments

The facility sampling list, obtained from the marz health departments, included all primary and secondary health care facilities (HPs, MAs, HCs, PCs, hospitals/maternities) in the networks of interest. Since the accuracy of these lists varied, the assessment team first cross-checked them with several local and international organizations.

In each facility with Ob/Gyns and family physicians, all Ob/Gyns and family physicians were included in the assessment (for performance observations). General practitioners and pediatricians working in medical ambulatories and health centers without Ob/Gyns and family physicians, were also included. All mid-level PHC providers (nurses, midwives and feldshers) working in health posts, medical ambulatories and health centers were included. Nurses and midwives working in polyclinics (PC) and in women's consultation centers (WCC) were not included, based on the assumption that they do not work with ANC and PP/IC clients separately from physicians.

Sampling for Household Survey

The assessment team selected a sample of 96 women with a child under 12 months of age from each of the target networks for a total sample of 480 women. The sample size was based on the formula $n=z^2pq/d^2$, permitting estimates of frequency in the population (90% C.I., 95% confidence levels) with a sample of 96 persons.

To obtain a sample of women, a probability proportional to size sampling technique was used based on the number of children under one year of age served by each of the pediatric polyclinics. The sampling procedure was implemented in the following stages:

1. Identification of all pediatric facilities where the records of under one-year old children are kept. In all cases these are district polyclinics' pediatric department.

2. Identification of all pediatric departments with names of under one-year old children. Number of pediatric departments generally equals to the number of pediatricians in the pediatric polyclinic.

3. Tabulation of the number of children under one year of age in each pediatric district (children recorded in the district pediatric journal).

4. Proportional distribution of the number of children/mothers to be sampled from each pediatric district/journal, based on the overall number of children registered in the district and total sample size.

5. Sampling of the children/mothers using a simple random sampling technique (a statistical calculator with random number generating option).

6. Generation of an additional list of women (50%) using the same technique as described in step 5 (excluding children/women already sampled for the main list) to substitute possible non-respondents.

Data Collection

The fieldwork took place on November 6 - 25, 2006. A total of 15 data collectors participated in the study: 4 clinical data collectors, 8 social data collectors and 3 community mobilizers collecting data on community relations and on community and health facility infrastructure.

All data collectors underwent a two-day training session in which they were familiarized with the content of the data collection instruments, standardized scenarios for role-playing and the research methodology and logistics. They also reviewed important issues in data collection and interviewing techniques. Each data collector received a copy of the data collector's manual summarizing all the issues covered during training.

For the most important data collection, brief descriptions of the modality of data collection are provided below:

- ***Facility assessment*** (physical structure, supplies, equipment) was conducted using a checklist developed based on WHO recommendations for facility physical structure, availability of basic medical supplies and equipment. Data was collected through observation and interview with facility personnel.

- ***Provider performance*** was conducted through observation during ANC and PPC visits. Taking into account that the number of real patients in the facilities (especially in rural) is low, scenarios were developed and used for simulating real clients. Providers were explained the reasons for simulating real cases and were instructed to act as in the real situation. Data collectors, who had clinical background, observed the client-provider interaction giving a score of completion for each executed items in the checklist.

- ***Provider interview*** sought to assess the provider perspectives regarding training and the job environment. The interview duration was around 20 minutes, the interview was conducted at the facility.

- ***Household Survey*** was conducted using a standardized questionnaire addressing women's knowledge of maternal and child health issues and their practice. The interviews were conducted at women's homes in a separate room to ensure confidentiality of information. The duration of interview was 20-30 minutes.

- ***Interviews with post-partum and post-abortion clients*** were conducted in the hospital delivery wards or maternities (in a confidential environment). The interviews were ano-

nymous. Structured questionnaires were developed for post-partum and post-abortion clients. The duration of interview was 4-5 minutes.

Data Entry, Management

After the data were collected it was entered into Project NOVA's MS Access-based MIS system and then transferred into SPSS v.13 for statistical analysis. To ensure data accuracy, frequency checks were performed to find and correct any outliers. When needed data from different sources were combined for further analysis.

Data Analysis

The data analysis was primarily descriptive: (frequencies and percentages), with some correlation testing. Where appropriate, data were disaggregated by different characteristics - usually by type of provider (doctor, nurse/midwife), type of facility (PC/WCC, HC/MA, and HP) or health network.

For the observation checklists, the tasks performed by a provider (and performed sufficiently well) were summed (with equal weights); that sum was then divided by the number of items in the checklist to provide an overall performance score (percent of tasks performed) for that provider. An average overall performance score for providers of a certain type or in a particular health network were also calculated. In addition performance scores for each item in the observation checklists were calculated to determine relative strengths and weaknesses with particular tasks.

Ethical Considerations

The assessment team obtained verbal informed consent from each study participant (both provider and client) prior to interview or observation. Prior to obtaining verbal consent participants were informed of the study's objectives, the benefits and possible risks of their participation in the study, and the voluntary nature of their participation. The consent forms for providers and clients are provided in Appendix 15.

Study Limitations

In the provider performance observations mainly simulated scenarios were used (cases where one of the data collectors acting as actors). The numbers of actual cases was too small to test for significant differences between provider performance with actual patients vs. actors in simulated cases.

The household interviews were conducted to assess women's knowledge and practices regarding antenatal and postpartum/infant care, including early childhood care, breastfeeding, knowledge of pregnancy and child care danger signs, etc. However given the fact that the interviews were conducted with mothers who gave birth within the past 12 months, accurate recall may have been more of a problem for those mothers who gave birth many months earlier than those with recent births; hence, there is some possibility for recall bias.

Instruments

Table 1 presents a list and brief description of the instruments used in the study. Copies of all instruments are provided in the Appendix 3-14.

Table 1. Instruments and Target Groups

Instrument	Details of the instrument	Target group
Observation of antenatal care visit (Appendix 3)	A checklist of 44 routine actions used to measure the performance of a PHC provider during an ordinary antenatal care visit	Ob/gyn
		Family doctors (FD)
		General Practitioners (GP) (only in cases where there was no Ob/Gyn or FD in a facility)
		Pediatricians (only in cases where there was no Ob/Gyn, FD or GP in a facility)
		Nurses, midwives (in HP, MA, HC)
Observation of postpartum and infant care visit (Appendix 4)	A checklist of 44 routine actions, intended to measure the performance of a PHC provider during an ordinary postpartum and infant care visit	Ob/Gyns
		FDs
		Pediatricians
		GPs (only in cases where there was no Ob/Fyn or FD in a facility)
		Nurses, midwives (in HP, MA, HC)
Inventory (Appendix 5)	A standardized checklist reviewing the standard minimal equipment, optional equipment, written guidelines, infrastructure, and medical supplies.	Facility
Facility Journal Review Form (Appendix 6)	A form used to assess the number of clients at PHC facilities during the period from October, 2005 to September, 2006.	Facility
Provider Questionnaire (Appendix 7)	A standardized questionnaire exploring provider performance factors, with a particular focus on supervision.	Nurses, midwives, physicians
Household Interview (Appendix 8)	A standardized questionnaire exploring women' perceptions of the quality of services and their knowledge of and practices in antenatal, postpartum and infant care	Women with a child under one year of age

Post-abortion Client Exit Interview (Appendix 9)	A standardized questionnaire exploring providers' family planning counseling after abortion	Women who underwent abortion prior to discharge from the facility
Post-partum Client Exit Interview (Appendix 10)	A standardized questionnaire exploring providers' family planning counseling in the post-partum period	Women in postpartum period prior to discharge from the facility after delivery
Community mapping (Appendix 11)	A standardized questionnaire exploring rural communities' infrastructure and communication.	Rural communities with HPs
Interview with community member (Appendix 12)	Semi-standardized questionnaire aimed at exploring the relations between the local government authorities, providers and the community	Community member/leader (i.e. school principal) in a community with an HP
Interview with community health provider (Appendix 13)	Semi-standardized questionnaire aimed at exploring the relations between the local government authorities, providers and the community	Provider in a community with an HP
Interview with community authority (Appendix 14)	Semi-standardized questionnaire aimed at exploring the relations between the local government authorities, providers and the community	Village mayor in a community with an HP

VII. Results

The results of the baseline assessment in the selected health networks of Armavir, Ararat, Aragatsotn, Vayots Dzor, and Syunik marzes gave essential information on health care situation in the five Project NOVA marzes and targeted health networks prior to project interventions. They also provide data for decision-making in the four project areas and assist in identifying health facilities and communities most in need of Project NOVA interventions.

Health Infrastructure

The infrastructure within five health networks was examined in the baseline assessment. This included physical condition of facilities; equipment and supplies; the structure, size and composition of the health work force; and patient load.

Figure 1: Health Network

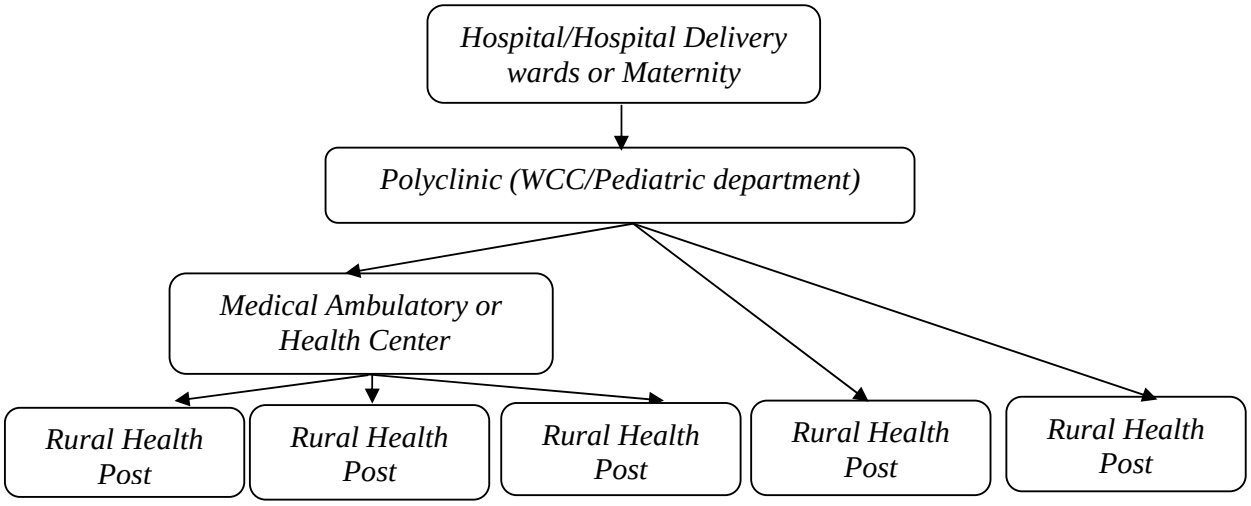


Figure 1 represents the hierarchical system of a typical Project NOVA health network*. The hospital, polyclinic and/or medical union heads the network. They supervise several lower level facilities. Many medical ambulatories in turn supervise the health posts (1-6 health posts per medical ambulatory).

In spite of this top-down management system, many supervisory health facilities still lack information on their subordinate facilities, including information on physical conditions of the facility, drug supply, medical personnel, etc.

* The presented picture cannot be generalized to all health networks in Armenia.

Table 2 presents information on primary level healthcare facilities in the health networks of five marzes to be supported by Project NOVA in 2006 - 2009. The networks have 141 urban and rural healthcare facilities, including 5 polyclinics for pediatric and adult care; 38 rural medical ambulatories (operated by a physician) and one health center (rural hospital); and 97 rural health posts, operated by a nurse, midwife or feldsher. Antenatal care is typically provided at the Women Consultation Centers (WCC) which are either integrated into polyclinic or maternity hospitals or into maternity wards in the general hospitals. WCC are available in all five health networks.

Table 2: Number and types of PHC Facilities in Targeted Health Networks

	PC	**MA**	**HPs**	***Total***
Armavir	1	19	12	*32*
Vedi	1	8	9	*18*
Talin	1	4*	36	*41*
Sisian	1	7	25	*33*
Vayk	1	1	15	*17*
Total	***5***	***39***	***97***	***141***

****** Includes 1 Health Center*

One of the important initiatives of Project NOVA is to increase the number and quality of supportive supervisory visits. Project NOVA defines a supervisory visit as a visit during which the supervisor performs administrative tasks; attends patients; works in the clinic with the nurses; inspects the environment and instruments; solicits client feedback on services; gives updates on procedural changes; clarifies instructions; discusses difficult clinical cases; suggests a service quality improvement plan; consults with providers before making decisions, etc. According to baseline results, only two out of three supervisory visits to health posts met this definition.

Table 3: Mean Number of Monthly Supervisory Visits to Health Posts in Past Two Months and Mean Duration of a Typical Visit

	Mean Number of visits/month*	Mean duration of visit (minutes)
Armavir	3.4	234
Vedi	4.0	240
Talin	0.5	180
Sisian	0.8	136
Vayk	1.9	205
Overall	***2.57***	***209***

****** The difference was significant at p<0.01*

Health Posts (HP) are the lowest level facilities in the PHC system. They are operated by mid-level health personnel (nurses, midwives and feldshers). The HPs are supervised by the medical ambulatory, health center or polyclinic. According to current MoH regulations, a representative of the supervising higher level healthcare facility (physician) should visit each health post at least once per month. Table 3 presents the number of supervisory visits to health posts in the past two months and their mean duration at baseline in the five health networks. Health post nurses reported an average of 2.57 supervisory visits per month, with an average duration of 3 hours and 28 minutes. The average number of supervisory visits per month ranged in the five networks from 0.5 to 4. Approximately 16% of the health posts reported not having any visit from the supervisory facility in the two months preceding the assessment. This may be why supervisory health facilities still lack information on their subordinate facilities, including information on physical conditions of the facility, drug supply, medical personnel, etc.

The highest average number of visits was reported in the Vedi network (4 visits per month) and the lowest was reported in the Talin network (0.5 visits per month). Duration of the visits was similar across the networks.

Service Utilization and Patient Flow

The assessment team determined the utilization of PHC services by reviewing patient records and facility journals. Patient medical records, facility journals, record/journal keeping practices and regulations differ in different facilities. Some rural health posts keep patient medical records at the attached physician's office (and the records are not regularly available for the nurse and the client), in others the HP nurse keeps all records in the health post or at her home. Keeping medical records at home is a common practice for health posts that have poor physical conditions or lack allotted space altogether.

The patient records review revealed that rural PHC facilities, overall, have a low patient load and that a very small number of pregnant and post-partum women visits rural health posts or medical ambulatories for antenatal/postpartum care. Generally, rural health post and ambulatory nurses identify and register pregnant women then refer them to the gynecologist in the higher level supervisory clinic (MA, PC or WCC). A review of facility journals and patient medical records identified that patient flow to primary healthcare facilities for ANC and PPC is rather low. On average 21 pregnant women and 78 post-partum women visit a health post in a 12 months period. The situation in medical ambulatories and polyclinics with full time physician(s) is slightly better. The higher rate of visits relates to the availability of a physician in polyclinics and medical ambulatories. Table 4 presents the average number of clients per year for those facilities with relevant services and available records.

