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PATIENT SATISFACTION SURVEY

BASELINE EVALUATION IN LORI AND SHIRAK MARZES
2006



December, 2008

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The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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Preface

The Primary Healthcare Reform (PHCR) project is a nationwide five-year (2005-2010) program funded by the United States Agency for International Development (USAID) under a contract awarded to [Emerging Markets Group, Ltd.](#) (EMG) in September 2005. The project's primary objective is the increased utilization of sustainable, high-quality primary healthcare services leading to the improved health of Armenian families. This objective is operationalized by supporting the Ministry of Health (MoH) to implement a package of six interventions that links policy reform with service delivery so that each informs the other generating synergistic effects. These six interventions address healthcare reforms and policy support (including renovation and equipping of facilities); open enrollment; family medicine; quality of care; healthcare finance; and public education, health promotion and disease prevention.

“What impact are these interventions having?” is a question frequently asked but less frequently funded. Fortunately, provision was made in the PHCR project to address the “impact” question. PHCR developed a set of six tools to monitor progress and evaluate results. Three of these tools are facility-based and are designed to assess changes through a pre-test and post-test methodology at 164 primary healthcare facilities and their referral facilities. Three other tools are population-based and are designed to assess changes for the whole of Armenia's population, using the same pre-test and post-test methodology.

This report summarizes the baseline assessment of client satisfaction with health care services at target and comparison primary healthcare facilities in Lori and Shirak marzes (Zone 1), creating a referent for future evaluation of project impact on perceived quality of care in Zone 1.

The Center for Health Services Research and Development of the American University of Armenia, one of the sub-contractors to EMG, has primary responsibility for PHCR monitoring and evaluation. Dr. Anahit Demirchyan, Ms. Tsovinar Harutyunyan, Dr. Varduhi Petrosyan, and Dr. Michael Thompson are the primary authors of this study. We would also like to thank Dr. Zaruhi Bakalyan, Dr. Hripsime Martirosyan and Ms. Nune Truzyan for their valuable contribution to all stages of the study. We would also like to thank our interviewers for their data collection efforts.

We trust that the findings of this study will be of value, both in improving health outcomes through more informed decision-making and in designing new projects. The report can be found on the PHCR website at www.phcr.am. Comments or questions on this study are welcome and should be sent to info@phcr.am.

Richard A. Yoder, PhD, MPH
Chief of Party
Primary Healthcare Reform Project

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Acronyms

AUA	American University of Armenia
CHSR	Center for Health Services Research and Development
PHC	Primary Health Care
PHCR	Primary Health Care Reform
PMP	Performance Monitoring Plan
USAID	United States Agency for International Development
M&E	Monitoring and Evaluation

Executive Summary

The United States Agency for International Development (USAID) awarded Emerging Markets Group (EMG), an international consulting firm, the five-year contract to run Primary Health Care Reform Project in Armenia. The primary goal of the Project is to improve population access to quality primary healthcare services through strengthening PHC (Primary Health Care) facilities and family medicine providers, on one hand, and improving public health awareness, health-seeking behavior and competent demand for PHC services, on the other. The six main components of PHCR project are run in the partnership with IntraHealth International Inc., American University of Armenia, Overseas Strategic Consulting, Ltd., and Social Sectors Development Strategies, and include the following activities:

- **Expansion of Reforms:** assisting the Government in establishing a supportive regulatory environment for the advancement of reforms; renovating and equipping PHC facilities nationwide; designing and delivering training to facility management
- **Family Medicine:** developing up-to-date curricula and training materials for continuous medical education; creating free-standing family medicine group practices; providing training to family physicians and nurses
- **Open Enrollment:** introducing the open enrollment principle in the Armenian healthcare sector to promote customer-oriented services by fostering competition among providers
- **Quality of Care:** improving the quality of care by introducing state-of-the-art quality standards and quality assurance procedures; introducing provider licensing and accreditation regulations
- **Healthcare Finance:** increasing the transparency and efficiency of the distribution of healthcare funds through improved service costing and performance-based contracting practices; enhancing accountability at the facility level; determining the use of National Health Accounts
- **Public Education:** enhancing awareness about PHC services offered; improving understanding of open enrollment and acceptance of family medicine providers; promoting healthy lifestyle and health-seeking behavior.

