



PRELIMINARY RESULTS REPORT

Armenia: Comparing Different Demand-Side Incentives for Health Screenings

This document presents the preliminary results and costing information from the Comparing Different Demand-Side Incentives for Health Screenings project in Armenia, including the screening rates in the five study groups, together with some additional analysis by gender, age group, location, etc., the results from qualitative interviews with major themes/sub-themes and verbatim quotations/testimonies from interviews, as well as the breakdown of cost for each of the 5 study groups. This document is prepared as a deliverable 11 for the IE, defined under the contract, signed between the World Bank (WB) and Media Model LLC on March 20, 2019 to execute the services specified in the Terms and Conditions (ToR) set out in the WB Selection No 1260874.

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Contents

LIST OF TABLES AND FIGURES	4
INTRODUCTION.....	5
PRELIMINARY RESULTS FROM QUANTITATIVE ANALYSIS.....	7
Socio-demographic profile of study population.....	7
Screening Rates and Influencing Factors	15
Voucher Delivery and Accumulation.....	18
RESULTS FROM QUALITATIVE END-LINE INTERVIEWS	21
Perceptions of hypertension and diabetes testing before the interventions	21
Perceptions of the intervention.....	25
Perceptions of hypertension and diabetes testing after the interventions.....	28
COSTING INFORMATION	31
ANNEX 1 Additional Tables	33
ANNEX 2 Costing Breakdown (incorporated MS Excel file)	39

LIST OF TABLES AND FIGURES

Table 1 Balance in socio-demographic characteristics across the Study Groups*.....	8
Table 2 Balance in socio-demographic characteristics across the Study Groups: Additional Means/Averages	11
Table 3 Balance in socio-demographic characteristics across the Study Groups: P-values.....	12
Table 4 Insurance, watching TV programmes on health, close surrounding of participants across Study Groups.....	14
Table 5 Screening Status Per Study Groups.....	15
Table 6. Voucher Delivery Status per Intervention Group in four regions.....	18
Table 7. Used vouchers per Groups for August-October.....	19
Table 8. Used vouchers per Intervention Groups Across Regions for August-October (days of the month are rounded).....	20
Table 9 Total Costs Per Intervention Groups (in AMD).....	31
Table 10 Total Costs per Person Across Intervention Groups and Regions (in AMD).....	31
Table 11 Costs Breakdown (in AMD and in % of total).....	32
Figure 1 Definition of Study Groups.....	6
Figure 2 Differences Across Intervention Groups compared to the Control Group in Uptake of Both Screenings.....	16
Figure 3 Reasons for not being screened before the intervention.....	16
Figure 4 Screened Participants by Gender Distribution and Availability of Medial Workers in Close Surrounding: Post-intervention.....	17
Figure 5 Screened Participants by Target Regions: Post-Intervention.....	17

INTRODUCTION

This Deliverable is produced by Media-Model LLC (hereinafter, the Consultant) to execute the services specified in the Terms of Reference (ToR) set out in the World Bank (WB) Selection No 1260874 “Comparing different demand-side incentives for health screenings in Armenia” to be implemented from March 20, 2019 to March 20, 2020.

Like many other middle-income countries, Armenia faces a growing burden of non-communicable diseases (NCDs)¹. In 2016, NCDs accounted for 93 % of deaths and 84 % of disability adjusted life years. The top drivers of death and disability from NCDs in Armenia are dietary risks, high blood pressure, and high fasting plasma glucose². The 2017-2018 health reforms in Armenia, among others, targeted modernization of the healthcare system, public health strengthening and early detection and proper control of cardiovascular diseases, malignancies and diabetes, thus contributing to reduction of the burden of non-communicable diseases³. The reforms by the Government of Armenia to promote screening have involved complementary supply- and demand-side interventions. On the supply side, facility equipment and supplies have been improved and health care providers have been rewarded with financial incentives for promoting screening. On the demand side, a nationwide communications campaign via mass media has provided information to the target population on the benefits of screening. However, there are still significant gaps in the early detection of high blood pressure and high fasting plasma glucose in Armenia through screening⁴. An increase of per capita ambulatory visits is evident in all marzes between 2006 and 2017, which means that population access to ambulatory care improved to some extent⁵. However, the 2016 Health System Performance Assessment indicates that 24% of 15 and older population had their blood glucose level measured during the past 12 months, while 43.5% of 15 and older population had their arterial blood pressure measured by healthcare providers⁶. Despite the variety of different benefits and regulations facilitating utilization of healthcare services, and allocation of state funds for free of charge medical screenings, many people are not aware of them and make voluntary or involuntary out-of-pocket spending⁷.

The aim of the assignment is to manage all aspects of the implementation, logistics and organization of intervention, data collection, entry and management for a prospective and rigorous impact evaluation designed by the WB Impact Evaluation (EI) team. Overall, the impact evaluation draws on behavioral theory to test the effectiveness of different types of demand-side incentives to promote screening uptake for hypertension and diabetes mellitus in Armenia through comparing regular incentives for patients to come for screenings, including personal invitations, personal invitations mentioning that peers have been tested, a labeled but unconditional cash transfer (in the form of “cash like” pharmacy voucher), and a conditional cash transfer, also in the form of a pharmacy voucher.

¹ Damien de Walque with co-authors, Study Details: Submission to Ethical Review Board, 2019

² Institute for Health Metrics and Evaluation (IHME), 2017.

³ Armenia Health System Performance Assessment 2018, p. 8

⁴ Damien de Walque with co-authors, Study Details: Submission to Ethical Review Board, 2019

⁵ Armenia Health System Performance Assessment 2018, p. 31

⁶ Armenia Health System Performance Assessment 2017

⁷ Armenia Health System Performance Assessment 2018, p. 27

The study is implemented as a randomized controlled trial design at the individual level of selection, allowing for random assignment of interventions to groups, which (the groups) do not differ systematically to measure the difference in difference of interventions at the end-line. As a statistically-strong impact evaluation it controls for a counterfactual and uses data on baseline and end-line variable values. Total of five groups were constructed for the Study purposes, described in Figure 1 below.

Figure 1 Definition of Study Groups

- 1 **TREATMENT GROUP 1.** Personal invitation to come to the health clinic for diabetes and hypertension screening
- 2 **TREATMENT GROUP 2.** Personal invitation to come to the health clinic for diabetes and hypertension screening with added mention about statistics of screening among peers and some visualization to showcase the screening numbers.
- 3 **TREATMENT GROUP 3.** Personal invitation to come to the health clinic for diabetes and hypertension screening + pharmacy voucher incentive given with the invitation, labeled as an unconditional “encouragement”
- 4 **TREATMENT GROUP 4.** Personal invitation to come to the health clinic for diabetes and hypertension screening + cash-like incentive conditional on taking the screening test.
- 5 **CONTROL GROUP.** No personal invitation for screening, no cash, in-kind, or any other incentives on taking the screening test. Exposure to general mass-media campaign to encourage health screenings (ongoing for several years)

Main methods of data collection cover extraction and analysis of data from Armenia e-health administrative data system for 2000 individuals aged 35-68 both women and men, collection and prior registration of on-going records of study participants’ behavior, i.e. visiting health facilities for screening, including single visit to each study participant to administer the assigned intervention, as well as linking the datasets through concise data management approach with proper user’s guide for the datasets, and qualitative data collection via qualitative interviews with 80 participants and 20 service-providers at the end-line of the intervention.