Table 4: Yearly Averages of Recorded Patient Visits by Type of Visit And Type of Facility:*

	ANC Visits			*PPC Visits*			*Pediatric Care Visits*		
	HP	*MA*	*PC*	***HP***	*MA*	*PC*	***HP***	*MA*	*PC*
Armavir	**34**	82	7791	**58**	26	N/A	**235**	350	5245
Vedi	**12**	67	N/A	**35**	36	N/A	**222**	407	N/A
Talin	**20**	98	N/A	**6**	87	N/A	**69**	92	N/A
Sisian	**6**	38	N/A	**6**	12	N/A	**66**	253	176
Vayk	**15**	N/A	N/A	**4**	N/A	79	**41**	N/A	942
Overall	**21**	78	7791	**13**	29	79	**106**	378	2121

**Number of visits is not adjusted based on the number of providers and population in the catchment area for a given type of facility.*

** Presented data is not correlated with the size of the catchment population, but rather collected for the future trend analysis as one of the project objectives is to increase utilization of health posts. .*

All rural health facilities (i.e. health posts and medical ambulatories) reported referring pregnant women to a regional facility with ob/gyn (WCC and/or maternity) even if the pregnancies were not high-risk and complications had not been reported. Table 5 reports the average number of pregnant women referred to a WCCs and maternities (for all purposes: laboratory tests, physician examinations). In case when regional WCCs and maternities identify severe complications they refer pregnant women to specialized centers in Yerevan.

In case of postpartum referrals, in most cases referrals are associated with complications and/or danger signs.

Table 5: Referrals Per Health Facility (yearly average)

Type of Facility	Mean number of pregnant women referred	Mean number of postpartum women referred
Health Posts	13.6	0.5
Medical Ambulatory	42.4	0
Health Center	26.8	0
Polyclinics/WCCs	266	0
Maternity Hospitals*	5.7	1.0

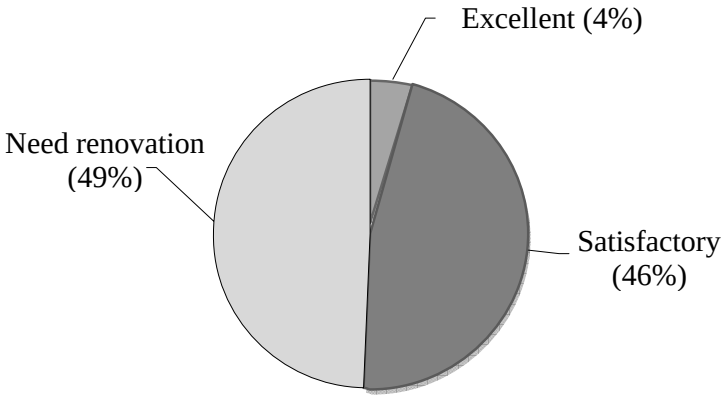
* Referrals to the tertiary level-facility

Facility Physical Conditions, Equipment and Supplies

The assessment team used standardized inventory checklists during observations and provider interviews to determine the physical condition and state of equipment needed for RH services at the PHC facilities (Appendix 12). This included the condition and/or availability of electrical power, running water, toilet, heating system, windows, floor and the availability of basic furniture and refrigerators.

Assessment results revealed the unsatisfactory physical conditions in many health facilities in the five health networks, with health posts being the worst. Only four percent of the health posts were in excellent condition, while almost half needed renovation. Health posts were insufficiently equipped with essential items needed to provide basic healthcare at the primary level.

Figure 2: Physical conditions of Health Posts

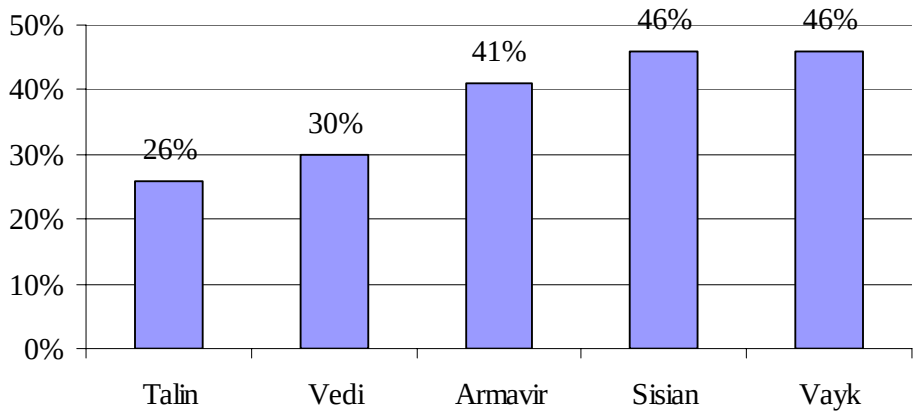


The assessment team collected data on the overall condition of facilities including: the condition and/or availability of electrical power, running water, toilet, heating system, windows, floor and the availability of basic furniture and refrigerators.

Detailed analysis of existing equipment and physical conditions at different levels of the healthcare system revealed that HP conditions are the worst as compared to medical ambulatories, health centers, polyclinics and women consultations. The majority of HPs are in need of renovation and a significant portion of PHC facilities operate under medium quality physical conditions. In general, medical ambulatories and polyclinics have a better supply of essential items, e.g. stethoscope, scales, than lower level facilities.

Availability of the drugs in the health facilities was assessed using a standard checklist of drugs recommended by WHO for low resource primary health care facilities (See Attachment 5.) Health posts were least equipped with essential drugs, Talin network having almost twice less drugs as compared with Vayk and Sisian networks (Figure 3).

Figure 3: Availability of Drugs in Health Posts



Primary Healthcare Workforce

PHC providers in Armenia offer outpatient medical services at urban polyclinics, rural medical ambulatories/health centers and rural health posts. Table 6 shows the number of PHC providers at different types of rural healthcare facilities. Armavir network, being the largest network has the largest number of healthcare personnel.

Table 6: Number of Primary Health Care Providers in Rural Health Facilities by Type of Facility

	MA & HC				HP	
	MDs		Nurses		Nurses	
	#	mean	#	mean	#	mean
Armavir	34	2.13	63	3.7	14	2.0
Vedi	17	2.83	36	5.1	6	2.0
Talin	17	4.25	52	13.0	9	1.8
Sisian	12	2.4	18	2.5	3	1.5
Vayk	N/A	N/A	3	3.0	1	1.0
Total	80	2.5	172	4.8	33	1.8

The mean number of health posts nurses ranged from 1-2 per health post while the average number of nurses in medical ambulatories and health centers ranged from 2.5 in Sisian to 13 in Talin. The mean number of physicians ranged from 2.13 to 4.25 per health center or ambulatory.

Provider Performance

Project NOVA considers provider performance to be a key factor in the quality of health care provision and in client satisfaction. For this assessment it focused on provider performance in two main technical areas: antenatal care (ANC) and postpartum and infant care (PP/IC). The assessment team measured performance in ANC and PP/IC visits of all providers delivering these services in primary healthcare facilities and hospital/maternity wards in the five networks. Both physicians and nurses were eligible for assessment (a detailed description of eligibility criteria is provided in Table 1).

The assessment measured providers' performance via observations of providers delivering ANC and PP/IC care. Standardized observation checklists were used to evaluate the patient-

provider interaction, counseling, clinical skills and performance in specific technical areas. The assessment team developed the checklists on the basis of WHO recommendations and national government norms in relevant specialties. Due to low number of real cases in the health care facilities, the evaluation team applied standardized scenarios and actors simulating patients.

When analyzing the data an 85% cut-off was used (i.e. the provider performing 85% of the essential tasks in the checklist) as an acceptable standard for satisfactory performance in each of the two technical areas.

Antenatal Care

The assessment team measured provider's performance in delivering ANC using a checklist of 44 items in the following areas: client-provider interaction (CPI) (10 items), counseling (8 items), clinical skills (18 items) and ANC specific skills (8 items). ANC care was assessed by observing 10 real cases (4.3%) and 225 simulated cases (95.7%). A significant difference (p=.001) was observed between provider performance in real cases and in simulated cases, with performance being superior in real cases.

Nurses, Midwives, Feldshers

Mid-level PCH providers' performance in providing antenatal care was significantly lower than the established standard of 85% (performing 85% of essential tasks). In fact, none of the surveyed mid-level providers met the 85% performance standard. Data analysis did not demonstrate statistically significant correlations between ANC performance scores and providers' age, experience (number of years worked as nurse, midwife or feldsher) or years working in the given facility.

Low performance in ANC of mid-level personnel can possibly be explained by a combination of factors: (1) lack of pre-service antenatal care training; (2) lack of in-service education and coaching, mentoring or in-service non-formal training in ANC; (3) almost non-existent antenatal client flow at HPs; and (4) insufficient quality of supervisory visits and support from a supervising health care facility.

Table 7: Average Mid-level Personnel Performance Scores in ANC (% Highest Possible Score)[+]

	Armavir mean% (n)	*Vedi mean% (n)*	*Talin mean% (n)*	*Sisian mean% (n)*	*Vayk mean% (n)*	*Total mean% (n)*
Type of Provider						
Nurse	35 (45)	28 (27)	25 (39)	23 (30)	29 (16)	28 (157)*
Midwife	43 (12)	47 (7)	40 (4)	16 (1)	--	42 (24)*
Feldsher	19 (1)	--	12 (1)	--	--	15 (2)*
Type of Facility						
Health Post	28 (17)	20 (10)	23 (38)*	22 (21)	30 (15)	24 (101)*
Medical Ambulatory	39 (38)	36 (21)	47 (5)*	21 (8)	7 (1)	36 (73)*
Health Center	42 (3)	50 (3)	63 (1)*	35 (2)	--	45 (9)*
Total	*36 (58)*	*32 (34)*	*26 (44)*	*23 (31)*	*28 (16)*	*30 (183)*

[+] *Figures rounded up and down*

** Statistically significant difference at p < 0.001*

As illustrated in Table 7, mid-level personnel in health centers performed better in ANC than in medical ambulatories and HPs. Providers in HPs had the lowest scores. The providers at health centers and medical ambulatories may have performed better because they are involved in providing ANC and work more closely with physicians.

Overall the average performance of mid-level primary healthcare providers in ANC was 30.1% (std.=14.7, range=4.65-81.4%), meaning that approximately 13 tasks were performed out of the 44 in the checklist. There was a statistically significant difference between the health networks, with providers from Armavir and Vedi performing better than those in Vayk, Talin and Sisian (Figure 4).

Figure 4: Mean ANC Performance Scores of Mid-Level Providers by Network

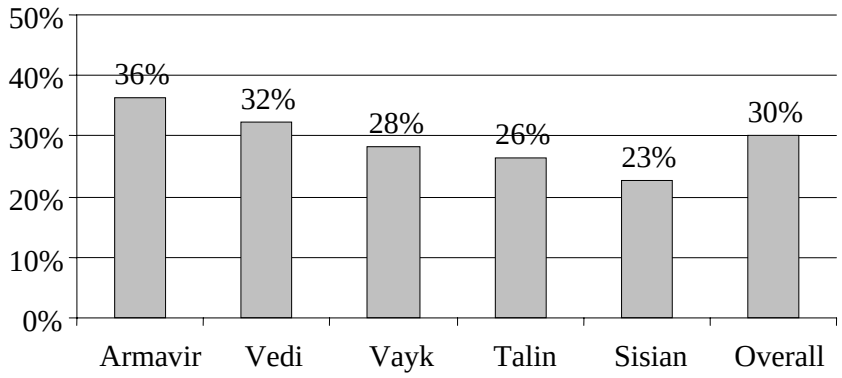


Figure 5 illustrates providers' ANC performance by aspect of care. Providers on average had their highest performance in 'ANC specific skills' and their worst performance in counseling.

Figure 5: Mean ANC Performance Score of Mid-level PHC Providers by Aspect of Care

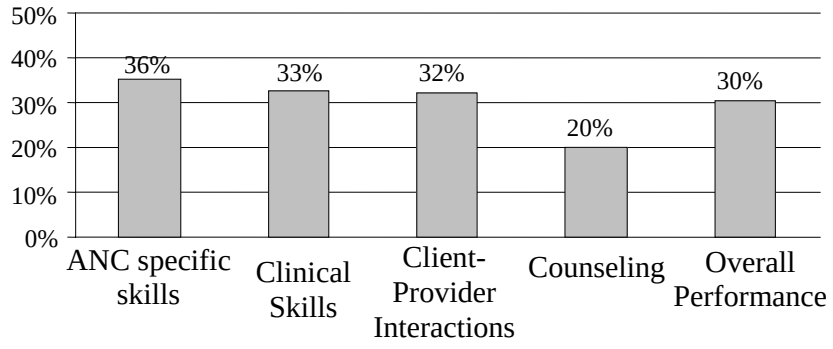


Table 8 demonstrates that there was consistency across marzes, with counseling consistently having the poorest performance percentage scores and ANC specific skills the highest.

Table 8: Mid-Level Provider Performance in Different Aspects of ANC Care: Mean number of Tasks Performed and Percent of Tasks Performed^

	Armavir mean # (%)	*Vedi* mean # (%)	*Talin* mean # (%)	*Sisian* mean # (%)	*Vayk* mean # (%)	*Total* mean (%)
Client-Provider Interactions (9 items)	2.8 (31)	3.4 (38)	2.6 (29)	3.0 (33)	2.8 (31)	3.0 (32)
Counseling (9 items)	2.3 (25)	1.9 (21)	1.3 (15)	1.5 (16)	2.0 (22)	1.8 (22)
Clinical Skills (18 items)	7.2 (40)	6.4 (35)	5.3 (29)	4.1 (23)	5.2 (29)	5.9 (33)
ANC Specific Skills (8 items)	3.7 (46)	2.7 (33)	2.8 (35)	1.7 (21)	2.7 (34)	2.8 (36)
Overall Performance	***15.9 (36)***	***14.2 (32)***	***11.6 (26)***	***10.0 (23)***	***12.5 (28)***	***13 (30)***

^*Mean # is the average number of tasks performed out of the total number of items for a particular aspect of ANC care. Percent is the average percent of tasks performed.*

Physicians

Table 9: Average PHC physicians performance score by specialty

	Mean %	*n*	*st. d.*
General practitioner	48	11	16
Ob/gyn	63	19	15
Pediatrician	51	6	18
Family doctor	64	17	17
Neonatologist	50	1	--
Total	***59***	***54***	***17***

As indicated earlier, physicians performed better than mid-level personnel, in ante-natal care though they did not meet the pre-defined standard of performing 85% of the tasks. Family physicians and gyne-cologists performed comparatively better than general practitioners or neonato-logists (Table 9, 10).

As a general rule, general practitioners, pediatricians and family physicians do not provide ANC within their medical practice, instead referring clients to ANC specialists (ob/gyn). However, in facilities (mainly HPs, MAs and occasionally in HC) with no ob/gyn present, other providers are expected to provide basic ANC to clients.

Table 10: Physicians' Performance in ANC By Type of Facility: Average Score[+]

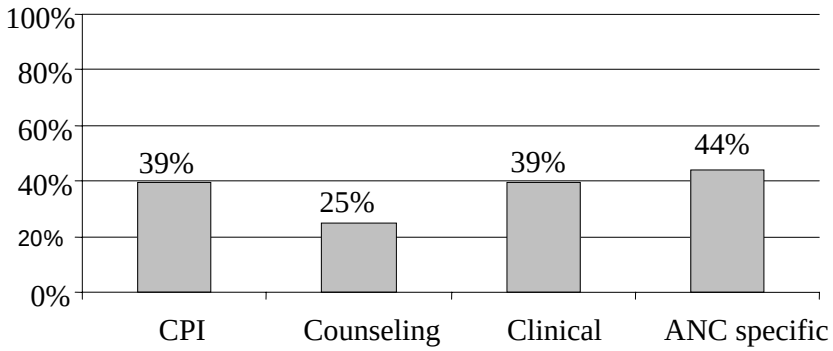
	MA	***HC***	***PC***	***HSP***
	Mean % (n)	*Mean % (n)*	*Mean % (n)*	*Mean % (n)*
General Practitioner	48.0 (9)	44.5 (2)	--	--
Pediatrician	38.2 (3)	--	63.8 (3)	--
Family doctor	63.6 (14)	68.9 (3)	--	--
Ob/Gyn	61.9 (1)	--	49.9 (3)	65.3 (15)

[+]*Mean (Average) score is mean percent of tasks performed.*

It is possible that family physicians have the highest score on ANC because they are currently receiving or have completed a refresher training within the Armenia Social Transition and World Bank Family Medicine programs which includes ANC modules. Ob/gyns have the second highest score as they are the primary providers working with ANC patients.