The project utilizes regional scale-up approach, which allows for the zonal expansion of the reforms throughout the country over the life of the project. Lori and Shirak marzes are targeted by the project for the first year.

Current assessment was conducted in summer 2006 and aimed to establish baseline value of patients' satisfaction with the health care services (one of the key indicators in the project performance management plan - PMP) at the facilities targeted by the project in Lori and Shirak marzes. The assessment will be repeated at the completion of the project activities in target marzes to track the changes in the care quality introduced by the project. Besides assessing the general level of client satisfaction with care, this study also investigated client perspective on specific aspects of health care provision, including patient-provider interactions, availability and confidentiality of care, and facility

conditions, thus lending insight into the areas where the project should put more efforts to bring in higher quality of care.

The baseline assessment utilized stratified random sampling design. Self-administered interviews were conducted with 684 clients of selected primary health care facilities in Lori and Shirak marzes in June-August 2006.

The data showed that the overwhelming majority of clients in the target and comparison groups were satisfied with the quality of their provider and the way he/she cared for them at the last visit (87.0% in both). Approximately 89.0% of clients would visit the same provider again if they were to have a similar problem, and 86.4% would recommend the provider to their friends and relatives. The level of satisfaction with other aspects of care, including waiting time, accessibility of services, confidentiality, provision of drugs, and other factors, was considerably lower than the satisfaction with the provider (62.2% of target respondents, and 63.7% of comparison respondents). The overall assessment of care was mostly positive (77.2% of target respondents considered the care they received was “excellent” or “good”). Level of education was associated with the level of satisfaction with services: less educated people reported being more satisfied than those with higher educational status.

1. Introduction

Like many of the former Soviet Republics, Armenia's entire health care system deteriorated following independence in 1991. Access to health care, its affordability, and its quality have declined, negatively impacting the health status of the population [1].

Although these negative changes in the health care system were universal and well-known throughout the country, several recent assessments of patient perspectives on the quality of primary health care services failed to provide sufficient and compelling information that reflected the true state of services [2; 3]. Despite the lack of necessary equipment and supplies, the inadequate communication between health care providers and clients, and the extremely poor physical conditions of facilities, the levels of patient¹ satisfaction with care remain high, even in most underprivileged populations living in remote rural areas. While patient satisfaction has long been considered an important component when measuring health outcomes and quality of care [4], the role of patient expectations, demographic characteristics, and other factors specific to the country/setting where the satisfaction studies are conducted should not be underestimated. Taking this into consideration, the current study used several measurements which would explore the opinions of patients about different aspects of care. Additional analyses investigated the link between satisfaction and demographic characteristics.

2. Methods

Sampling

Client satisfaction is a key indicator included in Primary Health Care Reform (PHCR) project's Performance Management Plan (PMP) to measure the progress made by the project in its intervention areas. Therefore, the study design facilitated annual measuring and reporting of the indicator to track the changes resulting from the project, providing a sample representative of the areas targeted by the project. The study design also facilitated the differentiation of project-specific changes from those that could possibly have arisen due to historical or other factors unrelated to the project. Taking into account these factors and the issues of feasibility, the Monitoring and Evaluation (M&E) team used a quasi-experimental pre-post non-equivalent control design using a cluster sampling method [5]. Given that cluster membership was based on a series of sequential visitors to the clinic, design effect was considered to be negligible in calculating the sample size.

The sample size was calculated using STATA software using the formula for two sample comparison of proportions, so as to detect a 10% pre-post difference in satisfaction level within the intervention group, with alpha error of 0.05, and power of 0.75. The resulting sample size was 196. The sample size for the comparison group was limited by feasibility and budgetary constraints, but was sufficient to detect practically significant differences between intervention and comparison groups at baseline and at follow-up. The same formula for two sample comparison of proportions was used, but with power set to 0.65 and the size of the intervention group as reported above. The calculated sample size for the comparison group was 140.

Of the 32 health facilities targeted by the PHCR project in Lori marz (consisting of four polyclinics, one health center, eight ambulatories, and 19 village health posts), 14 were selected through stratified random sampling to ensure that all the types of targeted facilities were represented in the sample proportionate to their distribution in the pool of targeted facilities. Two polyclinics, one health center, three ambulatories, and eight village health posts constituted the sample for Lori (one cluster per facility, 14 clusters in total). The same selection technique was applied to draw the Shirak sample.