The socio-demographic data collection from the Intervention Groups took place only at the base-line (in August 2019), while from the Control group – at the end-line (6 months later, in January 2020). This was done to avoid raising awareness about health screenings in the control group. Impact level change indicator was measured by means of extraction of official data on screening uptake from e-health system at the base-line and at the end-line for the comparison. The impact level change was reported only in case if a person was screened for both types of the screenings, namely hypertension and diabetes.

This document presents the preliminary results from the study, including screening rates for diabetes and hypertension in the five study groups, additional quantitative analysis by gender, age group, location, etc., the results from qualitative interviews with major themes/sub-themes and verbatim quotations/testimonies from interviews, as well as the breakdown of costs for each of the five study groups. The detailed methodology, fieldwork approach and data collection details are presented under separate deliverables, submitted to the WB Impact Evaluation Team (ET) in line with agreed-upon time-line, and, therefore, are not covered in this report.

PRELIMINARY RESULTS FROM QUANTITATIVE ANALYSIS

Socio-demographic profile of study population

All study groups are very much similar in gender, age, education, marital status, as well as are equally distributed across regions and types of facility (see Table 1 and for other averages and P-scores see Tables 2-3). Table 1 below shows that the whole study target population is represented equally by men and women (50/50) and more or less by three age groups (35-45 31.8%, 46-55 32.7% and 56-68 35.6%). Table 1 reveals that 85.8% of target population are married/live together, 84.4% - have got less than higher education level, 40.8% consider themselves extremely poor or poor and 54.8% did not have any paid jobs for which received a monetary payment during the month preceding the survey.

It is important to recognize that, because of the age restrictions (35-68), the geographic focus and the eligibility condition that participants did not go for screenings in the 12 months before the study, our sample is not meant to be representative of Armenia. However, the following statistics offer some comparison points. According to Census data for Armenia, around 80% of population have less than higher completed education level across Armenia, with the average for the target regions standing at 88% (Lori – 86%, Kotayk – 86%, Ararat – 89%, Armavir – 89%)⁸. Around 61% of country population aged 15 plus are married or live together, an average for target regions for married/living together is 62% (Lori – 60.9%, Kotayk – 63.1%, Ararat – 60.6%, Armavir – 61.7%)⁹. According to the subjective assessment of the living conditions by the Statistical Committee of RA (Social Snapshot and Poverty in Armenia 2019), in 2018 only 9.4% of households considered themselves to be poor (including the extremely poor). If we look into monetary poverty levels in target regions average poverty rate is 25.2% with maximum poverty rate reported for Lori (32.5%)¹⁰. Given the fact that pre-intervention population, according to e-health records, had not been screened for diabetes and hypertension during 12 months prior to the study, and also comparing the numbers with official statistics on poverty rates in RA and in target regions, we can make an assumption that people having lower levels of income are generally more likely to avoid medical screenings at local facilities in Armenia.

Table 4 on page 11 shows that 93.8% of study population do not have any medical insurance. Majority of participants (78.2%) watch TV programs about health. Every second participant or 53.2% has close relatives, friends, neighbors with medical education. Majority of participants have got people with diabetes (61%) and hypertension (69.6%) in their close surrounding, meaning that they are more or less familiar to hypertension and diabetes diseases (see Table 4, p. 11).

⁸ Available at: https://www.armstat.am/file/article/demog_2019_8.pdf

⁹ This number covers population older than 15 years of age. The disaggregation by age groups is available only in intervals which do not match evaluation target group of 35 to 68.

¹⁰ Available at: https://www.armstat.am/file/article/poverty_2019_english_2.pdf
https://www.armstat.am/file/article/poverty_2019_english_5.pdf

Table 1 Balance in socio-demographic characteristics across the Study Groups*

Baseline and End-line Variables*		Cluster					All
		Group One: Personal invitation	Group Two: Personal Invitation with Mention of Statistics	Group Three: Personal Invitation with Unconditional Voucher	Group Four: Personal Invitation with Conditional Voucher	Control Group	
Gender							
Female	Count	201	202	197	200	199	999
	%	50.3%	50.5%	49.3%	50.0%	49.8%	50.0%
Male	Count	199	198	203	200	201	1001
	%	49.8%	49.5%	50.8%	50.0%	50.3%	50.1%
Total	Count	400	400	400	400	400	2000
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Gender Means (1=Male)	Mean	.493	.493	.510	.505	.503	.501
Age							
35-45	Count	118	135	134	129	119	635
	%	29.5%	33.8%	33.5%	32.3%	29.8%	31.8%
46-55	Count	136	123	130	119	145	653
	%	34.0%	30.8%	32.5%	29.8%	36.3%	32.7%
56-68	Count	146	142	136	152	136	712
	%	36.5%	35.5%	34.0%	38.0%	34.0%	35.6%
Total	Count	400	400	400	400	400	2000
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Age Mean	Mean	51.268	50.528	50.378	50.975	50.915	50.813
Marital Status							
Never married/Single	Count	30	37	27	37	27	158
	%	7.5%	9.3%	6.8%	9.3%	6.8%	7.9%
Never Married, Single Means (No=0; Yes = 1)	Mean	.075	.093	.068	.093	.068	.079
Married/live together	Count	333	340	345	344	353	1715
	%	83.3%	85.0%	86.3%	86.0%	88.3%	85.8%
Married Means (No=0; Yes = 1)	Mean	.833	.850	.863	.860	.883	.858
Divorced/separated	Count	11	12	14	12	10	59
	%	2.8%	3.0%	3.5%	3.0%	2.5%	3.0%
Divorced Means (No=0; Yes = 1)	Mean	.028	.030	.035	.030	.025	.030
Widowed	Count	26	11	14	7	10	68
	%	6.5%	2.8%	3.5%	1.8%	2.5%	3.4%
Widowed Means (No=0; Yes = 1)	Mean	.065	.028	.035	.018	.025	.034
Total	Count	400	400	400	400	400	2000
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Education							
Non-educated	Count	5	3	2	4	0	14
	%	1.3%	.8%	.5%	1.0%	.0%	.7%
Non-educated Means	Means	.013	.008	.005	.010	.000	.007
Primary/secondary general	Count	230	210	234	229	234	1137

Baseline and End-line Variables*		Cluster					All
		Group One: Personal invitation	Group Two: Personal Invitation with Mention of Statistics	Group Three: Personal Invitation with Unconditional Voucher	Group Four: Personal Invitation with Conditional Voucher	Control Group	
	%	57.5%	52.5%	58.5%	57.3%	58.5%	56.9%
Primary/secondary general Means	Mean	.575	.525	.585	.573	.585	.569
Technical vocational	Count	112	118	93	108	107	538
	%	28.0%	29.5%	23.3%	27.0%	26.8%	26.9%
Technical vocational Means	Mean	.280	.295	.233	.270	.268	.269
Higher/post-graduate	Count	53	69	71	59	59	311
	%	13.3%	17.3%	17.8%	14.8%	14.8%	15.6%
Higher/post-graduate	Mean	.133	.173	.178	.148	.148	.156
Total	Count	400	400	400	400	400	2000
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Subjective Socio-Economic Status							
Our income is not sufficient for everyday food	Count	39	33	14	20	6	112
	%	9.8%	8.3%	3.5%	5.0%	1.5%	5.6%
Our income is sufficient for everyday food, but not for cloths and other basic needs	Count	152	129	109	151	162	703
	%	38.1%	32.4%	27.3%	37.8%	40.5%	35.2%
Our income is sufficient for family basic needs, such as food, clothing, utilities, but not enough for big purchases	Count	171	197	219	191	221	999
	%	42.9%	49.5%	54.8%	47.8%	55.3%	50.0%
Our income is sufficient to meet all family needs, make big purchases, but not enough for savings	Count	29	28	52	36	10	155
	%	7.3%	7.0%	13.0%	9.0%	2.5%	7.8%
Our income is sufficient to meet all family needs, make any kind of purchases and have some savings	Count	8	11	6	2	1	28
	%	2.0%	2.8%	1.5%	.5%	.3%	1.4%
Total	Count	399	398	400	400	400	1997
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Marz Distribution							
Ararat	Count	100	100	100	100	100	500
	%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Ararat means	Means	.250	.250	.250	.250	.250	.250
Armavir	Count	100	100	100	100	100	500
	%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Armavir Means	Mean	.250	.250	.250	.250	.250	.250
Kotayq	Count	100	100	100	100	100	500
	%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Kotayq Means	Mean	.250	.250	.250	.250	.250	.250
Lori	Count	100	100	100	100	100	500
	%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Lori Means	Mean	.250	.250	.250	.250	.250	.250
Total	Count	400	400	400	400	400	2000