Figure 6 demonstrates physicians' scores in different aspects of ANC service delivery. Their lowest score was in counseling and their highest in ANC (i.e. correctly determining pregnancy period, examining the breast, inspecting abdomen for scars, pigmentations, striae, etc). Client-provider interaction (CPI) and clinical skills were executed to 39%.

Figure 6: PHC Physicians' Mean Performance Scores in Different Aspects of ANC[+]



[+] *Average percent of tasks performed*

Postpartum/Infant Care

The assessment team measured provider performance in delivering PP/IC using a checklist of 44 items pertaining to: client-provider interaction (9 items), counseling (10 items), clinical skills (8 items), PPC specific skills (5 items) and IC specific skills (12 items). PP/IC care was assessed by observing 6 real cases (2.2%) and 268 simulated cases (97.8%).

The assessment revealed a low level of performance for both mid-level personnel and physicians in PP/IC, with physicians performing relatively better (Table 11). Physicians performed 52% of the tasks versus 35% by mid-level personnel. None of the mid-level providers surveyed met the established satisfactory performance rate of 85%. Amongst physicians the highest score was in Vedi network and the lowest in Vayk network. Amongst nurses the highest score was in Armavir network and the lowest in Talin network. The 6-8%

higher performance of Armavir nurses was likely related to several training events which nurses had received through other international collaborative projects implemented in the network.

Table 11: Provider's Mean Postpartum and Infant Care Performance Score by Provider Type[+]

	Armavir mean (n)	*Vedi mean (n)*	*Talin mean (n)*	*Sisian mean (n)*	*Vayk mean (n)*	*Total mean (n)*
Type of Provider						
Physicians	52% (39)	59% (5)	46.% (11)	54% (13)	47% (8)	52% (76)
Nurses	41% (61)	33% (34)	30% (50)	32%(33)	33%(16)	35% (194)

[+]*Mean score is mean percent of tasks performed.*

Amongst physicians, obstetricians-gynecologists and pediatricians had the highest performance observed in PP and IC respectively. This observation is concordant with the mean duration of visits: ob/gyns, pediatricians and family physicians had the longest PP/IC visits. This higher level of performance may be attributed to their general training and responsibilities at the workplace.

Table 12 illustrates that providers' (nurses and physicians) poorest performance in PP/IC care was in clinical skills and their best performance was in PPC specific skills.

Table 12: Provider Performance in Different Aspects of PP/IC Care By Network*

	Armavir mean % (n)	***Vedi mean %(n)***	***Talin mean %(n)***	***Sisian mean % (n)***	***Vayk mean % (n)***	***Total mean % (n)***
Client-Provider Interaction	45% (101)	41% (39)	32% (65)	37% (47)	45% (24)	40% (276)
Counseling	43% (100)	39% (39)	35% (65)	41% (47)	32% (24)	40% (275)
Clinical Skill	31% (100)	18% (39)	24% (65)	18% (47)	19% (24)	24% (275)
PPC specific	63% (100)	42% (38)	51% (65)	38% (47)	47% (24)	52% (275)
IC specific	49% (101)	39% (39)	36% (65)	49% (47)	44% (24)	44% (276)

** Significant between marz differences were observed for all aspects of PP/IC*

Household Interview

Household interviews with mothers of children under-one year of age were conducted to assess the following:

- women's knowledge of the basics of antenatal, postpartum and infant care
- women's experiences and satisfaction with antenatal care, labor and postpartum/infant care
- women's knowledge and practices in the use of family planning and contraceptive methods
- women's financial access to maternal and child health services

The mothers were identified by district pediatric journal records and selected randomly via a probability proportion to size sampling technique (see Methodology section). A total of 468* women, who gave birth in the preceding 12 months, participated. Data collectors went to respondents' homes to conduct the interviews.

Demographic Characteristics

The mean age of respondents was 25 years (std.=4.64, range = 16-43 years. Almost all women were married (95%); only 5% lived alone (single, widowed, divorced or separated). Slightly more than half of the women had secondary school education, one third had secondary-special education (equivalent to US college level education) and about 13.5% had higher education. No statistically significant differences were detected between health networks for any of the demographic characteristics.

Table 13: Mothers' Background Characteristics (n = 468)

	Armavir	***Vedi***	***Talin***	***Sisian***	***Vayk***	***Total***
Mean Age in years (std.)	24.7 (4.9)	25.5 (4.8)	25.0 (4.4)	24.9 (4.2)	25.8 (4.9)	25.1 (4.6)
Education (completed)						
Secondary school education	51.9%	55.0%	65.5%	40.8%	46.8%	51.8%
Secondary-special education	31.1%	30.0%	20.2%	44.9%	29.1%	31.5%
Student (institute, university)	1.9%	2.0%	2.4%	6.1%	3.8%	3.2%
Higher-level graduate (institutes, university)	15.1%	13.0%	11.9%	8.2%	20.3%	13.5%
Mean Number of children (std)	1.85 (0.89)	1.90 (1.01)	2.04 (0.99)	1.86 (0.97)	1.85 (0.89)	1.90 (0.95)
Number of Children						
One child	41.5 %	44.0%	34.5%	42.9%	44.3%	41.5%
Two children	37.7%	30.0%	39.6%	36.7%	30.4%	34.5%
Three or more children	20.8%	26.0%	25.9%	19.4%	25.3%	24.0%

** The percentages do not sum to 100% due to rounding*

* The sample size was calculated to be 96 women from each network (480 women), however due to small number of women of reproductive age in some villages the actual number of women contacted was 468.

Access to ANC, PP/IC and Obstetrics/Delivery Care

The assessment team measured women's access to healthcare using a set of questions on women's practices and experiences with ANC, PP/IC and Obstetrics Care (delivery), with respect to their current child under-one year's of age.

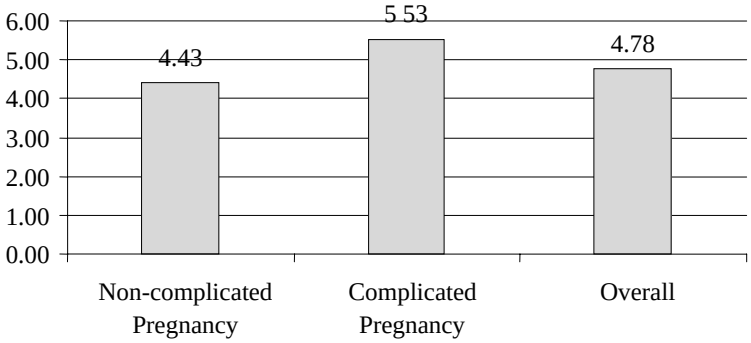
The mean number of ANC visits for non-complicated pregnancies averaged at 4.43 visits (std=2.8, range= 0-30 visits) and 5.53 for a pregnancy considered complicated (Table 13; Figure 7). Current Armenian MoH regulation suggests having at least 4 visits for a non-complicated pregnancy, thus the average number of visits might seem adequate, however one should be careful in interpreting this, since the quality of the visits is not sufficient (as it is discussed in the Provider Performance in ANC and PP/IC sections).

Table 13: Mothers' Mean Number of ANC Visits[+]

	Mean Number of Visits (Std)		
Health Network	*Non-Complicated pregnancy*	*Complicated pregnancy*	*Overall Number*
Talin	3.90 (2.43)	4.29 (1.95)	4.00 (2.31)
Vedi	4.55 (2.18)	5.70 (2.75)	4.95 (2.45)
Armavir	4.43 (4.10)	5.59 (2.94)	4.72 (3.86)
Sisian	5.00 (1.56)	6.53 (6.65)	5.56 (4.23)
Vayk	4.25 (2.32)	4.96 (2.05)	4.51 (2.24)
Total	***4.43 (2.77)***	***5.53 (3.94)***	***4.78 (3.22)***

[+]*During pregnancy with their current child under 12 months of age.*

Figure 7: Mean Number of ANC Visits by Type of Pregnancy



The mean gestational age at the time of the first ANC visit was 3.63 months (with a range from 1 to 9 months) (Table 13). Women were asked why they postpone antenatal care seeking, one in three respondents felt that women do not seek medical care during first trimester if no medical problem arises and one in four participants reported that financial difficulties delay care seeking.

Women from Sisian tended to apply for ANC care earlier than women from other health networks, just as they tended to have more visits. This may be because more women from Sisian have higher educational status as compared with women from other health networks (i.e. less women from Sisian discontinue their education after completion of secondary school).

Table 13: Gestational Age at First ANC visit[+]

	Less than 12 weeks	*16 and less weeks (cumulative)*	*More than 16 weeks*	*Gestational age (months) mean (std)*
Talin	49.4%	69.1%	*30.9%*	3.80 (1.60)
Vedi	49.5%	79.8%	20.2%	3.68 (1.25)
Armavir	44.8%	78.1%	21.9%	3.64 (1.46)
Sisian	60.4%	84.4%	15.6%	3.43 (1.21)
Vayk	55.7%	81.0%	19.0%	3.61 (1.23)
Total	51.7%	78.7%	21.3%	3.63 (1.35)

[+]*During pregnancy with their current child under 12 months of age.*
Percentages do not sum up to 100% due to rounding

For their first ANC visit the majority of women (75%) saw a physician (among those women 96% saw an Ob/Gyn), 12% a nurse/midwife, and 13% a nurse/midwife and physician jointly.

Childbirth preparation classes were initiated by the MOH a few years ago to prepare pregnant women for childbirth, delivery and proper postpartum self-care. The childbirth preparation classes are to be conducted by Ob/Gyns throughout the country. However, despite this policy, only four women of the baseline assessment's sample of 467 women (1%) had attended childbirth preparation classes. This number is indicative of the low enforcement of the MoH policy and indicates the need for further research on this issue.

A series of questions were posed in the interviews to measure clients' satisfaction with ANC/PPC and delivery. Vast majority of women (85%) reported satisfaction with the ANC they received and one or two women out of ten are neither satisfied nor dissatisfied with the antenatal care. Interestingly, women from Sisian, who paid the most frequent and earliest visits to health care facilities are least satisfied with the services they receive. As illustrated in Table 14, very few women indicated that they were dissatisfied with the ANC they received. In part this may have been due to a cultural predisposition not to express a negative attitude toward a healthcare provider, who is in most cases a community member.

Table 14: Mothers' Satisfaction with ANC Care [+]

	Very Satisfied	*Somewhat Satisfied*	*Niether Satisfied nor Dissatisfied*	*Dissatisfied*
Talin	48.8%	39.6%	10.7%	1.2%
Vedi	55.7%	29.9%	12.4%	2.1%
Armavir	50.0%	32.1%	17.0%	0.9%
Sisian	32.3%	49.0%	14.6%	4.2%
Vayk	40.5%	46.8%	11.4%	1.3%
Total	***45.7%***	***39.0%***	***13.4%***	***1.9%***

[+]*During pregnancy with their current child under 12 months of age.*
[+] *The percentages do not sum to 100% due to rounding*

The women interviewed were asked a series of questions about specific ANC services:

- 20% of the women reported receiving iron supplements from the healthcare provider; of those women who received them, only 40% reported taking them. The majority of women who did not take the iron supplements they were given reported that they did not feel they needed them.

- more than half the women (60%) reported that their healthcare provider informed them about pregnancy danger signs. However, on average, less than one danger sign was recognized by the women.

Knowledge of Safe Pregnancy

Table 15 summarizes women's knowledge of safe pregnancy related behavior and their practices.

Table 15: Mothers' Knowledge and Practices Relevant to Safe Pregnancy

	Talin	Vedi	Armavir	Sisian	Vayk	***Total***
Received iron supplements during pregnancy	16%	17%	17%	17%	32%	19%
Took iron supplements after receiving them	26%	50%	43%	29%	55%	40%
Had a provider who mentioned pregnancy related danger signs	61%	60%	62%	58%	58%	60%
Had a provider who consulted on proper nutrition	73%	65%	75%	77%	79%	73%
Danger Signs Recognized						
Number of pregnancy danger signs recognized out of 7 maximal/mean (std)	1.4 (0.9)	1.5 (0.9)	1.6 (0.7)	1.4 (0.8)	1.7 (1.1)	1.5 (0.9)
Specific Danger Signs Recognized						
Bleeding	56%	53%	63%	61%	62%	59%
Swelling of hands/face and severe headache	17%	5%	5%	7%	19%	10%
Fits	5%	14%	9%	7%	9%	9%
No fetal movement after 24 weeks	7%	6%	4%	7%	10%	7%
Fever	7%	5%	9%	4%	5%	6%
Severe pain in abdomen or when passing urine	37%	48%	61%	35%	50%	47%
High blood pressure	12%	18%	7%	19%	19%	15%

Table 16. Mean Duration of Stay in the Health Facility after Delivery: By Health Network [+]

Health Network	Mean # Days*	Std.
Talin	3.22	1.47
Vedi	4.19	2.99
Armavir	4.46	3.80
Sisian	5.55	2.86
Vayk	4.50	2.40
Total	4.42	2.965

[+] *After pregnancy with their current child under 12 months of age.*
** The difference between networks was significant at p=0.000*

Women were also asked to report the average duration of their stay in the health facility after the delivery. Interestingly, women from Sisian reported significantly longer stay (5.55 days in average) as compared with other health networks. The shortest stay in the health facility was reported by women from Talin (Table 16). Given there is no national recommendation on the hospital stay following delivery, the hospital staff applies different approaches in different networks.

About 30% of the women reported having complications during delivery; of those women 88% were satisfied with how the complications were handled.

The baseline survey also examined women's knowledge and practices with respect to child care and nutrition (Table 17).

Child Care and Nutrition

Breastfeeding

Ninety-two percent of women had ever breastfed their child. Of those women, 87% practiced exclusive breastfeeding. The average duration of exclusive breastfeeding was approximately 3 months. This pattern was universal across the 5 health networks.

Rooming in patterns were reported to be rather high; 94% of mothers reported being with the child in the same room while in the maternity. However only 45% of mothers reported putting the child to their breast within the first hour of the birth, with a range from 27% to 77%. The significantly higher percent of mothers who initiated early breastfeeding was in Talin (77%) versus only 26.8% in Armavir.

Mothers' Knowledge of Child and Newborn Danger Signs

The majority of mothers were not aware of the newborn and infant danger signs, which require immediate intervention by the healthcare provider (Table 17). Of seven danger signs in newborns the mean number of signs recognized ranged from 0.9 to 1.2. Of nine danger signs for children under 12 months of age, the mean number of signs recognized ranged from 1.3 to 1.7. Fever and diarrhea were the most widely recognized danger singes.

The findings demonstrate the need for an increase in mother education's on the recognition of child and newborn related danger signs.

Mothers' Knowledge and Practices Pertinent to Postpartum Care

Table 18 provides results on mothers' knowledge and practices relevant to postpartum care. It illustrates that mothers' knowledge of postpartum danger signs was low. On average they recognized only 1.5 out of 7 danger signs. Bleeding and severe abdominal pain were the most commonly recognized.