The list of all facilities in Lori marz providing primary healthcare and not targeted by the PHCR project served as the sampling frame for comparison facilities. A total of ten facilities (to complete ten clusters) were selected using stratified sampling to ensure that each type of facility was represented in the sample of comparison facilities proportionate to that in the sample of target facilities. Two polyclinics, two ambulatories, and six village health posts were selected. The study team used the same selection technique for the Shirak sample.

The samples were broken into clusters of 14 respondents. The cluster size of 14 ensures a satisfactory level of diversity within the sample while maximizing efficiency of the data collection process. The address of each element in the cluster was selected from the list of the most recent clients of the selected facility.

Two interviewers completed 24 clusters (14 for target facilities and ten for comparisons) in each marz. For each cluster, the names and addresses of the 25 most recent clients of the selected facility were taken from the facility's journal of visits. The interviewers visited the selected addresses and provided a self-administered questionnaire to an eligible respondent until 14 questionnaires were distributed. The completed questionnaires were collected in envelopes (distributed along with the questionnaires) sealed by the respondents to ensure the confidentiality of the data.

Instrument

The survey instrument (Appendix 1) was developed based on tools used in similar surveys in Armenia and internationally [2; 6; 7] and included the following domains:

1. Respondent's perception of the quality of care provided by a doctor or a nurse during his/her last visit to the primary health care facility (mainly focused on provider's communication skills and patient-provider interaction)
2. Accessibility of care
3. Confidentiality of care
4. Respondent's ability to get prescribed medicines
5. Facility conditions
6. Willingness to visit the same provider/recommend provider to friends/relatives
7. Overall assessment of the care received
8. Respondents' suggestions to improve services at the clinic
9. Brief demographic characteristics

In addition to distributing the self-administered questionnaires, the interviewers completed journal forms (Appendix 2) where information regarding the interview and

selection processes was recorded to document compliance with the sampling protocol and response patterns.

Training/pre-testing/data collection

The baseline interviewer training and pre-testing lasted one day in each marz. The PHCR M&E team developed and delivered to interviewers a training guide, containing important information regarding the research objectives, methods, sampling/interview administration, and timeline. A total of 3 interviewers participated. Data collection in Lori started on June 19, 2006 and ended on July 14, 2006. Data collection in Shirak started on July 21, 2006 and ended on August 25, 2006. A member of the M&E team observed each interviewer during the pre-testing phase. In addition, the M&E team conducted spot-checks of the interview process in both marzes to assure compliance with the survey protocol.

Data entry/analysis

The Center for Health Services Research and Development (CHSR) team of data enterers at the American University of Armenia (AUA) entered data into a computer database. The data were analyzed using SPSS 11.0 software. Double entry and subsequent cleaning helped to ensure the accuracy of the database. The Chi-square test, independent samples t-test, and one-way ANOVA were used in the analysis.

Ethical considerations

AUA's Institutional Review Board (IRB) approved the study. Consent was included in the questionnaire providing information about the benefits and risks to the research participants and information that participation in the study was voluntary (Appendix 1).

3. Results

Administrative/General

A total of 684 respondents were included in the patient satisfaction survey. Overall, it took 832 attempts to complete 684 interviews (82.1% response rate). The primary reason for non-response was absence of all household members (7.4%), followed by the absence of the eligible respondent (2.9%), or the respondent being unable to participate in the interview (2.6%). Refusal by the eligible respondent was recorded in 2.4% of cases. One person returned incomplete questionnaire.

Of 684 respondents, 377 were from target facilities (196 from Lori and 181 from Shirak), and 307 from comparison facilities (140 from Lori and 167 from Shirak) (Table 1a and 1b). One polyclinic was reassigned from the list of target facilities to that of comparison as the PHCR project plan changed after data collection had been completed; one extra cluster was collected, and two interviews were incomplete.