Baseline and End-line Variables*		Cluster					All
		Group One: Personal invitation	Group Two: Personal Invitation with Mention of Statistics	Group Three: Personal Invitation with Unconditional Voucher	Group Four: Personal Invitation with Conditional Voucher	Control Group	
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Facility Type							
Small	Count	40	40	40	40	40	200
	%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Medium	Count	76	76	76	76	17	321
	%	19.0%	19.0%	19.0%	19.0%	4.3%	16.1%
Large	Count	284	284	284	284	343	1479
	%	71.0%	71.0%	71.0%	71.0%	85.8%	74.0%
Total	Count	400	400	400	400	400	2000
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
During last month did you have any paid job for which you received a monetary payment?							
No	Count	220	222	203	225	226	1096
	%	55.0%	55.5%	50.8%	56.3%	56.5%	54.8%
Yes	Count	180	178	197	175	174	904
	%	45.0%	44.5%	49.3%	43.8%	43.5%	45.2%
During last month did you have any paid job for which you received a monetary payment? Means	Mean	.450	.445	.493	.438	.435	.452
Total	Count	400	400	400	400	400	2000
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: The data on the characteristics reflected in the table was collected at baseline for intervention groups and at the end-line (6 months later) for the control group. Therefore, the variables at end-line for the control group are proxies for baseline characteristics.

Table 2 Balance in socio-demographic characteristics across the Study Groups: Additional Means/Averages

Baseline and End-line Variables*	ALL	Group One: Personal invitation	Group Two: Personal Invitation with Mention of Statistics	Group Three: Personal Invitation with Unconditional Voucher	Group Four: Personal Invitation with Conditional Voucher	Control Group
Employment	Means					
Employed in state sector	.162	.160	.170	.158	.138	.185
Employed in private sector	.205	.200	.175	.240	.200	.208
Self-account worker/entrepreneur	.086	.090	.100	.095	.100	.043
Reason for not going to health screening in last 12 months						
There is no need, as I have no problems with health	.781	.778	.783	.711	.765	.870
Type of medical facility where participant is linked to						
Medical Facility Rank Large (No=0; Yes = 1)	.740	.710	.710	.710	.710	.858
Medical Facility Rank Medium (No=0; Yes = 1)	.161	.190	.190	.190	.190	.043
Medical Facility Rank Small (No=0; Yes = 1)	.100	.100	.100	.100	.100	.100
Expenditure						
During last month did you have any paid job for which you received a monetary payment?	.452	.450	.445	.493	.438	.435
How much is spent by your family for various purposes, including food, utility, transport, etc. during a typical month?	160396.378	159763.473	162964.744	165229.111	154981.191	156167.742
Health related questions						
Do you currently have a medical insurance? (No=0; Yes = 1)	.062	.068	.063	.053	.045	.083
Do you watch TV programs about healthcare? (No=0; Yes = 1)	.782	.763	.758	.843	.790	.758
Do you have any close relatives, friends, neighbors with medical education, whom you communicate with at least once per week? (No=0; Yes = 1)	.532	.478	.528	.553	.540	.560
Are there any people with diabetes among your relatives, friends, neighbors? (No=0; Yes = 1)	.610	.602	.604	.672	.584	.588
Are there any people with hypertension among your relatives, friends, neighbors? (No=0; Yes = 1)	.696	.672	.685	.749	.741	.635
Demographics						
HH Size	4.610	4.575	4.718	4.580	4.615	4.575

*Note: The data on the characteristics reflected in the table was collected at baseline for intervention groups and at the end-line (6 months later) for the control group. Therefore, the variables at end-line for the control group are proxies for baseline characteristics.

Table 3 Balance in socio-demographic characteristics across the Study Groups: P-values

Baseline Variables	1VS2	1VS3	1VS4	2VS3	2VS4	3VS4	5VS1	5VS2	5VS3	5VS4
Employment	P-values									
Employed in state sector	.704	.923	.372	.633	.203	.426	.350	.579	.303	.068
Employed in private sector	.366	.172	1.000	.023	.366	.172	.793	.243	.271	.793
Self-account worker/entrepreneur	.630	.807	.630	.812	1.000	.812	.007	.002	.003	.002
Reason for not going to health screening in last 12 months										
There is no need, as I have no problems with health	.870	.031	.673	.021	.559	.083	.001	.001	.000	.000
Marz (Regions)										
Ararat	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Armavir	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Kotayq	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lori	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Education										
Non-educated	.478	.255	.738	.654	.705	.413	.025	.083	.157	.045
Primary/secondary general	.156	.775	.943	.088	.177	.721	.775	.088	1.000	.721
Technical vocational (college, tvet, other)	.640	.124	.752	.045	.433	.222	.692	.388	.254	.937
Higher/post-graduate (diploma, ph.d., other)	.116	.079	.542	.853	.335	.251	.542	.335	.251	1.000
Gender										
Gender (1=Male)	1.000	.621	.724	.621	.724	.888	.778	.778	.832	.944
Type of medical facility where participant is linked to										
Medical Facility Rank Large (No=0; Yes = 1)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Medical Facility Rank Medium (No=0; Yes = 1)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Medical Facility Rank Small (No=0; Yes = 1)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Marital Status										
Never Married, Single (No=0; Yes = 1)	.372	.681	.372	.193	1.000	.193	.681	.193	1.000	.193
Married (No=0; Yes = 1)	.499	.238	.282	.615	.688	.919	.043	.177	.397	.343
Divorced (No=0; Yes = 1)	.833	.543	.833	.691	1.000	.691	.825	.666	.408	.666
Widowed(No=0; Yes = 1)	.012	.052	.001	.543	.341	.122	.006	.825	.408	.463
Expenditure										
During last month did you have any paid job for which you received a monetary payment?	.887	.229	.722	.179	.831	.119	.670	.776	.103	.943
How much is spent by your family for various purposes, including food, utility, transport, etc. during a typical month?	.686	.467	.584	.757	.352	.207	.724	.484	.333	.915

Baseline Variables	1VS2	1VS3	1VS4	2VS3	2VS4	3VS4	5VS1	5VS2	5VS3	5VS4
Health related questions										
Do you currently have a medical insurance? (No=0; Yes = 1)	.775	.372	.168	.544	.273	.623	.421	.276	.091	.030
Do you watch TV programs about healthcare? (No=0; Yes = 1)	.869	.004	.351	.003	.273	.055	.869	1.000	.003	.273
Do you have any close relatives, friends, neighbors with medical education, whom you communicate with at least once per week? (No=0; Yes = 1)	.158	.034	.077	.479	.723	.723	.020	.357	.831	.570
Are there any people with diabetes among your relatives, friends, neighbors? (No=0; Yes = 1)	.956	.043	.615	.048	.573	.011	.678	.635	.014	.929
Are there any people with hypertension among your relatives, friends, neighbors? (No=0; Yes = 1)	.692	.017	.032	.045	.079	0.794.	.278	.136	.001	.001
Demographics										
HH Size	.603	.971	.773	.611	.705	.790	1.000	.602	.971	.772
Age	.280	.187	.671	.826	.520	.384	.597	.566	.418	.930

Note: The data on the characteristics reflected in the table was collected at baseline for intervention groups and at the end-line (6 months later) for the control group. Therefore, the variables at end-line for the control group are proxies for baseline characteristics.