In the postpartum period 70% of women reported seeing a healthcare provider on average within 18 days after discharge from the hospital. It should be noted, however, that this refers

to any type of healthcare provider; in some cases these might be pediatricians focusing on child care only.

Table 17: Child Care and Nutrition: Mothers' Knowledge and Practices[+] **(n=468)**

	Talin	Vedi	Armavir	Sisian	Vayk	Total
Breastfed child	94%	94%	92%	91%	92%	91%
Practiced exclusive breastfeeding	91%	85%	90%	89%	81%	87%
Mean number of months of exclusive breastfeeding	3.36	3.43	2.95	3.95	3.20	3.38
Median number of months of exclusive breastfeeding	3.00	3.00	3.00	3.25	3.00	3.00
Put child to breast within first hour after delivery (of those who breastfed)[*]	77%	36%	27%	44%	47%	45%
Did not have rooming-in with infant	5%	4%	11%	5%	6%	7%
Mean number of days after delivery seen by pediatrician	16.1	21.6	15.4	18.6	17.9	17.9
Median number of days after delivery seen by pediatrician	4.0	10.0	5.0	7.0	7.0	7.0
Knowledge of childcare						
Knows appropriate liquid intake for child with diarrhea	53%	62%	60%	44%	69%	57%
Newborn danger signs recognized (under 1 month)						
Mean # signs recognized (out of 7)	1.1	0.9	1.0	1.0	1.2	1.0
(std.)	(0.8)	(0.8)	(0.8)	(1.0)	(1.2)	(0.9)
Specific newborn danger signs recognized						
Trouble breathing	8%	9%	10%	6%	4%	8%
Poor suck or is not able to suck	16%	13%	11%	9%	23%	14%
Feels hot or cold	43%	27%	37%	58%	46%	41%
Pus or redness any place on the baby	22%	26%	22%	15%	31%	23%
Fits, rigid, stiff, floppy	2%	8%	6%	2%	0%	4%
Born too small	8%	2%	4%	0%	10%	5%
Poor skin color	16%	11%	9%	15%	10%	12%
Child danger signs recognized (under 12 month)						
Mean # signs recognized (out of 9)	1.7	1.3	1.4 (0.9)	1.7	1.7	1.5
(std)	(0.9)	(0.9)		(1.1)	(1.0)	(1.0)
Specific child danger signs recognized						
Looks unwell or not playing normally	10%	8%	10%	4%	4%	8%
Not eating or drinking	9%	7%	4%	13%	9%	8%
Diarrhea	52%	46%	43%	47%	57%	48%
Lethargic or difficult to wake	3%	1%	1%	5%	3%	3%
High fever	74%	53%	60%	76%	68%	66%
Fast or difficult breathing	2%	7%	8%	5%	6%	6%
Vomits everything	13%	5%	4%	15%	18%	10%
Convulsions	3%	1%	6%	5%	2%	4%
Blood in the stool	3%	0%	0%	4%	3%	2%

[+] *Pertains to their current child under 12 months of age.*

Table 18: Postpartum Care: Mothers' Knowledge and Practices[+] (n=468)

	Talin	Vedi	Armavir	Sisian	Vayk	***Total***
Percent of women who had visit with any healthcare after discharge within on average 18 days after discharge	77%	57%	70%	77%	71%	70%
Mean number of days after discharge when visit was conducted	6.7	20.9	12.6	12.7	8.6	12.2
Median number of days after discharge when visit was conducted	4.0	7.0	3.0	6.5	5.0	4.0
Mean number of postpartum danger signs recognized (out of 7), (std.)	1.4 (0.8)	1.5 (0.8)	1.2 (0.7)	1.5 (0.9)	1.8 (1.1)	1.5 (0.9)
Specific danger signs recognized						
Heavy bleeding	70%	68%	62%	48%	66%	62%
Loss of consciousness	2%	2%	2%	5%	2%	2%
Fever with or without chills	6%	14%	15%	24%	30%	18%
Foul smelling discharge	11%	9%	6%	17%	19%	12%
Convulsions/rigidity	2%	0%	0%	3%	0%	1%
Headache, visual disturbances	11%	17%	6%	12%	21%	13%
Severe abdominal pain	40%	45%	32%	42%	40%	40%
Experienced complications during postpartum period	14%	14%	13%	21%	24%	17%
Received information on family planning before discharge from maternity	12%	8%	8%	16%	19%	12%

[+]*Pertains to the delivery which happened 12 months ago.*

Counseling of Postpartum and Post-abortion Patients

The quality and availability of patient postpartum and post-abortion counseling was assessed in the five selected health networks. Post-abortion client interview forms and postpartum client interview forms were developed for this purpose (Table 1). As described in the methodology section, the interviews took place in the higher level facilities (hospital maternity wards) where deliveries and/or abortions are performed. During a period of 5 days at each higher level facility, data collectors recruited and interviewed post-abortion and postpartum clients who were present at the facility at that time and agreed to participate.

Based on the actual number of annual births at each Maternity/Hospital participating in the assessment (averaging one birth per day) and DHS 2005 data estimating one abortion per pregnancy in Armenia, we expected to interview 25 postpartum and at least 25 post-abortion women at five higher level facilities within a 5-day period. However, data collectors were only able to contact 33 postpartum and 9 post-abortion women. As a result, a total of 33 postpartum and 8 post-abortion women were interviewed from the five health networks. The response rate was close to 100% (only one post-abortion women refused to participate in the interview). Due to the small sample size of post-abortion respondents, findings need to be interpreted with caution.

Postabortion Client Exit Interview

The mean age of women undergoing abortion was 28.6 years. All 8 respondents reported being married and having at least two children. Three out of eight women had completed high school and three had secondary-special (college-level) education. Two-thirds of the women had previously had an abortion and majority of them had had more than 3 abortions. All women underwent regular abortion procedures; no medical or late-term abortions were reported. When asked about future children, two of them indicated that they planned to have more children in the future. When asked about the main reason for their current abortion seven women pointed to their inability to afford another child.

The majority of women reported being informed about how to take care of themselves after leaving the clinic by medical staff at the facility. However, when asked in an open-ended question to name post-abortion danger signs, only heavy bleeding was reported to be a danger sign by seven women; other important danger signs were not identified. Only a few women reported that the medical staff spoke to them about means of avoiding unplanned or unwanted pregnancy. None of the respondents was able to name correctly the timing of fertility return following abortion. Most women reported being aware of contraceptive methods which are appropriate during the post-abortion period. However, when asked to identify them eight of them were able to identify a contraceptive means: among them seven women mentioned IUD only, leaving out pills, condoms and other modern methods widely available in Armenia.

Postpartum Client Exit Interview

All postpartum respondents were married and significantly younger than post-abortion women with a mean age of 24.3 years ($p=0.004$). The majority of postpartum women interviewed were at the Armavir Hospital which has by far the largest number of annual births of the five higher level facilities in this baseline assessment (Table 19). Slightly more than half the women had high school education, less than one-fourth had secondary-special education and about one-fourth had graduate (university/institute) education. For nine women this was their first child. The average number of children they had was 2.08 children and the average

number of pregnancies was 2.5. Thirteen women out of 33 reported having had an abortion; of those women almost half had had 2 abortions and the others had more than 2 abortions.

Table 19: Summary Table for Some Indicators from Post-partum Client Exit Interview

Hospital/Maternity	Total number interviewed	Attended childbirth preparation classes	Were shown how to breastfeed	Were counseled on nutrition during breast-feeding	Were appointed postpartum follow-up visit
Talin Hospital	5	4 (80%)	5 (100%)	5 (100%)	0 (0%)
Armavir Hospital	17	1 (6%)	17 (100%)	16 (94%)	1 (3%)
Vedi Maternity	5	1 (20%)	4 (80%)	5 (100%)	0 (0%)
Vayk Medical Union	1	1 (100%)	1 (100%)	1 (100%)	0 (0%)
Sisian Hospital	5	3 (60%)	5 (100%)	4 (80%)	0 (1%)
TOTAL	33	10 (30%)	32 (97%)	31 (94%)	1 (3%)

One third of the woman reported attending childbirth preparation classes; of those women more than 70% stated they attended three or more classes (Table 19). As compared with data obtained from household interview, higher percent of women participating in the post-partum client exit interview reported taking part in the child birth preparation classes (1% vs 70%).

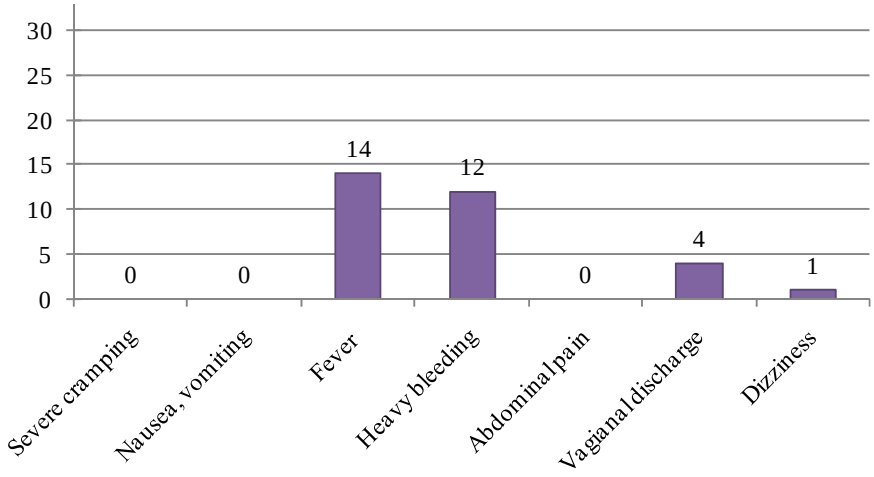
This difference might be due to two reasons:

- Lower enforcement of child birth preparation classes in a year preceding the interview as compared with better enforcement currently. Women participating in the child birth preparations classes were in their antenatal period one to two years before the survey.
- Recall bias. Women participating in the household interview had their antenatal period 1-2 years before the survey and might have inaccuracies in recalling that period.

All of the postpartum respondents were rooming-in with their newborns. On the other hand, only 42% reported putting the child to the breast within the first hour after childbirth. Most women (79%) were counseled on the benefits of exclusive breastfeeding and 97% of the women reported they had practiced exclusive breastfeeding.

Almost all respondents (90%) reported that the healthcare workers informed them how to take care of themselves after leaving the clinic. However, only 12% (4) of the women were able to list at least three postpartum danger signs.

Figure 8: Postpartum danger Signs Reported by Women



Among postpartum period danger signs, fever was identified

as danger sign by 14 women, heavy bleeding by 12 women and vaginal discharge by four women, and dizziness by one woman (Figure 8).

Though 22 (67%) of postpartum women reported planning to have another child in the future, 29 (88%) did not plan to get pregnant within the next year. Approximately one-fourth of the women indicated that they were informed of family planning options open to women during the postpartum period. Only one mother was told specifically about Lactation Amenorrhea Method (LAM) and she was unable to identify correctly three criteria necessary for LAM.

VIII. Conclusion

The information obtained during this baseline assessment in Vedi, Talin, Armavir, Vayk and Sisian networks will be used not only as a reference for Project NOVA evaluation and programmatic decision making, but also will provide additional cross-sectional details and will support similar studies in the area of reproductive and maternal/child health practices in Armenia. Healthcare providers from all project-supported networks will be informed on the key findings and will use this data to design facility-specific and network-specific interventions under the terms of the Project NOVA's Quality Assurance Initiative.

The key findings of this baseline assessment are mostly concordant with 2005 DHS data confirming reliability and accuracy of the methods used and data collected. However, the following discrepancies were found:

- More women participating in the Project NOVA baseline assessment reported breastfeeding the child within one hour of birth as compared with ADHS 2005 (44% vs. 28%).
- Forty eight percent of women in ADHS 2005 reported first antenatal visit happened within first 16 weeks of gestation, vs. 78% of respondents in the baseline assessment.
- Forty six percent of women reported being informed on pregnancy complications in DHS 2005 while only very few of them were able to correctly identify pregnancy related danger signs in the project NOVA survey.

Some of the observed differences can be attributed to the specifics of NOVA-supported health networks, which cannot be generalized for the whole population of the country, but partially to the fact that ADHS 2005 was analyzing data for 2000 – 2005, whereas NOVA baseline assessment was conducted in 2006 suggesting positive changes in certain service delivery aspects as well as achievements of targeted interventions by international and national programs.

Key findings from this study confirmed overall Project NOVA's proposed strategy and series of activities to improve reproductive health, family planning, maternal and child health services in project supported networks, but some minor adjustments will be made during the project implementation. Final internal evaluation of Project NOVA activities in Vedi, Talin, Armavir, Vayk and Sisian networks is tentatively scheduled for May 2009.

IX. Appendixes

Appendix 1: Network Selection Criteria and Scoring

Project NOVA's Network Selection Criteria and Scoring

MARZ	**MOH NETWORK**	**CRITERIA 1:** Population catchment area	**CRITERIA 2:** Condition of the higher level facility	**CRITERIA 3:** Absolute number of births in 2005	**CRITERIA 4:** Number of ob/gyns, neonatologists, pediatricians in WWCs, PC, Maternity	**CRITERIA 5**: Percent of complications during delivery	**CRITERIA 6:** The level of international NGOs' involvement in health areas	**CRITERIA 7:** Total number of HPs within the network	**CRITERIA 8:** The need of HP improvement/renovation	TOTAL SCORE
		0-20,000 – 1 20,001-40,000 - 2 40,001-60,000 - 3 60,001-80,000 - 4 > 80,000 - 5	very bad - 1 bad - 2 fair - 3 good - 4 excellent - 5	0-100 - 1 101-300 - 2 301-600 - 3 601-800 - 4 > 800 - 5	Up to 3 - 1 4 to 9 - 2 10 to 15 - 3 16 to 20 - 4 > 20 - 5	1-5% - 1 6-10% - 2 11-30% - 3 31-60% - 4 > 60%-5	significant - 1 fair - 2 some - 3 minimal - 4 no involv. - 5	up to 5 HPs - 1 6 to 10 HPs - 2 11-15 HPs - 3 16-20 HPs - 4 > 20 HPs - 5	very low - 1 low - 2 medium - 3 high - 4 very high - 5	
Aragatsotn	Ashtarak Hospital	4	3	3	4	3	2	5	2	26
	Talin Hospital	***3***	***4***	***3***	***3***	***2***	***4***	***5***	***4***	***28***
	Aparan Hospital	2	2	2	2	5	3	4	4	24
Ararat	Artashat Maternity	5	3	4	5	No Data	2	4	2	25
	Vedi Maternity	***3***	***4***	***4***	***3***	No Data	***5***	***2***	***4***	***25****
	Ararat Medical Center	5	2	3	3	No Data	3	3	4	23
	Masis Hospital	4	3	5	3	No Data	3	3	2	23
Armavir	***Armavir Hospital***	***5***	***3***	***5***	***4***	***1***	***4***	***3***	***3***	***28***
	Metsamor Hospital	2	3	3	2	1	4	2	3	20
Syunik	Kapan Hospital	3	3	3	4	3	4	5	1	26
	Kajaran Medical Center	1	2	1	1	4	4	2	3	18
	Goris Hospital	3	3	3	4	4	1	4	3	25
	Sisian Hospital	***2***	***3***	***3***	***3***	***4***	***4***	***5***	***3***	***27***
	Meghri Medical Center	1	3	1	2	3	3	2	3	18
	Agarak Medical Center	1	4	2	2	2	3	1	3	18
Vayotz Dzor	Yeghegnadzor Hospital	2	3	3	3	3	1	4	2	21
	Vayk Medical Union	***1***	***4***	***2***	***3***	***3***	***3***	***4***	***2***	***22***

Note: Networks selected by Project NOVA for upcoming interventions are marked in ***bold italic*** for each marz.