Table 1a. Socio-demographic characteristics of participants by marz

	Lori (n=336)	Shirak (n=348)
Mean age (years) mean (n)*	46.6 (316)	39.4 (326)
Level of education % (n)*		
1. School (< 10 years)	17.4 (55)	5.5 (18)
2. School (10 years)	42.9 (136)	38.5 (126)
3. Professional/technical (10-13 years)	22.1 (70)	32.4 (106)
4. Institute / University or Postgraduate	17.7 (56)	23.5 (77)
Gender % (n)		
Male	15.9 (51)	15.3 (50)
Female	84.1 (270)	84.7 (277)

*- the differences are statistically significant, $p \leq 0.05$

Table 1b. Socio-demographic characteristics of participants by target/comparison facilities

	Target (n=377)	Comparison (n=307)
Mean age (years) mean (n) *	43.7 (348)	42.0 (294)
Level of education % (n) *		
1. School (< 10 years)	15.4 (54)	6.5 (19)
2. School (10 years)	44.3 (155)	36.4 (107)
3. Professional/technical (10-13 years)	20.9 (73)	35.0 (103)
4. Institute / University or Postgraduate	19.4 (68)	22.1 (65)
Gender % (n)		
Male	14.7 (52)	16.6 (49)
Female	85.3 (301)	83.4 (246)

*- the differences are statistically significant, $p \leq 0.05$

Respondents from Lori marz were less educated and slightly older than respondents from Shirak in both target and comparison groups (Table 1a). The mean age of respondents was 43.7 in target (spanning from 16 to 84), and 42.0 in comparison group (spanning from 16 to 90); in Lori the range was 17-90, and in Shirak 16-81.

The educational status of target group respondents was significantly lower than that of a comparison group (Table 1b). The trend was persistent in each marz.

Client perceptions of quality of primary health care providers

The respondents were asked a set of questions investigating their opinion about the health care provider they contacted during their last visit to a primary health care facility. As shown in Table 2, the overwhelming majority of respondents, both in target and comparison groups, were satisfied with the qualities of the physician or nurse at their last visit to a health care facility.

About 93.3% of respondents considered that the provider was really attentive to them. Also, 92.5% reported that the provider appeared to enjoy caring for them; only 36.0% thought the provider was impatient. Approximately 75.0% mentioned that the provider gave complete explanations, 80.2% responded that he/she considered their preferences

regarding the care, and 89.0% reported he/she understood their problems. Only 11.2% of clients thought that the provider talked down to them, and 16.2% thought he/she was not thorough enough. An even smaller percentage of respondents felt that the provider seemed disorganized and flustered (5.7%). In the opinion of most of the respondents, the provider appeared to be skillful (87.6%), and treated them with respect (95.4%). In 92.1% of cases, providers explained things in understandable manner, in 78.1% of cases made them feel free to ask questions, in 89.6% helped them to understand the illness, and in 82.2% discussed treatment options with them.

Table 2. Clients' perceptions of provider qualities

Attitude and qualities of a physician/nurse % (n)	Target (n=377)			Comparison (n=307)		
	Yes	To some extent	No	Yes	To some extent	No
Was really attentive to you	93.3 (346)	5.4 (20)	1.3 (5)	90.8 (275)	7.3 (22)	2.0 (6)
Appeared to enjoy caring for you	92.5 (343)	5.9 (22)	1.6 (6)	89.0 (267)	8.7 (26)	2.3 (7)
Seemed impatient*	36.0 (129)	11.7 (42)	52.2 (187)	26.8 (74)	16.3 (45)	56.9 (157)
Gave complete explanations	74.6 (264)	12.4 (44)	13.0 (46)	72.7 (208)	16.4 (47)	10.8 (31)
Talked down to you	11.2 (40)	4.2 (15)	84.6 (301)	6.4 (18)	5.3 (15)	88.3 (249)
Was not thorough enough	16.2 (56)	13.9 (48)	69.9 (241)	12.8 (34)	16.9 (45)	70.3 (187)
Considered your preferences regarding your care**	80.2 (280)	12.9 (45)	6.9 (24)	74.3 (208)	13.2 (37)	12.5 (35)
Understood you when you shared your problems	89.0 (323)	7.2 (26)	3.9 (14)	84.2 (250)	10.8 (32)	5.1 (15)
Seemed disorganized and flustered	5.7 (20)	4.5 (16)	89.8 (317)	4.6 (13)	4.6 (13)	90.8 (257)
Appeared to be skillful	87.6 (318)	9.4 (34)	3.0 (11)	84.9 (248)	11.3 (33)	3.8 (11)
Treated you with respect	95.4 (353)	3.0 (11)	1.6 (6)	94.0 (283)	3.7 (11)	2.3 (7)
Explained things in an understandable manner	92.1 (339)	6.0 (22)	1.9 (7)	90.9 (269)	7.8 (23)	1.4 (4)
Made you to feel free to ask questions	78.1 (281)	9.7 (35)	12.2 (44)	74.7 (218)	13.7 (40)	11.6 (34)
Helped you to understand your illness	89.6 (328)	7.7 (28)	2.7 (10)	85.4 (258)	11.3 (34)	3.3 (10)
Discussed treatment options with you	82.2 (300)	9.9 (36)	7.9 (29)	78.7 (236)	12.0 (36)	9.3 (28)