Table 4 Insurance, watching TV programmes on health, close surrounding of participants across Study Groups

Study Group		Do you currently have a medical insurance?		Total	Do you watch TV programs about healthcare?		Total	Do you have any close relatives, friends, neighbors with medical education, whom you communicate with at least once per week?		Total	Are there any people with diabetes among your relatives, friends, neighbors?		Total	Are there any people with hypertension among your relatives, friends, neighbors?		Total
		No	Yes		No	Yes		No	Yes		No	Yes		No	Yes	
Group One: Personal invitation	Count	373	27	400	95	305	400	209	191	400	154	233	387	128	262	390
	%	93.3%	6.8%	100%	23.8%	76.3%	100%	52.3%	47.8%	100%	39.8%	60.2%	100%	32.8%	67.2%	100%
Group Two: Personal Invitation with Mention of Statistics	Count	375	25	400	97	303	400	189	211	400	158	241	399	126	274	400
	%	93.8%	6.3%	100%	24.3%	75.8%	100%	47.3%	52.8%	100%	39.6%	60.4%	100%	31.5%	68.5%	100%
Group Three: Personal Invitation with Unconditional Voucher	Count	379	21	400	63	337	400	179	221	400	128	262	390	97	290	387
	%	94.8%	5.3%	100%	15.8%	84.3%	100%	44.8%	55.3%	100%	32.8%	67.2%	100%	25.1%	74.9%	100%
Group Four: Personal Invitation with Conditional Voucher	Count	382	18	400	84	316	400	184	216	400	165	232	397	103	295	398
	%	95.5%	4.5%	100%	21.0%	79.0%	100%	46.0%	54.0%	100%	41.6%	58.4%	100%	25.9%	74.1%	100%
Control Group	Count	367	33	400	97	303	400	176	224	400	165	235	400	146	254	400
	%	91.8%	8.3%	100%	24.3%	75.8%	100%	44.0%	56.0%	100%	41.3%	58.8%	100%	36.5%	63.5%	100%
Total	Count	1876	124	2000	436	1564	2000	937	1063	2000	770	1203	1973	600	1375	1975
	%	93.8%	6.2%	100%	21.8%	78.2%	100%	46.9%	53.2%	100%	39.0%	61.0%	100%	30.4%	69.6%	100%

Note: The data on the characteristics reflected in the table was collected at baseline for intervention groups and at the end-line (6 months later) for the control group. Therefore, the variables at end-line for the control group are proxies for baseline characteristics.

Screening Rates and Influencing Factors

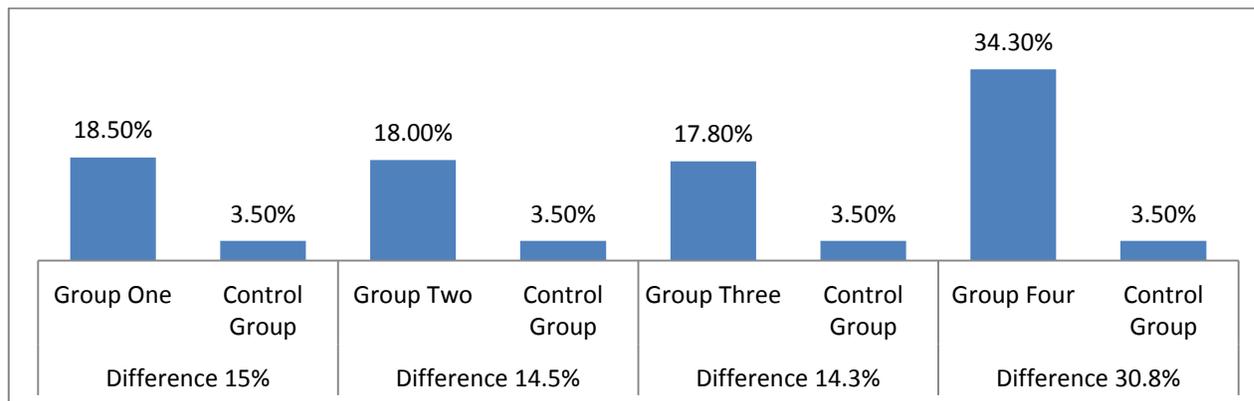
The screening rates at the end-line of the intervention across the study groups are presented in Table 5 and Figure 2 below. The table depicts that out of 2000 study participants 368 or 18.4% went for both screenings. The impact of the interventions is substantial as all four intervention groups demonstrated increased testing rates compared to the Control Group with at least five times more people screened for both diseases. If for the Control Group non-screening rate stands at 91.3%, for Groups One to Four the rates are respectively 74.8%, 74.5%, 74.3 and 57.8%.

Table 5 Screening Status Per Study Groups

Impact status		Cluster					Total
		Group One: Personal invitation	Group Two: Personal Invitation with Mention of Statistics	Group Three: Personal Invitation with Unconditional Voucher	Group Four: Personal Invitation with Conditional Voucher	Control Group	
Not screened	Count	299	298	297	231	365	1490
	%	74.8%	74.5%	74.3%	57.8%	91.3%	74.5%
Screened only for diabetes	Count	5	7	10	7	3	32
	%	1.3%	1.8%	2.5%	1.8%	.8%	1.6%
Screened only for hypertension	Count	22	23	22	25	18	110
	%	5.5%	5.8%	5.5%	6.3%	4.5%	5.5%
Screened for both	Count	74	72	71	137	14	368
	%	18.5%	18.0%	17.8%	34.3%	3.5%	18.4%
Total	Count	400	400	400	400	400	2000
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The conditional voucher intervention significantly outperformed the three other interventions with nearly every second participant tested for at least one disease during the specified period. Only one in ten persons from Control Group was screened for at least one disease (see Figure 2). The performance of Group Four with conditional vouchers is twice higher than that of three other intervention groups. However, for this evaluation the change is reported only if a person undergoes both screenings (diabetes and hypertension). As the impact variable for all study groups at the baseline is zero and the difference between the groups on the baseline is zero, the actual change in screening behavior is measured by means of comparison of difference between the groups at the end-line. Relying therefore on this simple difference framework, the change in the conditional voucher group constitutes a close to 31% increase compared to the control group. Interestingly, the group with unconditional vouchers reached rates of screening uptakes similar to those registered for the participants who did not receive any cash-like benefits (17,8% compared to 18,5% and 18,0% accordingly).