Appendix 2: List of Selected Communities for Area 4 Interventions

List of Selected Communities for Area 4 Interventions
Community Partnership for Health

Talin Health Network

1. Akunk
2. Areg
3. Ashnak
4. Dashtadem
5. Davtashen
6. Karmrashen
7. Katnaghbyur
8. Nor Artik
9. Shgharshik
10. Vosketas
11. Yeghnik
12. Zarindja
13. Agarak
14. Kakavadzor
15. Nerkin Sasunashen
16. Partizak
17. Verin Sasunashen
18. Garnahovit

Armavir Health Network

19. Haykavan
20. Lukashin
21. Amasia
22. Djrashen
23. Nor Kesarya
24. Yeraskhahun
25. Artashar
26. Yeghegnut
27. Araks
28. Aigeshat
29. Arazap
30. Nor Armavir

Vaik Health Network

31. Artavan
32. Gndevaz
33. Saravan
34. Azatek
35. Arin
36. Karmrashen
37. Her her
38. Nor Aznaberd

Sisian Health Network

39. Shaki
40. Ouyts
41. Akhlatyan
42. Tolors
43. Salvard
44. Sarnakunk
45. Tsghuk
46. Aghitu
47. Noravan
48. Vorotan
49. Shamb
50. Mutsq

Vedi Health Network

51. Yegheghnavan
52. Shaghap
53. Dashtaqar
54. Goravan
55. Sisavan
56. Vanashen
57. Nor Ughi
58. Vedi vine factory
59. Yeraskh
60. Paruir Sevak

Appendix 3: ANC Assessment Form

CHECKLIST FOR ASSESSMENT OF ANTENATAL CARE VISIT

Observer's first name, last name: _____ Team #: ___ ___

GENERAL INFORMATION

Observation date: (dd/mm/yy) __/__/__ Observation start time: __:__

Facility name: _____

Facility type:

1. Polyclinic
2. Ambulatory/Health Center
3. FAP

Facility address _____

ID # of the provider (the Interviewer should ensure that the number coincides with the list number foreseen for the observations).

Specialization of the provider:

1. Therapeft
2. Ob/gyn
3. Pediatrician
4. Dermatologist-venerologist
5. Family Doctor
6. Nurse/midwife

NOTE TO THE OBSERVER

This is a young married woman of 23, first-time pregnant who comes first time to the provider and the clinic. She is approximately 7 months pregnant, has not had a prenatal care visit before. Her LMP was April 15 (supposed delivery period January 22), let the midwife determine the pregnancy period. The reason for making a late visit was her mother-in-law's influence. By the end of counseling ask "How are the matters with me?" In other cases try to avoid giving additional information by brief answers.
Got married in March 2002.
Complaints

- Headache
- Getting plump

If the observation is carried out with a real client, ask the client's agreement to start. Do not remind the provider about steps forgotten to include. Only register steps/procedures spontaneously carried out/mentioned by the provider. Mark the way in which the information was collected, below.
Do not remind the provider about the steps missed by her during the assessment. Register only the performed steps/protocols.

Check one of the following available options of the data collection:

1. Information was collected through a simulated exchange and not through observation of a real case
2. Information was collected through a real-case observation

Use the following guide to mark the results of your observations:
1 = Done
0 = Not done, or done unsatisfactorily
9 = Not applicable

If one point states two operations that are separated by "AND", put "1" ONLY if both operations are implemented.

#	ITEM	1/0/9
1	Greets and calls woman by her name/surname and introduces him/herself if first visit	
2	Washes hands with soap & water	
3	Talks about the purpose of the visit and/or nature of the interventions	
4	Ensures woman is in a comfortable environment	
5	Asks questions and allows the woman to express herself	
6	Pays attention and is interested in personal problems of the woman	
7	Reviews clinic records before starting the session (if not the first visit) /makes a new record for the new client (in case of first visit)	
8	For first consultation, checks about previous pregnancies: number, evolution and outcomes (only for 1st visit, for other cases write '9')	
9	For current pregnancy: assesses LMP (only for 1st visit, for other cases write '9')	
10	Correctly determines the pregnancy period	
11	Asks about complains	
12	In case it is possible performs medical examination (urine AND blood) (write '9' if not possible to determine	
13	Refers for medical examination (urine AND blood) at another facility	
14	Collects woman's medical anamnesis (only for the 1st visit)	
15	Explores pulse rate	
16	Explores blood pressure	
17	Explores temperature	
18	Gets anthropometric measurements: weight AND height (height only in case of 1st visit)	
19	Examines skin and conjunctivae	
20	Examines the legs for edema OR redness OR varicose veins	
21	Examines mouth cavity	
22a	Examines thyroid (Physician)	
22b	Ask about thyroid (Nurse/Midwife)	
23	Examines breasts	
24a	Examines the heart and lungs, in case of necessity refers to the relevant specialist (Physician)	
24b	Ask about the heart and lungs, in case of complains sends her to the relevant specialist (Nurse/Midwife)	
25	Inspects abdomen for scars, pigmentation, striae	
26	Palpates uterus to detect the height AND measures uterine height AND abdomen circumference	
27	Performs maneuvers to detect fetal position and situation (in case of pregnancy of 28 weeks and more, in other cases write '9')	
28	Listens to the fetal heart rate (in case of pregnancy of 18 weeks and more, in other cases write '9')	
29	Verifies probable delivery date based on previous findings	

#	ITEM	1/0/9
30	Informs woman about the progress of pregnancy and the fetus' health condition	
31	Informs woman about her health condition and any complications	
32	Informs woman on danger signs: pain, fever, bleeding and leaking of vaginal fluid	
33	Orients woman for the place of delivery (hospital, contacts, transportation, etc) (in case of pregnancy of 28 weeks and more, in other cases write '9')	
34	Orients woman on management of common pregnancy-related afflictions	
35	Orients woman on personal hygiene, nutrition, rest and general care	
36	Orients woman on STI prevention, general information, risk factor	
37	Orients woman on sexual life during pregnancy	
38	Informs woman on positive and side effects of medicines during pregnancy	
39	Informs or asks woman about iron supplementary therapy and prescribes iron and/or folic acid on as needed basis	
40	Orients woman on breastfeeding, (in case of pregnancy of 28 weeks and more, in other cases write '9')	
41	Solicits questions to ensure client has understood	
42	Schedules the next appointment according to clinic needs and woman's convenience	
43	Records all findings, assessments, diagnosis and care with client	
44	Thanks client for her time	

Observation end time ___: ___

Appendix 4: PPC Assessment Form

CHECKLIST FOR ASSESSMENT OF POSTPARTUM CARE

Observer's first name, last name: _____ Team #: ___ ___

GENERAL INFORMATION

Observation date: (dd/mm/yy) __/__/__ Observation start time: __:__

Facility name: _____

Facility type:

1. Polyclinic
2. Ambulatory/Health Center
3. FAP

Facility address _____

ID # of the provider (the Interviewer should ensure that the number coincides with the list number foreseen for the observations).

Specialization of the provider:

1. Therapeft
2. Ob/gyn
3. Pediatrician
4. Dermatologist-venerologist
5. Family Doctor
6. Nurse/midwife

Now let's observe post partum care delivery. Please, perform all the actions that you usually perform during post partum care delivery. Include all usual examinations, counseling and procedures. Physical examination details can be mentioned orally without demonstration.

NOTE TO THE OBSERVER

Conduct this observation whenever possible through a real client-provider interaction. If there are no clients/patients at the time of the visit, conduct a simulated exchange with the following scenario: this is a young married woman of 23, first pregnancy who has gone to the nearest hospital for delivery, had a normal delivery and was discharged 2 days later.

If the observation is carried out with a real client, ask the client's agreement to start.

Do not remind the provider about steps forgotten to include. Only register steps/procedures spontaneously carried out/mentioned by the provider. Mark the way in which the information was collected, below.

Check the information collection method for this observation:

1. Information was collected through a simulated exchange and not through observation of a real case
2. Information was collected through a real-case observation

Use the following guide to mark the results of your observations:
1 = Done
0 = Not done, or done insufficiently
9 = Not applicable

#	ITEM	1/0/9
1	Greets and calls woman by her name or surname and introduces him/herself if first visit	
2	Washes hands with soap & water	
3	Ensures woman is in a comfortable environment	
4	Explains purpose of the session and nature of the procedures	
5	Asks questions and allows client to express herself	
6	Pays attention and is interested in personal problems of the woman	
7	Asks about last pregnancy and delivery: evolution, outcome, any complications (ONLY FOR 1st VISIT, FOR OTHER CASES WRITE '9')	
8	Asks about danger signs (bleeding, fever, excessive pain)	
9	Explores pulse rate	
10	Explores blood pressure	
11	Explores temperature	
12	Examines skin AND conjunctivae	
13	Checks for legs - edema, redness and varicose veins	
14	Inspects AND palpates abdomen for uterine involution	
15	Examines breasts AND inquires for any lactation problem	
16	Examines vaginal discharge (amount, color, smell)	
17	Asks about baby's health: feeding	
18	Asks about baby's health: sleeping	
19	Asks about baby's health: posture	
20	Asks about baby's health: skin color	
21	Asks about baby's health: breathing	
22	Asks about baby's health: fever	
23	Assesses baby's health: feeding	
24	Assesses baby's health: sleeping	
25	Assesses baby's health: posture	
26	Assesses baby's health: skin color	
27	Assesses baby's health: breathing	
28	Assesses baby's health: fever	
29	Informs woman about her health condition	
30	Informs woman about the baby's health condition	
31	Informs woman about potential complications of woman or baby and trains on self-assessment	
32	Orients woman on breast-feeding (only for 1st visit, for other cases write '9')	
33	Orients woman on breast care (only for 1st visit, for other cases write '9')	
34	Orients woman on personal hygiene (only for 1st visit, for other cases write '9')	
35	Orients woman on STI prevention	
36	Consults woman on sexual life	

#	ITEM	1/0/9
37	Consults on nutrition	
38	Orients woman on hospital/clinic services (e.g. location, hours, etc), follow up visits (only for 1st visit, for other cases write '9')	
39	Orients woman on baby vaccination	
40	Orients woman on the period between deliveries and contraception	
41	Solicits questions to ensure client has understood	
42	Schedules appointment/next visit according to needs and woman's convenience	
43	Records all findings, assessments, diagnosis and care with client	
44	Thanks client for her time	

Observation end time ___: ___

Appendix 5: Facility Inventory Assessment Form

INVENTORY

General Information

Observer's first name, last name (ID)_____ Team # __ __

Date (day/month/year)_____/_____/_____

Facility name _____

Facility type

1. Health Post
2. Medical Ambulatory
3. Health Center
4. Polyclinic
5. Hospital (Maternity department)
6. Other (specify) _____
7. Medical Center
8. Women Consultation Center

Address of the Facility_____

ID # of the facility. (the data collector should ensure that the number coincides with the given facility ID number list number).

___ ___ ___ ___ ___ ___ ___ ___

Inventory assessment should be implemented in all facilities. In bigger facilities (polyclinics and hospitals) complete the list for maternity department or women consultation center. Record only those tools /inventory that is in the facility and is in appropriate/working condition. .

A.	Basic Equipment and Supplies					
		In-patient settings		Out-patient settings		Comments
		Availability Yes =1 No=0	Quality Good=1 Satisfactory=2 Poor=3	Availability Yes =1 No=0	Quality Good=1 Satisfactory=2 Poor=3	
	Maternal Care					
1.	Sphygmomanometer					
2.	Measure tape					
3.	Pelvic meter					
4.	Stethoscope					
5.	Body Thermometer					
6.	Adult Scale					
7.	Fetal stethoscope					
8.	Obstetric Doppler					
9.	Light source					
10.	Heat source					
11.	Vaginal smear currette					
12.	Forceps					
13.	Scissors					
14.	Needle holder					
15.	Artery forceps or clamp					
16.	Vaginal speculum					
17.	Sponge forceps					
18.	Dissecting forceps					
19.	Dipsticks					
20.	Tongue blades					
21.	Swabs					
22.	Gauze					
23.	Pregnancy test					
	Newborn and Infant Care					
24.	Rectal Thermometer					
25.	Child sphygmomanometer					
26.	Infant scale					
27.	Self-inflating resuscitation bag, newborn size					
28.	Face mask for resuscitation (sizes 0,1)					
29.	Incubator					
30.	Mucus extractor with suction tube					
31.	Infant examination table					
32.	Tourniquet					
33.	Injectibles					
34.	Glucometer (without strips)					
35.	IV poles					
36.	Suction apparatus					
37.	Gastric tubes (3.5-F, 5-					

A.	Basic Equipment and Supplies					
		In-patient settings		Out-patient settings		Comments
		Availability Yes =1 No=0	Quality Good=1 Satisfactory=2 Poor=3	Availability Yes =1 No=0	Quality Good=1 Satisfactory=2 Poor=3	
	F, and 8-F) with caps					
38.	Suction catheters					
39.	Umbilical vein catheter					
40.	Nasal catheters (6-F and 8-F)					
41.	Nasal prongs (1mm and 2 mm)					
42.	Butterfly sets (22- to 25-gauge)					
43.	Cannulas (22- to 25-gauge)					
44.	IV tubing					
45.	Microdropper					
46.	Blades and handles					
	Infection prevention					
47.	Leak-proof container for contaminated waste					
48.	Receptacle for soiled linens					
49.	Puncture-proof container for sharps disposal					
50.	Instrument sterilizer					
51.	Clean examination gloves					
52.	Utility gloves					
53.	Sterile gloves					
54.	Chloramine (packs)					
55.	Chlorhexidine (liquid solution)					
56.	Soap					

	Training Equipment and Supplies for Clinical Training Sites					
57.	Tables					
58.	Chairs					
59.	White board					
60.	Flipchart stand					
61.	Antenatal modelodel/ Childbirth model					
62.	Gynecological model (ZOE)					
63.	Flipchart paper					
64.	Markers					

B.	**Condition of Facility**	Ideal condition	Medium condition, operating	Needs renovation
1.	Electrical power	1	2	3
2.	Running water	1	2	3
3.	Functioning toilet (in the facility or around)	1	2	3
4.	Heating system (please describe)	1	2	3
5.	Windows	1	2	3
6.	Floor	1	2	3
7.	Shelves	1	2	3
8.	Examination table	1	2	3
9.	1 table and 2 chairs	1	2	3
10.	Refrigerator/Freezing bag	1	2	3

C.	**Other**	Availability Yes = 1 No = 0
1.	Exam light-floor based adjustable portable	
2.	Penlights – reusable diagnostic	
3.	Spatula	
4.	Straight urinary catheter	
5.	Surgery threads	

D.	**Drugs**	Availability Yes = 1 No = 0
1.	Iron/folic acid tablets	
2.	Intravenous fluids	
3.	Pain relievers (Paracetamol or other medication containing Paracetamol, e.g. Efferalgan, Panadol, Calpol)	
4.	Magnesium sulphate (25% or 50%)	
5.	Contraceptives (any)	
6.	Uterotonic agents (Oxytocine, Ergometrine)	

7.	Antibiotics (*Quinolons*: Ciprofloxacin, Ofloxacin, Negram/Nalidixic acid; *Cephalosporins*: Cefixim, Ceftriaxon; *Tetracyclines*: Doxycycline, Tetracycline; *Macrolids*: Azithromycin, Azatril, Sumamed, Erythromycin; *Penicillins*: Benzatin Benzylpenicillin, Procaine Benzylpenicillin, Penicillin G, Amoxycillin)	
8.	Antifungal drugs (Clotrimazole, Miconazole, Fluconazole, Ketoconazole)	
9.	Antiprotozoal drugs (Metronidazole, Flagyl, Tinidazole, Ornidazole.)	