*- the differences are statistically significant, $p \leq 0.05$

A few differences were found between comparison and target groups in the values of above-mentioned variables (Table 2). A summative score, which included all 15 variables shown above, was computed. The score "2" was given to each positive ("yes") reply and "0" to negative replies. The summative score was divided into the number of items in the scale resulting in a maximum possible score of 2.0. Mean scores for target and

comparison respondents were equal: 1.75 (out of maximum 2.0) in both groups. The summative score was also recoded into an ordinal variable, which grouped respondents scoring ≥ 1.5 into “satisfied” category, and respondents scoring less than 1.5 into “not satisfied”. The analysis showed that about 87% of respondents from target and the same percentage from comparison facilities were satisfied with the provider’s attitude and care. Thus, the two groups were similar at baseline with respect to satisfaction.

Clients’ perceptions of different aspects of care

A set of questions was asked regarding general aspects of care received at the last visit (Table 3). Only 11.5% of respondents in the target group, and 10.9% in the comparison group mentioned that they had to wait too long before receiving care, while 7.9% of target and 8.4% of comparison populations told that it was difficult for them to make an appointment with the provider. Twenty-five percent of target respondents reported that people unrelated to them were present during the visit (versus 19.6% in the comparison), however 67.7% believed that the information they shared with their provider will be kept confidential (71.7% in comparison). Approximately 64.7% of clients received health education materials to read (59.9% in comparison).

Over two-thirds of the target respondents (67.7%) claimed that they were able to get all the medicines prescribed during the last visit to the clinic, and 47.1% had received free or discounted medicine during the last visit. Overwhelming majority of target respondents (91.9%) was satisfied with the cleanness of the clinic. However, only 58.6% considered clinic conditions satisfactory in terms of renovation, equipment, and supplies (67.4% of comparison, the difference is statistically significant).

Based on the set of variables mentioned above, a summative score was calculated similarly to the score calculated for the perceptions of the provider’s quality. The mean score for the target group was 1.54, and for the comparison group 1.55 (of maximum 2.0). The summative score was recoded into an ordinal variable, which grouped respondents scoring ≥ 1.5 into “satisfied” category, and respondents scoring less than 1.5 into “not satisfied”. The analysis showed that about 62.2% of respondents in the target group and 63.7% respondents in the comparison group could be considered satisfied with care received at the last visit. The difference was not statistically significant, indicating the two groups were equivalent in this respect at baseline.

However, when asked directly about how they would assess care received in the clinic during the last visit, the majority of patients responded either “excellent” or “good” (77.2% of target group, and 78.4% of comparison group).

Approximately 89% of clients stated that they would visit the same provider again in case of similar problem, and 86.4% would recommend the same provider to their friends and relatives.