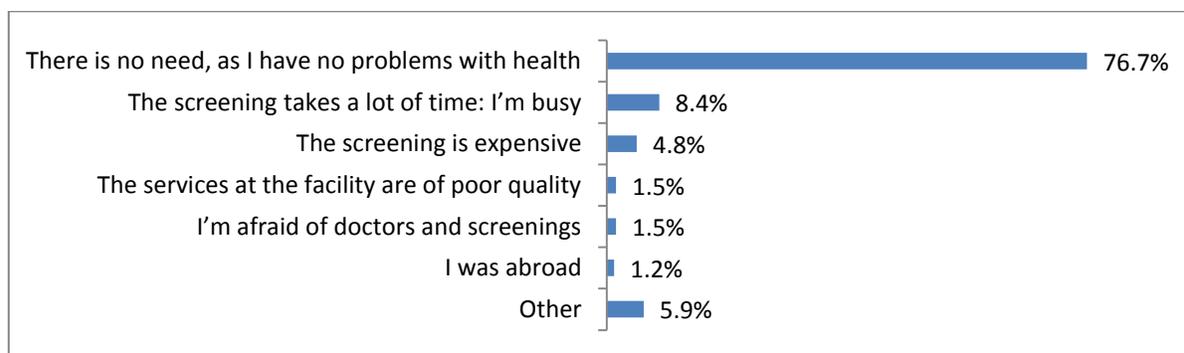
Figure 2 Differences Across Intervention Groups compared to the Control Group in Uptake of Both Screenings



Note: Group One: Personal invitation, Group Two: Personal Invitation with Mention of Statistics, Group Three: Personal Invitation with Unconditional Voucher, Group Four: Personal Invitation with Conditional Voucher

Those who had not been screened before the intervention were asked why they had not taken medical screening for diabetes and/or for hypertension at this particular medical facility (see Figure 3, ANNEX 1 Table 1). Three most frequent answers to this multiple response question explored that majority of people considered themselves healthy (76.7% of responses or 78.1% of respondents), or too busy to take their time for screenings (8.4%), or stated that the screenings were expensive (4.8%). No significant difference explored in responses by gender or age (see ANNEX 1 Tables 2 and 3). These figures confirm that the medical screenings are perceived as a tool for curative, rather than preventive measures: people think that if they don't feel ill, there is no need to take the screenings. Around 5% of respondents, reporting that the screenings are expensive, demonstrate that people are not well informed that the screenings at their local facility are free-of-charge.

Figure 3 Reasons for not being screened before the intervention



Correlation analysis was performed to see the relations between the post-intervention screening behavior and other factors, such as gender, age, insurance, etc. of participants, but no statistically significant correlations were discovered to confirm that those factors directly influence participants' behavior at the end-line of the intervention. Simple cross-tabulations reveal some minor differences between the distributions across the whole sample and across the group of participants who attended both screenings by gender, marz distribution and by having close relatives with medical education (see Figures below). Women demonstrated a bit better screening performance than men (see Figure

4). People from Lori went for both screenings more than others and people from Armavir marz are less represented in the group of tested people (see Figure 5). Study participants who reported having medical workers among their close relatives are less likely to attend for screenings (see Figure 4). Yet, all those figures have no statistically strong correlations behind them.

Distribution of screened participants by age, gender, marital status, expenditure, medical insurance availability, etc. are presented in ANNEX 1 Tables 4-15.

Figure 4 Screened Participants by Gender Distribution and Availability of Medical Workers in Close Surrounding: Post-intervention

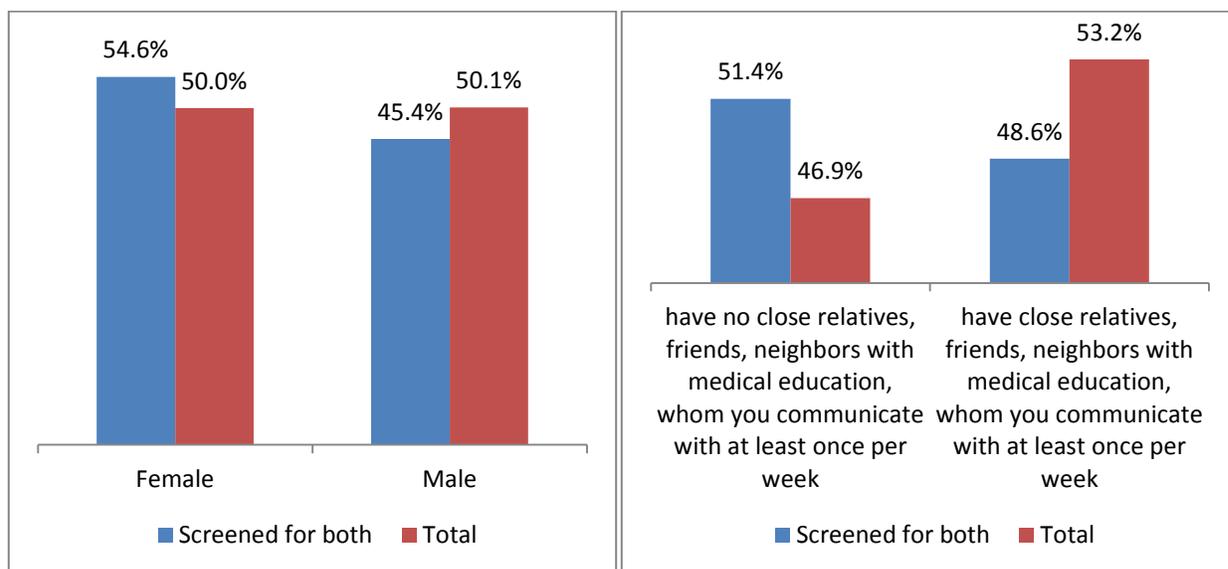
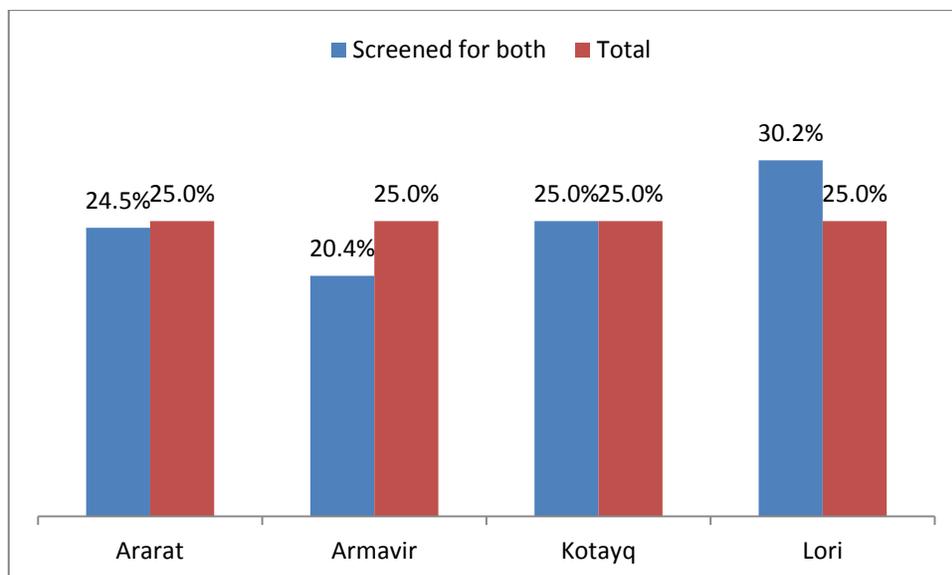


Figure 5 Screened Participants by Target Regions: Post-Intervention



Voucher Delivery and Accumulation

The full package of 400 vouchers was delivered to individuals from Intervention Group 3¹¹. Total of 134 vouchers have been successfully delivered to participants from Intervention Group 4 after confirmation of screening uptake (see Table 6). However, it was impossible to deliver 3 more vouchers based on confirmation of the screening, due to impossibility to locate the recipients or rejection to take the voucher by the recipients¹².