Appendix 6: Client Record Review Form

Facility Journal Review Forms

FACILITY JOURNAL REVIEW FORM

Interviewer's first name, last name (ID)_____ team # __ __

GENERAL INFORMATION:
Date of Visit (dd/mm/yy): _____/_____/_____ Interview start time ___:___

Name of facility _____

Type of facility

1. Health Post
2. Medical Ambulatory
3. Health Center
4. Polyclinic
5. Hospital (Delivery department/Maternity)
6. Medical Center
7. Women Consultation Center

Address of Facility _____

ID # of the facility (the Interviewer should ensure that the number coincides with the list number foreseen for other data collection instruments).

___ ___ ___ ___ ___ ___ ___ ___

1. Number of personnel providing Reproductive Health Services
NOTE: Consider all providers who deliver services at the given facility.

	Personnel:	**Men**	**Women**
1.	General practitioners		
2.	Obstetrician-gynecologists		
3.	Pediatricians		
4.	Dermatovenerologists		
5.	Family Doctors		
6.	Nurses		
7.	Midwives		
8.	Other physicians _____		
9.	Other personnel _____		

II. Review of Client Records

NOTE: Place an "N/A" in the cells if the records are not available and a zero "0" if there were no such services offered that month

	2005			2006									
	X	**XI**	**XII**	**I**	**II**	**III**	**IV**	**VI**	**V**	**VI**	**VII**	**VIII**	**IX**	**Total**
A. ANTENATAL CARE														
1. Total number of women seen														
(from total number): 2. Number of women referred to higher level facilities because of complications														
B. POSTPARTUM														
1. Total number of women seen														
(from total number): 2. Number of women referred to higher level facilities because of complication														
C. FAMILY PLANNING														
1. Total number of clients														
(from total number): 2. Number of women referred for FP services to higher level facility														
D. INFANT CARE														
1. Total number of children up to 1 year old seen														
2. number of infants seen for immunization														
3. number of infants seen for well child visit (except immunization)														
4. number of infants seen for sick care														

Appendix 7: Provider Interview Form

Provider Interview

Interviewer's first name, last name (ID#)_____
Team # __ __

GENERAL INFORMATION
Date (dd/mm/yy) ___/___/___ Interview start time __:__

Name of the Facility
_____

Type of the facility

1. Health Post
2. Medical Ambulatory
3. Health Center
4. Polyclinic
5. Women Consultation Center

Address of the Facility _____

Provider ID # (Interviewer: make sure that the number corresponds to the numbers of the remaining instruments). ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

1 INFORMATION ABOUT PROVIDER

1.1. What are your responsibilities/position?

1. Nurse
2. Midwife
3. General Practitioner
4. Pediatrician
5. Family Physician
6. Ob/Gyn
7. Other (specify) _____

1.2. How long have you worked in the health services? (WRITE NUMBER OF FULL YEARS)
_____YEARS

1.3. How long have you worked in this facility? (WRITE NUMBER OF FULL YEARS)
_____YEARS

1.4. How old are you? RECORD IN FULL YEARS
_____ years old

1.5. Sex (DO NOT READ)

1. Male
2. Female

2 PREVIOUS TRAININGS

The following questions refer to your professional education and training

1.1 When did you receive your last training in maternal or child health?

_____DATE (year)

88. Do not receive →SKIP TO Q. 2.6

1.2 In which area were you trained? _____

1.3 Have you been able to use the knowledge/skills learned in the training course?

1. Yes→SKIP TO Q. 2.6
0. No
9. Do not know

1.4 Why? _____

1.5 Do you think you have the knowledge or skills necessary to perform all your responsibilities?

1. Yes
0. No
9. Do not know

1.6 Do you think you need an additional training?

1. Yes
0. No
9. Do not know

3 JOB EXPECTATIONS

In this section of the questionnaire we would like to learn more about your job.

3.1 Do you have a written job description for this job?

1. Yes
0. No → SKIP TO Q. 3.3
9. Do not know → SKIP TO Q. 3.3

3.2 Please show your job description. MENTION THE RESULT.

1. The job description was shown
0. The job description was not shown

3.3 Do you know/understand what roles and tasks you have to carry out in your job?

1. Yes
0. No
9. Do not know

4 MOTIVATION/INCENTIVES

In this set of questions we will ask you how you are awarded for your work.

4.1 Have you had bonuses or raises in your salary within the last 3 years?

1. Yes
0. No →SKIP TO Q. 4.3
9. Do not know

4.2 Was it related to your good performance at work?

1. Yes
0. No
9. Do not know

4.3 What are non-monetary incentives coming <u>from the employer</u> if you do your work well? MENTION ALL THAT APPLY

1. Verbal recognition
2. Written recognition
3. Uniforms
4. Free/discounted medicines
5. Equipment
6. Training courses
7. Other, please specify _____
8. No incentives DO NOT READ

4.4 What are non-monetary incentives which come <u>from the client or community</u> if you do your work well? MENTION ALL THAT APPLY

1. Verbal recognition
2. Written recognition
3. In-kind products or small gifts
4. Services in return
5. Respect in community
6. Other, please specify _____
7. No incentives DO NOT READ

5 ORGANIZATIONAL SUPPORT

In this part of the questionnaire we would like to ask how your organization helps you to perform your job.

Has your supervisor ever given you orientation towards:		Yes	No	DK
5.1	Organizational structure of the marz health care system	1	0	9
5.2	Reporting lines of authorities	1	0	9
5.3	Organizational behavior	1	0	9
5.4	Your duties, rights and responsibilities	1	0	9

5.5 Are you able to influence the decision-making process in this facility regarding the organization of the health care service (through meetings, by voting, etc.)?

1.Yes
0. No
9. Do not know

5.6 Do you work in the same facility with your supervisor?
1. Yes IF THE RESPONDENT IS PHYSICIAN ➔ SKIP TO SECTION 6
0. No
9. Do not know

5.7 When was the last supervisory visit conducted to this facility?
_____months ago IF THE VISIT WAS DURING THIS MONTH, NOTE 0.5
88. S/he has never visited

5.8 When the supervisor comes to supervise, what does she/he do? (READ ALL ANSWERS, CIRCLE ALL THAT APPLY)
1. Supervisor performs administrative tasks: checks registry, other papers, financial management
2. Supervisor attends patients, for ex., attends home visits, treats patients, supervises the pregnant women's visit delays.
3. Supervisor checks environment/tools quality: for instance checks sanitarian state, cleanness
4. Supervisor solicits client feedback on services
5. Supervisor gives update on changes in procedures, clarifies instructions
6. Supervisor asks about the situations when the provider has been unable to provide health care and in case of necessity teaches how to do that
7. Supervisor suggests service quality improvement plan
8. Supervisor consults with you before making decisions
9. Other actions
(specify)_____

5.9 Has your supervisor ever made a negative remark to you in presence of a client?
1. Yes
0. No
9. Don't know/don't remember

5.10 How long does the visit usually take? MENTION IN MINUTES
_____ minutes

5.11 How many times has your supervisor made supervisory visits to this facility in the past 2 months?
_____ times

6 PERFORMANCE SELF-ASSESSMENT

The following questions will reflect your opinion on different aspects of the work.

How would you evaluate		Very good	Good	Bad	Very bad
6.1	Your relations with your supervisor?	1	2	3	4
6.2	Your relation with the community/your patients	1	2	3	4
6.3	The level of your professional development	1	2	3	4
6.4	Your willingness to work	1	2	3	4
6.5	Your relation with the colleagues	1	2	3	4

6.6 If you were to assess your performance quality, how would you assess yourself with 10 score scale where 1 is the worst point and 10 is the best.

1	2	3	4	5	6	7	8	9	10

6.7 What do you think how would your supervisor assess your performance using the same 10 score scale where 1 is the worst point and 10 is the best.

1	2	3	4	5	6	7	8	9	10

THANK YOU FOR YOUR TIME!

Interview end time __:__

Appendix 8: Household Interview

Knowledge, Attitude & Practice Survey on
Maternal and Child Health

Interviewer's first name, last name (ID number)_____

Date (dd/mm/yy) ___/___/___ Interview start time __:__

Client address
(village/city)_____

ID # __ __ __ __ __ __ __ __ __ __

INSTRUCTIONS TO INTERVIEWER
READ: Good morning/afternoon. My name is _____. I represent Project NOVA which conducts this survey together with the Ministry of Health with the aim to assess the quality of maternal and child health services in Armenia. Your name was randomly selected from the regional/village health facility. We would like to ask you to participate in this survey. You may refuse to participate in the interview or any part of it, however your participation is very important and it will help us to understand the current status of the maternal and child care in your region and provide recommendations for its improvement.

I would like to let you know that this interview is confidential, which means that your name will not be mentioned anywhere and the information provided by you will be presented only in a summarized form.

The interview will take 20 to 25 minutes.

Can we start now?

The questions we are going to ask you refer to your pregnancy and birth of {Name of the child} Please be sincere and answer the questions as honest as possible. This is not an exam or a test and we are not going to record your name next to the information you give. Please feel free to skip any question you don't want to answer or you feel uncomfortable.

SECTION 1: ANTENATAL CARE

We will start our talk with the antenatal care, then will discuss delivery, postpartum care and some other issues associated with your health and the health of your child {name}.

1.1 How many months pregnant you were when you received first antenatal care?

Month of pregnancy _____
88. Don't know
99. Don't remember

1.2 Who accompanied you to your first antenatal care visit to the health provider?

1. I went alone
2. My mother-in-law or other in-law
3. My partner/husband
4. My mother or other family member
5. Other person (specify) _____

88. Don't know
99. Don't remember

1.3 What type of health care provider did you see at your first antenatal care visit?

1. Nurse/midwife → Go to question 1.5
2. Physician
3. Both (nurse/midwife and physician)

88. Don't know → Go to question 1.5
99. Don't remember → Go to question 1.5

1.4 What was the narrow specialization of the physician whom you saw at your first visit?

1. General practitioner
2. Ob/Gyn
3. Family Physician
4. Pediatrician
5. Other (specify) _____

88. Don't know
99. Don't remember

1.5 By which specialist were you <u>mainly consulted during the pregnancy</u>? **CIRCLE ONLY ONE RESPONSE**

1. Doctor/general practitioner
2. Doctor/Ob/Gyn
3. Doctor/Family doctor
4. Nurse/Midwife

88. Don't know
99. Don't remember

1.6 Do you or your physician/nurse consider your pregnancy a complicated or non-complicated?

1. Complicated pregnancy
2. Non-complicated pregnancy

88. Don't know
99. Don't remember

1.7 During pregnancy how many times did you receive antenatal care?

Number of times _____

88. Don't know

99. Don't remember

1.8 Did you receive iron supplements during your pregnancy from your health care provider?

1. Yes
2. No
88. Don't know → Go to question 1.10
99. Don't remember → Go to question 1.10

1.9 During your pregnancy did you take iron supplements?

1. Yes
2. No → Why not: _____
88. Don't know
99. Don't remember

1.10 Did your provider mention to you any pregnancy danger signs?

1. Yes
2. No
88. Don't know
99. Don't remember

1.11 Please mention all pregnancy danger signs that need urgent intervention from a health care provider? **DO NOT READ THE RESPONSES, CIRCLE ALL THAT APPLY. PROBE: any other?**

1. Bleeding
2. Swelling of hands/face and severe headache
3. Fits
4. No fetal movement after 24 weeks
5. Fever
6. Severe pain in abdomen or when passing urine
7. High blood pressure
8. Other (specify) _____

88. Don't know
99. Don't remember

1.12 Did the provider consult you on proper nutrition during this pregnancy?

1. Yes
2. No
88. Don't know
99. Don't remember

1.13 Did you attend childbirth preparation classes during your pregnancy?

1. Yes
2. No → Go to Q1.17
88. Don't know
99. Don't remember

1.14 How many classes did you attend?
Number of classes attended _____
88. Don't know
99. Don't remember

1.15 Did you find these classes useful?
1. Yes
2. No
88. Don't know
99. Don't remember

1.16 Did your husband/partner participate in the childbirth preparation classes?
1. Yes
2. No
99. Don't remember

1.17 In general how satisfied you are with the antenatal care you received?
1. Very satisfied
2. Somewhat satisfied
3. Neither satisfied nor dissatisfied
4. Dissatisfied
5. Very dissatisfied

SECTION 2: LABOR AND DELIVERY

2.1 When was {Name} born? _____ / _____ / _____ day/month/year

2.2 Where did you deliver {Name}?
1. Nearest facility or regional maternity hospital (specify facility)_____
2. Marz maternity hospital (specify facility) _____
3. Yerevan facility (specify facility) _____
4. Home
5. Other (specify) _____
99. Don't remember

2.3 What is <u>the major</u> reason for your place of delivery choice?
1. My catchment area
2. Good reputation
3. Less expensive
4. Other (specify) _____
88. Don't know
99. Don't remember

2.4 How long did you stay at the health facility after your delivery?
Number of days _____
88. Don't know
99. Don't remember

2.5 Did you experience any complications?

1. Yes
2. No → Go to question 2.7
88. Don't know → Go to question 2.7
99. Don't remember → G o to question 2.7

2.6 Are you pleased with how it was handled?

1. Yes
2. No
88. Don't know
99. Don't remember

2.7 Did you breastfeed {Name}?

1. Yes
2. No → Why not: _____ → Go to Q2.11
88. Don't know
99. Don't remember

2.8 How long after birth did you first put {Name} to the breast?

1. Immediately/within first hour after delivery
2. Within first day
3. After first day
88. Don't know
99. Don't remember

2.9 Did you practice exclusive breastfeeding?

1. Yes
2. No → Why not: _____ → Go to Q2.11
88. Don't know
99. Don't remember

2.10 For how long did you exclusively breastfed {Name}?

_____months
88. Don't know
99. Don't remember

2.11 Did you have rooming in?

1. Yes
2. No
88. Don't know
99. Don't remember

SECTION 3: POSTPARTUM CARE

3.1 Did you see health care provider after discharge from Maternity for a postpartum checkup?

1. Yes
2. No → Go to question 3.4

88. Don't know → Go to question 3.4
99. Don't remember → Go to question 3.4

3.2 In how many days after discharge from Maternity did you <u>first</u> see the health care provider for postpartum check-up?

_____ days

77. Never visited
88. Don't know
99. Don't remember

3.3 What health care provider did you see <u>first</u> after discharge from Maternity for your postpartum check-up?

1. General practitioner
2. Ob/Gyn
3. Family Physician
4. Pediatrician
5. Nurse/midwife
6. Other (specify) _____

88. Don't know
99. Don't remember

3.4 Please mention all danger signs after delivery that needs treatment from a health care provider? **DO NOT READ THE RESPONSES, CIRCLE ALL THAT APPLY. PROBE: any other?**

1. Heavy bleeding
2. Loss of consciousness
3. Fever with or without chills
4. Foul smelling discharge
5. Convulsions/rigidity
6. Headache, visual disturbances
7. Severe abdominal pain
8. Other (specify)_____

88. Don't know
99. Don't remember

3.5 Did you experience any complications during postpartum period after discharge from Maternity?

1. Yes
2. No

99. Don't remember

3.6 Did you receive any information on family planning options available for women in the postpartum period before your discharge from Maternity?