Table 3. Clients' perceptions of quality of care

Aspects of care at the clinic % (n)	Target (n=377)			Comparison (n=307)		
	Yes	Don't know	No	Yes	Don't know	No
You had to wait too long before receiving the care	11.5 (42)		88.5 (324)	10.9 (31)		89.1 (254)
It was difficult for you to make an appointment with the provider	7.9 (29)		92.1 (338)	8.4 (24)		91.6 (261)
People unrelated to you were present during your visit	25.0 (91)		75.0 (273)	19.6 (56)		80.4 (229)
You received health educational materials for reading	64.7 (233)		35.3 (127)	59.9 (173)		40.1 (116)
Do you think the information you shared about yourself with the provider will be kept confidential	67.7 (245)	25.7 (93)	6.6 (24)	71.7 (215)	24.0 (72)	4.3 (13)
	Yes	No medicine was prescribed	No	Yes	No medicine was prescribed	No
Could you get all the medicines prescribed during your last visit	67.7 (243)	14.2 (51)	18.1 (65)	61.0 (183)	17.0 (51)	22.0 (66)
	Yes	There was no need	No	Yes	There was no need	No
Did you receive free of charge or discounted medicine during your last visit	47.1 (172)	22.7 (83)	30.1 (110)	45.7 (137)	27.7 (83)	26.7 (80)
	Satisfactory	Don't know	Unsatisfactory	Satisfactory	Don't know	Unsatisfactory
How would you assess the cleanness of the clinic at the time of your last visit	91.9 (339)	5.4 (20)	2.7 (10)	90.4 (272)	7.6 (23)	2.0 (6)
How would you assess the clinic conditions (renovation, equipment, supplies) at the time of your last visit*	58.6 (212)	14.1 (51)	27.3 (99)	67.4 (203)	13.6 (41)	18.9 (57)

*- the differences are statistically significant, $p \leq 0.05$

Client suggestions for the improvement of care

Table 4 shows the distribution of responses to the question about the three measures that a patient would consider the most important to improve clinic services. As seen from the table, the most frequently mentioned suggestion in the target group was to improve drug supplies (82.2%), followed by increasing the salary of providers (44.9%), and increasing the space of the facility (39.6%). Other common responses were “to buy necessary equipment” (36.4%), “to increase professional level of providers” (32.7%), and “to make a doctor regularly available” (23.4%). The distribution of responses in the comparison group was similar to what was found in the target group.

Table 4. Client suggestions for the improvement of care*

Three most important measures to improve the services % (n)	Target (n=377)	Comparison (n=307)
Improve drug supplies	82.2 (309)	78.4 (240)
Increase salary of providers	44.9 (169)	44.4 (136)
Increase space	39.6 (149)	30.1 (92)
Buy necessary equipment	36.4 (137)	35.3 (108)
Increase professional level of providers	32.7 (123)	36.6 (112)
Make doctor regularly available	23.4 (88)	23.2 (71)
Improve hygiene/cleanness	15.2 (57)	16.3 (50)
Involve community in supervision	11.2 (42)	10.1 (31)
Increase working hours of the clinic	10.9 (41)	12.4 (38)
Supervise providers	8.5 (32)	10.5 (32)

* - multiple responses were obtained for the question

Other responses not included in the main list of options in the questionnaire but mentioned by several respondents included suggestions to have a telephone connection for the clinic, to frequently invite narrow specialists to the facilities or open cabinets for them at the facility, repair the clinic, and provide the facility with a car/ambulance with equipment.

Client satisfaction in relation to demographic characteristics

The M&E team tabulated client satisfaction with different aspects of care by the demographic characteristics of respondents. As shown in table 5a, no significant associations were found between the levels of satisfaction and age category of respondents. However, the association between satisfaction with the quality of a provider and educational level of respondents was significant, with more educated clients being less happy with the provider’s care at the last visit (Table 5b). The same trend was found for the overall assessment of care received during the last visit: 54.7% of people with less than 10 years of school education considered care received during the last visit as excellent versus 32.8% of institute/university graduates.

Table 5a. Satisfaction with care by age category in target group

	Younger (<42)	Older (≥ 42)
Satisfaction with provider % (n)		
Satisfied	87.9 (124)	88.6 (124)
Not satisfied	12.1 (17)	11.4 (16)
Satisfaction with provider: mean score, mean (n)	1.75 (141)	1.75 (140)
Satisfaction with different aspects of care % (n)		
Satisfied	61.9 (91)	63.0 (97)
Not satisfied	38.1 (56)	37.0 (57)

	Younger (<42)	Older (≥ 42)
Satisfaction with different aspects of care: mean score, mean (n)	1.53 (147)	1.55 (154)
Overall assessment of the care received during the last visit, % (n)		
Excellent	37.3 (63)	43.6 (75)
Good	41.4 (70)	32.0 (55)
Fair	20.1 (34)	21.5 (37)
Poor	1.2 (2)	2.9 (5)