Table 6. Voucher Delivery Status per Intervention Group in four regions

Marz			Intervention Group		Total
			Group Three: Unconditional Voucher	Group Four: Conditional Voucher	
Ararat	Voucher delivery date	22.7.2019	12	0	12
		29.7.2019	21	0	21
		02.8.2019	10	0	10
		04.8.2019	25	0	25
		06.8.2019	32	0	32
		07.8.2019	0	3	3
		21.8.2019	0	7	7
		04.9.2019	0	3	3
		05.9.2019	0	1	1
		21.9.2019	0	5	5
		25.10.2019	0	5	5
		14.11.2019	0	3	3
		23.12.2019	0	6	6
		10.1.2020	0	1	1
Total			100	34	134
Armavir	Voucher delivery date	23.7.2019	14	0	14
		24.7.2019	27	0	27
		26.7.2019	23	0	23
		08.8.2019	0	7	7
		09.8.2019	30	0	30
		12.8.2019	3	0	3
		13.8.2019	3	0	3
		22.8.2019	0	1	1
		28.8.2019	0	3	3
		04.9.2019	0	1	1
		21.9.2019	0	1	1
		09.10.2019	0	4	4
		24.10.2019	0	2	2
		14.11.2019	0	5	5
		23.12.2019	0	2	2
15.1.2020	0	1	1		
Total			100	27	127
Kotayq	Voucher delivery date	24.7.2019	8	0	8
		25.7.2019	11	0	11
		26.7.2019	21	0	21
		29.7.2019	2	0	2
		08.8.2019	11	1	12

¹¹ For detail see Progress Reports 1-3. The voucher delivery to doctors and operators from target PHCs is presented in Progress Reports 2-3.

¹² Namely, IDs 6166 and 2189 had moved to Russia several days after the screening and didn't return by the end of January 2020, and ID 2179 rejected taking the card with an explanation that he/she doesn't need it and screened not for the 5000 AMD incentive.

Marz		Intervention Group		Total
		Group Three: Unconditional Voucher	Group Four: Conditional Voucher	
	09.8.2019	2	0	2
	11.8.2019	2	0	2
	12.8.2019	35	0	35
	15.8.2019	0	1	1
	20.8.2019	0	1	1
	28.8.2019	0	1	1
	29.8.2019	0	12	12
	08.9.2019	8	0	8
	12.9.2019	0	1	1
	20.9.2019	0	6	6
	24.10.2019	0	2	2
	26.10.2019	0	1	1
	13.11.2019	0	1	1
	14.11.2019	0	3	3
	20.11.2019	0	1	1
	24.12.2019	0	1	1
	Total	100	32	132
Lori	Voucher delivery date			
	09.7.2019	1	0	1
	23.7.2019	15	0	15
	29.7.2019	0	1	1
	31.7.2019	15	0	15
	01.8.2019	10	0	10
	02.8.2019	20	0	20
	03.8.2019	12	1	13
	04.8.2019	10	0	10
	05.8.2019	1	0	1
	07.8.2019	9	0	9
	21.8.2019	0	10	10
	05.9.2019	5	12	17
	07.9.2019	2	0	2
	10.10.2019	0	3	3
	24.10.2019	0	1	1
	14.11.2019	0	6	6
	24.12.2019	0	4	4
	14.1.2020	0	3	3
	Total	100	41	141
GRAND TOTAL		400	134	534

Based on the analysis of the invoices from August 2019 – January 2020, total of 488 vouchers were accumulated by the participants and the doctors/operators at the pharmacies, of which (302 by Intervention Group 3 and 126 by Intervention Group 4). The figures are presented in Table 7 below.

Table 7. Used vouchers per Groups for August-October

	Period 01.08.19-31.01.20		Total
	Alfa Pharm	Natali Pharm	
Group 3. Unconditional Voucher	159	143	302
Group 4. Conditional Voucher	67	59	126
Doctors/operators	32	28	60
Total	358	230	488

The distribution of accumulated vouchers across marzes is presented in Table 8 below.

Table 8. Used vouchers per Intervention Groups Across Regions for August-October (days of the month are rounded)

Marz Code			Intervention Group		Total
			Group Three: Unconditional Voucher	Group Four: Conditional Voucher	
Ararat	Voucher Accumulation Approximate date	1st half.8.2019	22	0	22
		2nd half.8.2019	7	4	11
		1st half.9.2019	12	2	14
		2nd half.9.2019	0	3	3
		1st half.10.2019	7	3	10
		2nd half.10.2019	2	5	7
		2nd half.11.2019	4	3	7
		27.12.2019	1	2	3
		2nd half.1.2020	14	9	23
Total			69	31	100
Armavir	Voucher Accumulation Approximate date	1st half.8.2019	22	0	22
		2nd half.8.2019	11	3	14
		1st half.9.2019	11	4	15
		1st half.10.2019	9	1	10
		2nd half.10.2019	1	5	6
		2nd half.11.2019	6	5	11
		27.12.2019	4	0	4
		2nd half.1.2020	8	7	15
		Total			72
Kotayq	Voucher Accumulation Approximate date	1st half.8.2019	22	0	22
		2nd half.8.2019	21	4	25
		1st half.9.2019	11	8	19
		2nd half.9.2019	4	3	7
		1st half.10.2019	5	0	5
		2nd half.10.2019	2	3	5
		2nd half.11.2019	2	9	11
		27.12.2019	6	2	8
		2nd half.1.2020	6	3	9
Total			79	32	111
Lori	Voucher Accumulation Approximate date	1st half.8.2019	34	1	35
		2nd half.8.2019	9	2	11
		1st half.9.2019	13	3	16
		2nd half.9.2019	3	8	11
		1st half.10.2019	7	3	10
		2nd half.10.2019	1	1	2
		2nd half.11.2019	3	7	10
		27.12.2019	3	3	6
		2nd half.1.2020	9	10	19
Total			82	38	120

RESULTS FROM QUALITATIVE END-LINE INTERVIEWS

Total of 80 semi-structured interviews were conducted with study female and male participants, including those who attended screenings and those who did not, as well as 20 qualitative interviews with service providers. Main findings from the qualitative study are presented below based on thematic areas pre-defined in study documents. The details on sample and methodology are presented in Fieldwork Completion Report. The qualitative data collection and final reporting are based on the Consolidated criteria for reporting qualitative research (COREQ standards)¹³.

Perceptions of hypertension and diabetes testing before the interventions

Awareness on diabetes and hypertension: Majority of respondents, both women and men, state that they are well aware or at least have some basic understanding of what the hypertension and diabetes diseases are, what the basic symptoms are and how to apply some home-treatment measures. The qualitative interviews come to re-confirm the finding from the quantitative survey that a lot of people have friends, relatives and neighbors, who suffer from one or both diseases. There were several cases, when the respondents reported that they also have got diabetes or hypertension themselves. If in case of diabetes, most of the persons with the disease were tested at different medical facilities and either received some medical treatment or were keeping diets, in case of hypertension most of the people apply self-testing and self-curative measure with three common behavior practices:

- ✚ Self-testing with blood pressure meters and other equipment at home;
- ✚ Home-treatment using herbal medicine, lemon and gas-water, Armenian sour milk (“matsun”);
- ✚ Using medicine prescribed by doctors to their friends or relatives.