1. Yes
2. No
88. Don't know
99. Don't remember

4. CHILD CARE

4.1 How soon after the delivery did {Name's} pediatrician see {Name}?

_____ days
77. Never see
88. Don't know
99. Don't remember

4.2 What do you think, when a child has diarrhea, he/she should be given liquids much less than he/she normally drinks, about the same amount that he/she normally drinks or more than he/she usually drinks?

1. Much less than he/she normally drinks;
2. About the same amount that he/she normally drinks;
3. More than he/she normally drinks
88. Don't know
99. Don't remember

4.3 What are the signs of illness that would indicate your newborn (under 1 month) needs treatment? **DO NOT READ, CIRCLE ALL THAT APPLY. PROBE: any other?**

1. Trouble breathing
2. Poor suck or is not able to suck
3. Feels hot or cold
4. Pus or redness any place on the baby: eyes, cord stump, skin
5. Fits, rigid, stiff, floppy
6. Born too small
7. Poor skin color (e.g. pale, blue or yellow)
8. Other (specify) _____
88. Don't know
99. Don't remember

4.4 What are the signs of illness that would indicate your child (under 12 months) needs treatment? **DO NOT READ, CIRCLE ALL THAT APPLY, PROBE: any other?**

1. Looks unwell or not playing normally
2. Not eating or drinking
3. Diarrhea
4. Lethargic or difficult to wake
5. High fever
6. Fast or difficult breathing
7. Vomits everything
8. Convulsions
9. Blood in the stool
10. Other (specify)_____
88. Don't know
99. Don't remember

4.5 When any of your children was sick last time (any sickness), did you seek advice or treatment for the illness outside of the house?

1. Yes
2. No → Go to section 5
77. Did not got sick → Go to section 5
88. Don't know → Go to section 5
99. Don't remember → GO to section 5

4.6 To whom did you first apply for the advice or treatment? DO NOT READ, CIRCLE ONLY ONE RESPONSE

1. Physician
2. Nurse
3. Traditional practitioner
4. Other person with medical education (specify)_____
5. Other person without medical education (specify)_____

SECTION 5: REPRODUCTIVE HEALTH

Now let's talk about women's reproductive health.

5.1 How many times have you been pregnant (including miscarriages, stillbirths and abortions)?

_____ times

88. Don't remember, but more than 5
99. Don't remember but more than 10

5.2 How many children have you given birth to including {Name}?

_____ children

88. Don't know
99. Don't remember

5.3 Are you planning to have more children?

1. Yes
2. No → Skip to 5.5

88. Don't know

5.4 When are you planning to have next child?

1. In 1 year
2. In 2 years
3. In more than 2 years
4. I am pregnant now→ Go to section 6.
5. Immediately→ Go to section 6.
88. Don't know→ Go to section 6.

5.5 Are you using any contraceptive methods currently?

1. Yes
2. No → Why not: _____ Go to Q5.7

88. Don't know → Go to question 5.7
99. Don't remember → Go to question 5.7

5.6 What contraceptive methods do you use currently? MENTION ALL THAT APPLY

1. Pills
2. IUD
3. Depo-Provera/injections
4. Condoms
5. Spermicide (cream, jelly)
6. Female sterilization: tubal ligation
7. Rhythm (calendar/mucous check)
8. Lactational Amenorrhea Method
9. Withdrawal
10. Other method (specify) _____
88. Don't know
99. Don't remember

5.7 Do you know where to can get/purchase contraceptives?

1. Yes → Where: _____
2. No

SECTION 6: FINANCIAL ACCESS

We have one more section to complete our interview and in this section we will discuss the financial issues, associated with pregnancy care, delivery and child care. As we know the medical services are always connected with some expenditure. In this section we would like to know how much you paid over all for the antenatal care, delivery and other services.

Now I will read a list of medical service and I would like to ask you to specify how much did you pay for each of the services specified. Please try to remember all the costs associated with the type of service, i.e. include all payments, like buying presents, fuel, etc.

INSTRUCTIONS TO DATA COLLECTORS: Write down the sum in Armenian drams. If the fee is given in other currency, recalculate translate it into Armenian drams. If the fee is provided in the form of a present, clarify the cost with the respondent and write the approximate financial equivalent. If the particular service was not used, write 99, if no money was paid, write 0. If the respondent does not remember or does not know, or does not want to respond, write 98.

	Service provided	**Cost in AMD**
1.	Antenatal care service with nurse/midwife (consultations, meetings with the provider)	
2.	Antenatal care service with the physician (consultations, meetings with the provider, etc)	
3.	Antenatal care: laboratory fees, tests, ultrasound, EKG	
4.	Total for antenatal care	
5.	Delivery: midwife fee	
6.	Delivery: ob/gyn fee	
7.	Delivery: stay in the hospital	
8.	Delivery: services by other staff of the facility	
9.	Total for delivery	
10	Postpartum care (home visits)	
11	Postpartum care (laboratory fees)	
12	Postpartum care (vaccination)	
13	Total for postpartum care	
14	Drugs overall (prenatal care, delivery, postpartum care)	
15	Overall estimation of travel expenses for all the services?	
16	Other expenses during the pregnancy and postpartum care that were not mentioned?	
17	Total for antenatal care, postpartum care and delivery	

6.18 Were you requested or asked to bring a present or pay any fees by your provider or any other facility staff?

1. Yes
2. No
88. Don't know
99. Don't remember

6.19 Do you know what of the above mentioned services should have been provided to you with no charge, meaning being paid by the government?

1. Yes
2. No
88. Don't know
99. Don't remember

SECTION 7: DEMOGRAPHIC INFORMATION

7.1 How old are you?

AGE OF RESPONDENT IN FULL YEARS: ___ ___

7.2 What is your marital status?

1. Married
2. Separated
3. Divorced
4. Widowed
5. Single
88. Don't know

7.3 What is your education status?

1. School education (completed secondary education)
2. Secondary-special education
3. Student (institute, universities)
4. Higher level/graduate (institute, university education)
88. Don't know

7.4 Last months, the approximate amount of household income spent by all household members was?

1. Less than 20,000 AMD
2. From 20,000 to 49,999 AMD
3. From 50,000 to 99,999 AMD
4. From 100,000 to 249,999 AMD
5. Above 250,000 AMD
99. Don't know

THANK YOU!

Interview end time ___:___

Appendix 9: Postabortion Client Exit Interview

Postabortion Client Exit Interview

INSTRUCTIONS TO INTERVIEWER
This questionnaire should be used with female clients aged 19 - 46 years who have agreed to participate in this study and had an elective abortion. The interview should be conducted prior to discharge from the health care facility. Make sure the interview is taking place in such setting, where none can interrupt and listen to you.

READ: Good morning/afternoon. My name is _____. I represent Project NOVA which conducts this survey together with the Ministry of Health with the aim to assess the quality of maternal and child health services in Armenia. I know that you just underwent an elective abortion and you are going to be discharged. I would like to talk to you couple of minutes before your discharge. This interview will not take more than 5 minutes and we will talk about your abortion and experience in this facility.

You may refuse to participate in the interview or any part of it, however your participation is very important and it will help us to understand the current status of the family planning post-abortion counseling practices in this facility. Project NOVA will work in this facility to improve the service delivery here.

This interview is confidential and anonymous. Your name will not be recorded and the information you give us will be shared only in the summarized format and with other hospitals/maternities we work in.

Please be sincere and answer the questions as honest as possible. This is not an exam or a test and we are not going to record your name next to the information you give. Please feel free to skip any question you don't want to answer or you feel uncomfortable.

Can we start now?

FACILITY ID __ __ __ __ __ __ __ __

1. How old are you? RECORD AGE IN FULL YEARS _____

2. What is your current marital status?
   1. Married
   2. Single
   3. Separated
   4. Widowed
   77. No answer

3. What is your education status?
    1. School education (completed secondary education)
    2. Secondary-special education
    3. Undergraduate (institute, universities)
    4. Postgraduate (post-institute/university education, such as Master degree, PhD, candidate of science)
    88. Don't know

4. Do you have children?
    1. Yes
    2. No → Go to Q6

5. How many children do you have? Number of children _____

6. In total, what is the number of pregnancies you have had including this one and any others including those that ended in a miscarriage, abortion, or live birth?

    Number of pregnancies _____ if **1** → Go to Q9

7. Have you ever had an abortion before this one?
    1. Yes → How many: _____
    2. No → Go to Q9
    77. No answer

8. What type of abortion did you have before?

	Yes	No	NA	DK
1. Regular abortion	1	2	77	88
2. Medical abortion (mifepristone within one month of missed menses)	1	2	77	88
3. Late-term abortion (more than 12 weeks)	1	2	77	88
4. Other (specify) _____	1	2	77	88

9. Are you planning to have (more) children in the future?
    1. Yes
    2. No → Go to Q 11
    88. Don't know/not sure

10. How long would you like to wait before the birth of your (next) child?
    in _____ years
    88. Don't know/not sure

11. What was the principal reason that you decided to have this abortion? CIRCLE ONLY ONE RESPONSE
    1. Not a good time to have a baby
    2. Dangerous to life/health
    3. Risk of birth defect
    4. Socio-economic reasons
    5. Didn't have partner
    6. Partner wanted abortion
    7. Did not want more children
    8. Age (too young)
    9. Age (too old)
    10. Other (specify)_____
    88. Don't know/unsure

12. Today, did anyone of medical staff explained how to care for yourself at home after leaving the clinic?
    1. Yes
    2. No
    88. Don't know/unsure

13. What symptoms may indicate that you are having a problem which needs treatment and return to the clinic?
    1. Fever
    2. Dizziness or fainting
    3. Abdominal pain
    4. Severe cramping
    5. Nausea, vomiting
    6. Bleeding heavier than a normal period
    7. Virginal discharge that smells bad
    8. Other (specify)_____
    9. None
    77. No answer
    88. Don't know/unsure

14. Today did anyone of the medical staff talk to you about how to avoid unplanned pregnancy?
    1. Yes
    2. No
    77. No answer
    88. Don't know/unsure

15. How soon do you think is the earliest that a woman is fertile (can become pregnant) after she has had an abortion?
    1. Immediately or within two weeks
    2. Any other answer
    77. No answer
    88. Don't know/unsure

16. Are there certain contraceptive methods that are more appropriate during postabortion period?
    1. Yes
    2. No
    77. No answer
    88. Don't know/unsure

17. (If yes) Which methods? (CIRCLE ALL RESPONSES)
    1. Pills
    2. IUD
    3. Injectables/Depo Provera
    4. Sterilization
    5. Condoms
    6. Natural family planning
    7. Other_____
    77. No answer
    88. Don't know/unsure

Thank you

Interview end time: ___ : ___

Appendix 10: Postpartum Client Exit Interview

Postpartum Client Exit Interview

Interviewer's first name, last name (ID number)_____

Date (dd/mm/yy) ___/___/___ Interview start time __:__

Client address
(village/city)_____

ID # __ __ __

INSTRUCTIONS TO INTERVIEWER
READ: Good morning/afternoon. My name is _____. I represent Project NOVA which conducts this survey together with the Ministry of Health with the aim to assess the quality of maternal and child health services in Armenia. I know that you just had baby and you are going to be discharged. I would like to talk to you couple of minutes before your discharge. This interview will not take more than 5 minutes and we will talk about your experience in this maternity.

You may refuse to participate in the interview or any part of it, however your participation is very important and it will help us to understand the current status of the maternal and child care practices in this facility. Project NOVA will work in this facility to improve the service delivery here.

This interview is confidential and anonymous. Your name will not be recorded and the information you give us will be shared only in the summarized format and with other hospitals/maternities we work in.

Can we start now?

The questions we are going to ask you refer to the period after the birth of {Name of the youngest child}and till now. Please be sincere and answer the questions as honest as possible. This is not an exam or a test and we are not going to record your name next to the information you give. Please feel free to skip any question you don't want to answer or you feel uncomfortable.

FACILITY ID __ __ __ __ __ __ __ __

1. How old are you? RECORD AGE IN FULL YEARS _____

2. What is your current marital status?
    1. Married
    2. Single
    3. Separated
    4. Widowed
    77. No answer

3. What is your education status?
    1. School education (completed secondary education)
    2. Secondary-special education
    3. Undergraduate (institute, universities)
    4. Postgraduate (post-institute/university education, such as Master degree, PhD, candidate of science)
    88. Don't know

4. Do you have children?
    1. Yes
    2. No → Go to Question 6

5. How many children do you have? Number of children _____

6. In total, what is the number of pregnancies you have had including this one and any others including those that ended in a miscarriage, abortion, or live birth?

    Number of pregnancies _____ if **1** → Go to Question 9

7. Have you ever had an abortion?
    1. Yes → How many:_____
    2. No → Go to Question 9
    77. No answer

8. What type of abortion did you have before?

	Yes	No	NA	DK
1. Regular abortion	1	2	77	88
2. Medical abortion (mifepristone within one month of missed menses)	1	2	77	88
3. Late-term abortion (more than 12 weeks)	1	2	77	88
4. Other (specify) _____	1	2	77	88

9. During this pregnancy did you attend childbirth preparation classes?
    1. Yes
    2. No → Go to Q11
    88. Don't know/unsure
    99. Don't remember

10. How many classes did you attend? _____ classes

11. Did you have rooming in?
    1. Yes
    2. No
    88. Don't know/unsure
    99. Don't remember

12. Did medical staff at the Maternity explain how to care for yourself at home after leaving the clinic?
    1. Yes
    2. No
    88. Don't know/unsure

13. What symptoms may indicate that you are having a problem which needs treatment and return to the clinic?
    1. Fever
    2. Dizziness or fainting
    3. Abdominal pain
    4. Severe cramping
    5. Nausea, vomiting
    6. Bleeding heavier than a normal period
    7. Vagianl discharge that smells bad
    8. Other_____
    9. None
    77. No answer
    88. Don't know/unsure

14. Do you breastfeed?
    1. Yes
    2. No → Go to Question 18
    88. Don't know/unsure

15. Did medical staff at the Maternity/WCC explained to you about the benefits of exclusive breastfeeding for the first 6 months of baby's life?
    1. Yes
    2. No
    88. Don't know/unsure

16. Do you practice exclusive breastfeeding?
    1. Yes
    2. No
    88. Don't know/unsure

17. How long after birth did you first put your child to the breast?
    1. Immediately/within first hour after delivery
    2. Any other answer
    88. Don't know/unsure
    99. Don't remember

18. Did medical staff at Maternity show you how to breastfeed?
    1. Yes
    2. No
    88. Don't know/unsure
    99. Don't remember

19. Did medical staff at Maternity tell you about proper nutrition during breastfeeding?
    1. Yes
    2. No
    88. Don't know/unsure
    99. Don't remember

20. Are you planning to have (more) children?
    1. Yes
    2. No → Skip to question 22
    88. Don't know/not sure

21. How long would you like to wait before the birth of your (next) child?
    _____ Years
    88. Don't know/not sure

22. Did medical staff at the Maternity/WCC talk to you about how to avoid unplanned pregnancy?
    1. Yes
    2. No
    77. No answer
    88. Don't know/unsure

23. Did medical staff at the Maternity/WCC talk to you about Lactational Amenorrhea Method?
    1. Yes
    2. No → end the questionnaire
    77. No answer
    88. Don't know/unsure

24. Please name criteria necessary for lactational amenorrhea method? DO NOT READ THE RESPONSES.
    1. 6 months postpartum, menses didn't return, exclusive breastfeeding on demand
    2. Any other answers
    77. No answer
    88. Don't know/unsure

25. Did medical staff at the maternity/wcc tell you when to come back for a postpartum follow-up visit to wcc?
    1. Yes
    2. No
    77. No answer
    88. Don't know/unsure

THANK YOU!