Table 5b. Satisfaction with care by education category in target group

	School (less than 10 years)	School (10 years)	Professional technical education (10-13 years)	Institute/ University or Postgraduate
Satisfaction with provider % (n)*				
Satisfied	97.8 (44)	91.1 (113)	82.3 (51)	81.1 (43)
Not satisfied	2.2 (1)	8.9 (11)	17.7 (11)	18.9 (10)
Satisfaction with provider: mean score mean (n)	1.80 (45)	1.77 (124)	1.72 (62)	1.68 (53)
Satisfaction with different aspects of care % (n)				
Satisfied	66.7 (32)	58.5 (79)	71.9 (46)	54.2 (32)
Not satisfied	33.3 (16)	41.5 (56)	28.1 (18)	45.8 (27)
Satisfaction with different aspects of care: mean score mean (n)	1.56 (48)	1.53 (135)	1.60 (54)	1.45 (59)
Overall assessment of care received during the last visit % (n)*				
Excellent	54.7 (29)	43.3 (65)	30.1 (22)	32.8 (22)
Good	26.4 (14)	36.0 (54)	39.7 (29)	43.3 (29)
Fair	18.9 (10)	19.3 (29)	28.8 (21)	16.4 (11)
Poor	-	1.3 (2)	1.4 (1)	7.5 (5)

*- the differences are statistically significant, $p \leq 0.05$

Marginally significant difference was found between satisfaction with different aspects of care in males and females (48.9% of males were satisfied with care versus 64.4% of females).

Table 5c. Satisfaction with care by gender in the target group

	Male	Female
Satisfaction with provider % (n)		
Satisfied	82.2 (37)	89.2 (215)
Not satisfied	17.8 (8)	10.8 (26)
Satisfaction with provider: mean score mean (n)	1.71 (45)	1.76 (241)
Satisfaction with different aspects of care % (n)*		
Satisfied	48.9 (22)	64.4 (168)
Not satisfied	51.1 (23)	35.6 (93)
Satisfaction with different aspects of care: mean score mean (n)	1.52 (45)	1.54 (261)
Overall assessment of the care received during the last visit % (n)		
Excellent	34.7 (17)	41.4 (123)
Good	28.6 (14)	38.0 (113)
Fair	34.7 (17)	18.2 (54)
Poor	2.0 (1)	2.4 (7)

*- the differences are statistically significant, $p \leq 0.05$

The tabulation of variables by marz revealed statistically significant difference between the marzes with Lori respondents being less satisfied with different aspects of care than respondents from Shirak (Table 5d).

Table 5d. Satisfaction with care by marz in target group

	Lori	Shirak
Satisfaction with provider % (n)		
Satisfied	88.7 (134)	85.5 (130)
Not satisfied	11.3 (17)	14.5 (22)
Satisfaction with provider: mean score mean (n)	1.77 (151)	1.73 (152)
Satisfaction with different aspects of care % (n)*		
Satisfied	56.5 (95)	68.2 (107)
Not satisfied	43.5 (73)	31.8 (50)
Satisfaction with different aspects of care: mean score mean (n)	1.52 (168)	1.57 (157)
Overall assessment of the care received during the last visit % (n)		
Excellent	40.8 (78)	39.0 (69)
Good	39.3 (75)	35.0 (62)
Fair	18.3 (35)	23.2 (41)
Poor	1.6 (3)	2.8 (5)

*- the differences are statistically significant, $p \leq 0.05$

The distribution of responses in comparison group resembled that of a target group.

4. Conclusions and Recommendations

The following findings need to be taken into account in the process of evaluation of the impact of project interventions in the surveyed regions:

- The general level of satisfaction with health care received at the last visit to primary health care facility among clients of target facilities was rather high at baseline (71.1%), though leaving some room for improvement.
- Mean scores for the satisfaction with the quality of a primary healthcare provider for target and comparison respondents were equal: 1.75 out of maximum 2.0 in both groups.
- Mean score for the satisfaction with the other aspects of care at the facility was 1.54 for the target group, and for the comparison group 1.55 (of maximum 2.0)
- For the majority of constructs, no statistically significant differences were found between the target and comparison facilities at baseline.
- The significant association was found between satisfaction with the quality of a provider and educational level of respondents with more educated clients being less happy with the provider's care at the last visit. Also approximately 55% of people with less than 10 years of school education considered care received during the last visit as excellent versus 32.8% of institute/university graduates.