In addition to learning about these diseases from personal and other people’s experience, study participants are watching health programs on TV (more specifically the Treat-Info or “Buzh Info”, produced by one of country’s major broadcasting companies), searching the web, and communicating through social networks. All those channels are considered as major sources of knowledge and information for study population. Among the symptoms the following were mentioned by the respondents:

- ✚ Diabetes: bitter taste in the mouth, getting thirsty frequently, getting fat;
- ✚ Hypertension: headache, dizziness, chest heaviness.

The perceived awareness about symptoms and treatment determines avoiding professional medical consultancy, as most of respondents are sure that they can diagnose and treat themselves at home, ask their acquaintances for advice or search for the answers via Internet. This is especially true for hypertension, which is perceived as something that can be easily fixed at home.

“Mostly people have diabetes and hypertension. Everybody knows how to treat themselves or others in each case. If someone’s blood pressure gets high, s/he knows that lemon will help low down it. Now everybody is signed in to the Facebook, everything is accessible, people know a lot about diseases.” Group 1, screened, female, 64 years old

“I know that in case of hypertension, lemon or something like lemon helps. In case of a low [blood] pressure, you need something sweet, whether it is honey syrup or sugar syrup.” Group 2, not screened, male, 39 years old

“it [the diabetes] is considered a disease of the century...If, for instance, people with diabetes must not eat potatoes, I eat less, I use other vegetables... When I was feeling bad, I was thinking of visiting my doctor. But I did not.” Group 3, screened, female, 60 years old

“Well, I know that my father had diabetes, my grandfather, as well, and nothing would help. I’ve heard about sweets, this and that...My cousin also has diabetes, but I don’t care much about it.” Group 4, not screened male, 35 year old

“My mother is having hypertension for a long time, and I think, I know everything about it. I learned from doctors and from my experience. My mother was ill and her blood pressure got high, we called an ambulance, and this was all an experience for us.” Groun 4. screened. male. 35 years old

¹³ <https://academic.oup.com/intqhc/article/19/6/349/1791966> accessed on 03.05.2020

Perceived Common Screening Practices and Importance of Screening: Not going for a professional medical consultancy is considered as a common practice for Armenians and for people in their communities: people don't go for screenings until it gets too far and "the knife reaches the bone". The preventive medicine is taken seriously, but in everyday life no one is practicing it. Interviewees provided several explanations for the phenomenon:

- ✚ "national character" or "mentality", comparing Armenians to Russians (who are prone to regular attendance for medical testing) in several interviews, as an example;
- ✚ lack of money and financial problems;
- ✚ fear to get diagnosed, which leads to limitations at work or routine habits and further screenings and treatment, which doubles the costs;
- ✚ lack of trust towards doctors and, particularly, towards local medical facilities (several respondents brought examples of wrong tests or wrong diagnoses, provided at local facilities and getting additional tests or treatment in hospitals of Yerevan).

In respondents' words, older people go for screenings more often than the younger ones, and women go for screening more often than men. The first tendency is explained by availability of spare time and elderly's desire to live longer, while the second one is explained by women experiencing more gynecological problems, trying to stay healthy to be able to take care of their families and carry out their duties. Interestingly, the doctors also confirm this assumption, adding another factor, which explains why women go for screening more often than men: it happens because most of medical workers and nurses at local facilities are women, and men do not feel comfortable attending them, especially in small communities, where everyone knows each other. In several cases, availability of insurance was mentioned as an important facilitating factor to increase the screening rates: both the doctors and study participants think that medical insurance and social packages covering medical costs make people more confident that they should not pay any money, and therefore support their preventive healthcare practices. Though there were several respondents, mentioning that the better-off families go for screening more often, in majority of interviews the socio-economic status of families and their education level were not considered an important influencing factor.

"In Russia, for example, people care about themselves and attend for screening every 3 or 6 months. But here people don't attend until the knife reaches the bone. Who goes? Do they have money to pay for it? But that's good to attend as you know about your disease and it's easier to deal with it". Group 4, screened, male, 53 years old

"Those who consider health important, do their best to frequently go [for checks], and find out [...]. Those people are very few, perhaps only about 10% of our society, who actually go. Others – the majority – don't go and don't even want to use preventive care, and they attend only in extreme conditions." Group 4, screened male, 65 years old

"Well, yes, screenings are important; if needed they are important, one has to get checked in order to avoid complications." Group 1, not screened, male, 54 years old

"Screenings are important. There are things you don't know, and you can't even imagine, but when you go get screened, something turns out, [proving] you should've gone [for screening] long before." Group 4, screened, male, 65 years old

"It is a trait of a character which is wide-spread mainly among Armenians. I lived abroad and saw that if Russians feel pain, they immediately visit a doctor to find out their problem and cure it. But we avoid it..." Group 4, screened, male, 35 years old

"In case of villagers the major thing is to solve their 'belly problems' rather than take care of their health. They are indifferent... the more developed is the population, the more they will take care of themselves. I have worked in the city, and I know it. The reason is maybe more intense communication in the cities." Service provider, male, rank of facility 'Small'

“For instance, if I were able to take good care of my child and managed to save some money, then I would certainly go for a screening. Why not? But I don’t have the means today to go to Yerevan and get tested, since the local medical institution is not productive...As long as you are young, your organism resists, and you don’t pay attention, but then, when you’re older, as it is said, “the knife reaches the bone”, and you start to appreciate what this life is...In any case, women are more delicate, and they are more burdened, so the illnesses are more common for them. Therefore, they visit doctors more regularly” Group 2, not screened, male, 39 years old

“There are women who live for their family, for their children, and I feel that they go more often for screenings with the only purpose to be healthy for their family. I used to know a lonely woman... I was so happy that she went for a screening... She lives alone, her husband has died and they didn’t have children... She wanted to go for screenings... look, she could say ‘I earned 6000 AMD today, let’s go and buy a new skirt’, but she went for screening instead of having a new skirt. I was happy for her... The money doesn’t matter. If you go to the doctor and ask to screen you, can he refuse? Or you may want your blood pressure to be measured or to be tested for diabetes, no, there is no such thing. It [not attending] comes from a person’s character.” Group 3, screened, female, 60 year old

“The middle-aged people go for checks, yet the young don’t go unless they feel pain... See, I am 48 and I haven’t known where the polyclinic is, not until the last year, when I started to feel bad, and only then went... Perhaps, women would go [for screenings] more frequently, apparently because of female illnesses ... In case of men, probably the wife or other family members should force them to go.” Group 4, screened male, 48 years old

Perceived Influencers and Messages: The respondents think that peer behavior is not an important influencer to change people’s attitudes in healthcare. Major influencers mentioned by the service users are their own family members, close relatives. The service providers add themselves as an important influencing group, emphasizing the important role they play in small communities, where people listen to their views. However, the study participants did not consider doctors’ messages to be significant for changes in people’s behavior. In terms of major messages which could push people to visit doctors, the interviewees mentioned references to the importance of their health and life for their family, putting families in the center of the message. This kind of messaging could be more effective to trigger people’s desire to get tested for the sake of their children and relatives. The respondents say that they trust the host of TV show “Buzj Info” on Shant TV and usually listen to his advice. Therefore, this channel can be used for social advertisement to bring messages on importance of the screenings, free-of-charge tests and improved perceptions of preventive healthcare in general.