Interview end time ___:___

Appendix 11: Community Mapping

Community mapping indicators list

Observer's first name, last name: _____ Team #: ___ ___

GENERAL INFORMATION
Date: (dd/mm/yy) __/__/__

Facility name: _____
Facility type:

1. Polyclinic
2. Ambulatory/Health Center
3. FAP

Facility address _____

ID # of the facility (the data collector should ensure that the number coincides with the given facility ID number list number).

__ __ __ __ __ __ __

USE THE FOLLOWING CODES FOR INDICATING DATA SOURCES:

1. Village mayor
2. Provider
3. Community member

Data		Data source
A. ID number of facility		
B. Geographical location		
B.1 Distance in km of facility from the center of the village/town	_____km	
B.2 Name and location of the nearest delivery facility		
B.3 Distance in km from village to the nearest delivery facility	_____km	
B.4 Distance in travel time by car from village to the nearest delivery facility in minutes	_____min	
B.5 Name and location of the nearest outpatient facility with a physician (ob/gyn, family doctor)	__ __ __ __ __ __ __	
B.6 Distance in km from village to the nearest outpatient facility with a physician	_____km	
B.7 Distance in travel time by car from village to the nearest outpatient facility with a physician (RECORD IN MINUTES)	_____min	
B.8 Communications – telephone line (in the facility, at provider's home, at the post office)		
B. 9 Communications – type of transport, frequency, approximate travel time		

Data		Data source
B.10 Communications - quality of the road		
C. Catchments area		
C. 1 Population	_____ people	
C. 2 Number of women/men	_____men _____women	
C. 3 Women of reproductive age (16-49 years)		
C. 4 # of births within last 3 years		
C. 5 # of people who left the village permanently within last 3 years		
C.6 Migration: number of men having temporal work abroad		
C. 7 Children under 1		
C. 7.1 Children under 5		
C. 7.2 Children under 15		
C.8 Number of national minorities in the community		
C.9 Number of refuges in the community		
D. Health facility		
D.1 Existence of health facility	1. Exists 0. Not exist → reserve _____	
D.2 Type of facility	1. Ambulatory 2. FAP	
D.3 Existence of pharmacy	1. Exists 0. Not exists	
E. Intervention of international organizations (which organizations worked in this community during last 5 years)		
F. Supervision		
F. 1 Name and surname of the nurse		
F.2 Name and location of the supervisor 1		
F.3 Name and location of the supervisor 2		
F.4 Name and location of the supervisor 3		

Appendix 12: Community Member Interview Form

COMMUNITY MEMBER INTERVIEW

Date (day/month/year) ___/___/___ Interview start time___:___

Interviewer's first name, last name _____

Name of the Facility_____

Address of the Facility_____

Source of information:

1. School principal
2. School teacher

If there is no school in the community take an interview with any community member

3. A community member

INSTRUCTIONS TO DATA COLLECTOR
Please, fill in all questions of these questionnaires with at least 3 people suggested as sources of information above. If information provided by community representative, health provider and village mayor, is contradicting, please make sure to include one more community representative. Remember to include all 3 sources of information. Please follow the instructions put in CAPS LOCK before questions.

Health facility ID # (Interviewer: make sure that the number corresponds to the numbers of the remaining instruments).

__ __ __ __ __ __ __

Good morning. My name is_____. I represent Project NOVA which conducts this survey together with the Ministry of Health. This study aims to research the quality of health care services in your community. Your answers will help us shape our program best suited for the needs of the community. The study is CONFIDENTIAL; your name will not be mentioned anywhere and the information provided by you will be presented only in a summarized form.
The interview process will take 10 to 15 minutes.

You may refuse to participate in the interview or any part of it
Can we start now?

IN CASE OF DISAGREEMENT THANK THE RESPONDENT FOR THE TIME, FILL IN THE 'GENERAL INFORMATION' SECTION AND LEAVE.

Community/Local Government Activism

The following questions aim to explore the relations of the community and some members of the community. Please listen to the question and then choose one of the options which best describes the present situation in your opinion. I would like to emphasize that we don't look for the *right* answers; we appreciate your opinion, even if you think it could be wrong or incomplete. Also, please remember that your answers will remain confidential.

1. **How much do you think is the village mayor is concerned about community issues?**
    1. Completely concerned about community issues and problems and is actively working
    2. Not completely concerned about community issues
    3. Somehow concerned about community issues
    4. Not concerned about community issues

   Please give an example _____

2. **How much does the village mayor encourage community participation and involvement?**
    1. Always involving the community
    2. Often involving the community
    3. Involving the community very rarely
    4. Not involving the community

   Please give an example _____

3. **How much importance do you think the village mayor gives to health issues and problems?**
    1. Gives very much importance to health issues and problems and raise these issues
    2. Gives much importance to health issues and problems but raise these issues not actively
    3. Gives some importance to health issues and problems but doesn't raise these issues
    4. Doesn't give any importance to health issues and problems

   Please give an example _____

4. **What is the community opinion about health provider's competence in health issues?**
    1. S/he is very competent and always knows what s/he is talking about
    2. S/he seems to be competent enough to deal with community members health issues
    3. S/he is competent in most of the issues she comes across, but sometimes is not confident
    4. S/he is competent at all, and should not be working as a health provider

   Please give an example: _____

5. How much do you think health provider is respected in the community?

1. S/he is one of the most respected community members, and everybody refers to her with any health problem they would encounter
2. S/he is respected as the health provider in the community, and most people refer to her having a problem with health
3. S/he does not enjoy particular respect in the community, but people occasionally refer to her having a health problem
4. S/he is not respected in the community, and people very rarely go to her, or do not go at all

Please give an example: _____

6. How often does the health provider raise health related issues/problems with the mayor, Avagani and community?

1. Often raises health related problems
2. Raises health related problems on as needed basis
3. Raises health related problems very rarely
4. Does not speak of the health related problems at all

Please give an example _____

7. How often does a physician visit the community?

1. Twice a month or more often
2. Each month
3. Once per two months or more rarely

8. How much do you think the community is concerned with primary healthcare issues?

1. Community is concerned very much with primary healthcare issues, it is one of the first priorities
2. Community is not very concerned with primary healthcare issues
3. Community isn't concerned with primary healthcare issues

9. Do you think there might be community leaders who will be willing to take extra responsibilities in the community?

1. yes 2. no

If yes, please specify _____

10. What international or local organizations worked in this community in the past 5 years? Please provide details of their involvement and the impact it had on community's life.

_____

_____

THANK YOU!

Interview end time ___:

Appendix 13: Community Provider Interview Form

COMMUNITY PROVIDER INTERVIEW

Date (day/month/year) ___/___/____ Interview start time___:___

Interviewer's first name, last name _____

Name of the Facility_____

Address of the Facility_____

Source of information:
1. Community nurse
2. Other (specify) _____

INSTRUCTIONS TO DATA COLLECTOR
Please, fill in all questions of these questionnaires with at least 3 people suggested as sources of information above. If information provided by community representative, health provider and village mayor, is contradicting, please make sure to include one more community representative. Remember to include all 3 sources of information. Please follow the instructions put in CAPS LOCK before questions.

Health provider ID # **(Interviewer: make sure that the number corresponds to the numbers of the remaining instruments).**

__ __ __ __ __ __ __

READ
Good morning. My name is_____. I represent Project NOVA which conducts this survey together with the Ministry of Health. This study aims to investigate quality of health care services in your community. Your answers will help us shape our program best suited for the needs of the community. The study is confidential; your name will not be mentioned anywhere and the information provided by you will be presented only in a summarized form.

The interview process will take 10 to 15 minutes.

You may refuse to participate in the interview or any part of it

Can we start now?

NOTE TO DATA COLLECTOR
IN CASE OF DISAGREEMENT THANK THE RESPONDENT FOR THE TIME, FILL IN THE "GENERAL INFORMATION" SECTION AND LEAVE.

Community/Local Government Activism

The following questions aim to explore the relations of the community and some members of the community. Please listen to the question and then choose one of the options which best describes the present situation in your opinion. I would like to emphasize that we don't look for *right* answers, we appreciate your opinion, even if you think it could be wrong or incomplete. Also, please remember, that your answers will remain confidential.

1. **How much do you think the village mayor is concerned about community issues?**
   1 Completely concerned about community issues and problems and is actively working
   2 Not completely concerned about community issues
   3 Somehow concerned about community issues
   4 Not concerned about community issues

   Please give an example _____

2. **How much does the village mayor encourage community participation and involvement?**
   1 Always involving the community
   2 Often involving the community
   3 Involving the community very rarely
   4 Not involving the community

   Please give an example _____

3. **How much importance do you think the village mayor gives to health issues and problems?**
   1 Gives very much importance to health issues and problems and raise these issues
   2 Gives much importance to health issues and problems but raise these issues not actively
   3 Gives some importance to health issues and problems but doesn't raise these issues
   4 Doesn't give any importance to health issues and problems

   Please give an example _____

4. **How often does a physician visit the community?**
   1 Twice a month or more often
   2 Each month
   3 Once per two months or more rarely

5. **How much do you think the community is concerned with primary healthcare issues?**
   1 Community is concerned very much with primary healthcare issues, it is one of the first priorities
   2 Community is not very concerned with primary healthcare issues
   3 Community isn't concerned with primary healthcare issues

6. Do you think there might be community leaders who will be willing to take extra responsibilities in the community?

1. yes 2.no

If yes, please specify _____

7. What international or local organizations worked in this community in the past 5 years? Please provide details of their involvement and the impact it had on community's life.

_____

THANK YOU!

Interview end time ___:___

Appendix 14: Community Authority Interview Form

Community Authority interview

Date (day/month/year) ___/___/___ Interview start time ___:___

Interviewer first name, last name _____

Name of the Facility_____

Address of the Facility_____

Source of information

4. Village mayor
5. Other mayor's office employee (specify) _____

Health facility ID # (Interviewer: make sure that the number corresponds to the numbers of the remaining instruments).

__ __ __ __ __ __ __

INSTRUCTIONS TO DATA COLLECTOR
Please, fill in all questions of these questionnaires with at least 3 people suggested as sources of information above. If information provided by village mayor, health provider, and community representative, is contradicting, please make sure to include one more community representative. Remember to include all 3 sources of information. Please follow the instructions put in CAPS LOCK before questions.

READ
Good morning. My name is _____. I represent project NOVA which conducts this survey in cooperation with the Ministry of Health. The aim of this research is to explore quality of health care services in your community. Your answers will help us shape our program best suited for the needs of the community. The study is confidential; your name will not be mentioned anywhere and the information provided by you will be presented only in a summarized form.

The interview process will take 10 to 15 minutes.

You may refuse to participate in the interview or any part of it

Can we start now?

IN CASE OF DISAGREEMENT THANK THE RESPONDENT FOR THE TIME, FILL IN THE 'GENERAL INFORMATION' SECTION AND LEAVE.

Community/Local Government Activism

The following questions are aimed to explore the relations of the community and some members of the community. Please listen to the question and then choose one of the options which best describes the present situation in your opinion.

1. What is the community opinion about community health provider's competence in health issues?

1. S/he is very competent and always knows what s/he is talking about
2. S/he seems to be competent enough to deal with community members health issues
3. S/he is competent in most of the issues she comes across, but sometimes is not confident
4. S/he is competent at all, and should not be working as a health provider

Please give an example: _____

2. How much do you think health provider is respected in the community?

1. S/he is one of the most respected community members, and everybody refers to her with any health problem they would encounter
2. S/he is respected as the health provider in the community, and most people refer to her having a problem with health
3. S/he does not enjoy particular respect in the community, but people occasionally refer to her having a health problem
4. S/he is not respected in the community, and people very rarely go to her, or do not go at all

Please give an example: _____

3. Is the health provider raising health related issues/problems with the mayor, Avagani and Community?

1. Often raises health related problems
2. Raises health related problems on as needed basis
3. Raises health related problems very rarely
4. Does not speak of the health related problems at all

Please give an example: _____

4. How often does a physician visit the community?

1. Twice a month or more often
2. Each month
3. Once per two months or more rarely

5. How much do you think the community is concerned with primary health issues?

1. Community is concerned very much with primary health issues, it is one of the first priorities
2. Community is not very concerned with primary health issues
3. Community isn't concerned with primary health issues

6. Do you think there might be community leaders who will be willing to take extra responsibilities in the community?

1. yes 2. no

Please specify what extra responsibilities might the community leaders take: _____

7. What international or local organizations worked in this community in the past 5 years? Please provide details of their involvement and the impact it had on community's life. _____

THANK YOU!

Interview end time ___:___

Appendix 15: Consent Forms

Informed Consent for
Observation of Health Care Provider's Performance in Care Delivery

Good morning/afternoon.

My name is_____ (I am physician) and also present are _____. We represent the USAID-funded Project NOVA, which conducts Reproductive Health Care survey together with the Ministry of Health. We would like to talk to you regarding your medical/nursing practices in maternal and child care, reproductive health, management of STIs, etc.

We would like to state that the survey is not an examination or a test. We just want to assess what are practices of health care providers regarding the issues identified above. Please be as sincere as possible and remember that neither your name nor name of your facility will appear along with information we collect from you. We will present only the summary of the data on all facilities we assess.

Your participation is voluntary and you can refuse to participate in the study or any component of it.

Within the next hour we would be observing you and your client(s) during her/their visit(s). If there are no clients one of our data collectors will act as a client.

Can we start now?

NOTES FOR THE OBSERVER
In case of refusal, fill in the general information section, thank the provider and go the next facility according to the list.

READ
Please, perform all the actions that you usually perform during antenatal/postnatal/FP/STI care delivery. Include all usual examinations, counseling and procedures which you do and pay no attention to our presence. Physical examination details can be mentioned orally without demonstration.

NOTES FOR THE OBSERVER
If there is a client present during the observation, read the appeal for the client on the back of this page.

Informed Consent
for Client Visit Observation

Good morning/afternoon.

My name is_____ (I am physician) and also present are _____. We represent the USAID-funded Project NOVA, which conducts assessment of maternal and child health services in Armenia. We would like to be present during your visit/check-up to observe the interactions between the health care provider and yourself.

This observation is completely voluntary for you and you can refuse to participate in the study or any component of it. Please remember, that this observation is anonymous, we are not asking or recording your name. Whatever we observe or hear today will be available only for the NOVA and we will not share it with anyone else. Only the summary of all data will be presented to the public.

Can we start now?

NOTES FOR THE OBSERVER
In case of refusal, wait for the next client or do a role playing.

READ
Please, do not pay any attention to our presence and behave as if there is no one except you and the health provider in the room.

X. References

i. National Statistics Service, *Quarterly Report*, April 2004
ii. UNFPA, *Project Document between the Government of Armenia, Armenian Family Health Association and the United Nations Population Fund*
iii. National Statistical Service, Ministry of Health, Measure DHS + ORC Macro, Armenia *Demographic and Health Survey 2005*
iv. Project NOVA, *Reproductive and Child Health Services in Armenia; Baseline Assessment of Primary Health Care Facilities in Tavush and Shirak Marzes*, February, 2006
v Project NOVA, *Reproductive and Child Health Services in Armenia; Baseline Assessment of Primary Health Care Facilities in Gegharkunik and Kotayk Marzes*, October, 2006