As mentioned previously, client perceptions may not be sufficient criteria for an objective estimate of the quality of services. That assumption was partially confirmed by the vast list of suggestions for improvements provided by respondents. Unfortunately, among the important improvements suggested by the clients (the implementation of which would presumably elevate the satisfaction levels) the three most frequently repeated options (improvement of

drug supplies, increase of providers' salaries, and the space of facilities) will not be directly addressed by the PHCR project. However, providing facilities with necessary equipment, improving the professional training of providers, and improving hygiene/cleanness mentioned by 36.4%, 32.7%, and 15.2% of respondents, respectively, are within the scope of the project activities.

The fact that respondents with lower education tend to be happier with the services received than respondents with higher educational status indicates the importance of different expectations for care and different levels of health literacy in different population strata largely affecting the satisfaction outcome in clients. The current assessment suggests the administration of more in-depth questionnaire in terms of demographic information on respondents and details of care provided at the facility, and a separate analysis of changes in different socio-economic strata of the population at the follow-up.

5. References

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Appendix 1: Client Survey

Facility Code _____

Date: _____ / _____ / _____
Day Month Year

Dear client,

Primary Health Care Reform Project conducts this survey together with the Ministry of Health with the aim to assess the quality of primary health care services in your residency area. We need your help to understand how to improve the primary health care for your community. Your address was selected randomly from the list of people who visited your primary health care facility recently. The healthcare providers of that facility know about this survey and support it. However, your participation in this study is voluntary and the information you give us will be 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. It is very important that you respond honestly. Please, carefully read each question and the possible responses. Choose and mark (✓) the response option that best represents your opinion about the last visit to the polyclinic (ambulatory, FAP) made during the last month by you, your child or a household member whom you accompanied. Please, note, if you accompanied a household member, the questions concerning care refer to the care provided to that person.

1. Do you think that during your last visit to the clinic, the provider (doctor or nurse):

- | | | | |
|---|--------------------------------|---|-------------------------------|
| 1. Was really attentive to you? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 2. Appeared to enjoy caring for you? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 3. Seemed impatient? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 4. Gave complete explanations? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 5. Talked down to you? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 6. Was not enough thorough? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 7. Considered your preferences regarding your care? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 8. Understood you when you shared your problems? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 9. Seemed disorganized and flustered? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 10. Appeared to be skillful? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 11. Treated you with respect? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 12. Explained things in an understandable manner? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 13. Made you to feel free to ask questions? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 14. Helped you to understand your illness? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |
| 15. Discussed with you the treatment options? | <input type="checkbox"/> 1.Yes | <input type="checkbox"/> 2.To some extent | <input type="checkbox"/> 3.No |

2. Was the following true for your last visit to the clinic?

- | | | |
|---|---------------------------------|--------------------------------|
| 1. You had to wait too long before receiving care. | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 2. No |
| 2. It was difficult for you to make an appointment with the provider. | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 2. No |
| 3. People unrelated to you were present during your visit. | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 2. No |
| 4. You received health educational materials for reading. | <input type="checkbox"/> 1. Yes | <input type="checkbox"/> 2. No |

Appendix 2: Journal Form

(One form for each cluster of 14 respondents served by a health care facility)

Date: _____

City/Village _____

Interviewer's name _____

Facility type: Polyclinic
 SVA
 Health Center
 FAP

Facility code _____

<i>Visit/ attempt number</i>	01	02	03	04	05	06	07	08	09	10	11	12	13	14
<i>Result code</i>														

<i>Visit/ attempt number</i>	15	16	17	18	19	20	21	22	23	24	25	26	27	28
<i>Result code</i>														

<i>Visit/ attempt number</i>	29	30	31	32	33	34	35	36	37	38	39	40	41	42
<i>Result code</i>														

RESULT CODES

1. Completed interview
2. Nobody at home
3. No eligible respondent
4. Selected respondent not at home
5. Refusal
6. Refusal by selected respondent
7. Respondent unable to participate _____
8. Other _____
9. Incomplete interview