“Of course, the family has its influence. They don’t want you to die soon; and you are eager to support them to reach their goals in life. If a person has got a brain and has his own will, he won’t change. No one can influence me. I have got my family and I want to take care for them, this is the only thing that can make me take care of my health”. Group 1, not screened male, 49 years old

“I think no one can influence, if a person decides that he won’t attend. I tell this on my own example. Everyone knows if he needs it and will attend. But I think nobody’s advice or encouragement will work”. Group 4, screened male, 45 years old

“I do not need to be compelled to visit a doctor. If I want...I will visit. I will not behave the way others tell me.” Group 1, not screened, female, 65 years old

“People tell each other about the screenings, or visit the polyclinic and get informed about the screenings. They also tell about it to their family members. However, the setting is somehow different in the village. You should very much ask people in villages to come for screenings... It’s hard to influence them” Service provider, male, rank of facility ‘Small’

Reasons for Non-screening before the Intervention: Answers to questions about reasons for not being screened during the past 12 months before the study, coincide with the results from the survey. Usually people do not go for screening and do not visit doctors as they don't feel too bad, do not have pain or other health issues. "Feeling good" is an umbrella reason for them, while other reasons are brought to showcase situations when even having pain or health issues, they still avoided going to the doctor. Hence, study participants consider it useless to take time for healthcare until there are any serious complaints. Moreover, even if there are problems, people can't find money or time to spend in "overcrowded" and "expensive" facilities. Although screenings at the local facility to which the patients are assigned, should be free of charge in Armenia and funded through the state budget, most of the interviewees either are not well informed about free screening possibility or consider that they should pay something to nurses or other medical staff regardless of the free-of-charge services. Even if they were aware of availability of free screenings at their PHC, they told about likelihood that after free-of-charge screenings they would need additional testing or services which need to be covered from their own budget. Interestingly, those who did not attend screenings are more often discussing poor conditions of local facilities, overcrowdings and bad treatment from medical staff. On the other hand, people who attended screenings as a result of the intervention, insist that they are treated well, the conditions are satisfactory, and there were not too many people waiting in the lists. This shows that there are stereotypes about the negative situation at local facilities, which are hindering people to attend the PHC. It is more likely that positive perception of facility and doctors would be formed after the actual screening. More information about the situation at facilities and positive changes in services should be generated through media and social advertising to change negative images of people who are "dropped-out" of the services. Among objective reasons on demand-side, the lack of money and inability to pay for the services is the major influencing factor. People have fear that if they are diagnosed, they should pay for more testing, they would need visiting the capital city, purchase medicine or get other medical treatment. Therefore, they prefer staying unaware of the disease, rather than getting tested, having the diagnostic and not being able to receive the treatment. To cut the health related expenditures, people address medical workers from their close surrounding, purchase equipment to test themselves and practice self-healing. The service providers agree that self-healing is widely practiced, replacing medical support.

"I knew that the screenings are free of charge, but now people are so...well-informed: everybody has the blood pressure monitors, equipment for diabetes testing, they check themselves at home. There is no need to visit doctors anymore." Group 1, screened, female, 64 years old

"People go to a doctor only in extreme cases. They don't go in preventive period at all. The illness rises, deepens, "the knife reaches the bone". And only when it has reached the final point, you visit a doctor. Maybe the reason is financial: people think, if a problem is discovered, it will lead to additional costs and will exacerbate their financial problems. They have to purchase medicine or get a treatment, which is expensive. They think it is better not to be informed, rather than to know about illness and start thinking how to fight against it." Group 3, screened, female, 42 years old

"I thought that nobody in our family had diabetes, that's why I ignored it. Don't you know the character of Armenians?... My neighbor visits doctor very often. If something happens, her son or husband takes her to the medical facility. Me and my husband don't have anyone to take us to the doctor. We are people who can rely only on ourselves. I avoid visiting doctors. If they say something bad, I think I will die sooner. I prefer living without knowing about any disease. I am afraid, I don't know why...I know, that the mouth of people with diabetes are sweetened, they always have need of sweets... I don't have any of the mentioned, that's why I am not worried." Group 1, not screened, female, 65 years old

"I have never had health problems or visited a hospital in my life. Although I have some concerns, but I don't want to visit a doctor, because they will say "You are sick". It's important, but if you visit a doctor, ask for advice, then he says "Pay me this amount of money and I will tell you to take this or that medicine" I can't afford it." Group 4, not screened, male 64

"Why would I care about, say, diabetes? It has never come to my mind to go get tested, because, I haven't experienced any triggers, symptoms." Group 3, screened, female, 48

"In case of diabetes, you know, many people have their own equipment. Why do they have to go to an overcrowded polyclinic once to get tested and then again the next day to get the results, if they have got equipment at home?"

Group 4, not screened, female, 60 years old

"Our neighbor is a doctor. If we have health problems, we don't go to hospital, but ask him to screen us. If he says that it is necessary, then we go to hospital. Therefor there was no need." Group 4, screened male, 35 years old

"The attitude of our [meaning the facility's] nurses has normalized a bit now, yet before this, it had been just really terrible, just terrible." Group 1, not screened, male, 54 years old

"I didn't have time [to take screening]. Besides, I know, if I go there, they will ask for lots of documents, you get tired of this... I don't have any fears. Hospitals are too overcrowded; you have to wait for 2-3 hours. You go there and return with empty pockets [meaning without money]. People are treated very badly at the ambulatory. If it's free, even if you are with one leg, they tell you to come the next day. It's awful". Group 1, not screened, male, 49 years old

"There is no history of diabetes in our [meaning her family's] genes. Hypertension and neurosis do apply, but not the diabetes. That's the reason I don't think that I should be tested" Group 3, screened, female, 46 years old

"Some people, no matter what you tell them, say: "I will go and check it on Internet and will be healed, I am healthy". But there are no healthy people, if we examine them... And it's good that pharmacy workers don't always sell the medicine until they call and check with us". Service providers, female, rank of facility 'Medium'

Perceptions of the intervention

Visit and Study Documents: Interviews showed that mostly people reacted very positively to the visit of the study officers. They enjoyed their communication, liked how "the young girls and boys" explained everything kindly and clearly. While describing their feelings, they used labels like "surprised", "encouraged", "astonished", "pop-eyed", "felt cared for". Despite of the explanations provided by the officers verbally and through the letter of consent and other study documents, most of the participants still considered the intervention to be an act of humanity or "kindness" from the policy-makers, who cared for the general population. They were positively intrigued to receive the invitation, but there were many cases when the participants didn't trust the offer from the beginning. They contacted the facility and their doctors for extra explanations, asked questions, which in its turn created an impression with the doctors that participants had not been well-explained what they were supposed to do. Overall, the random selection and procedures of assigning people to intervention groups were still unclear to the participants and to some of the doctors. In several interviews, participants mention that they were a little bit nervous/scared when first were contacted by the officers, as they suspected that they had some kind of illness or problems detected by the medical facility, but nervousness disappeared when they received the explanations, or after they visited the doctor and received negative results for tests. The doctors told that many participants came to the facility with the invitation letter at their hands, some of them asked to provide vouchers, the others asked to send the officers to their neighbors or relatives in need, etc. There is evidence, that some participants did not read the invitation themselves: they say that the officer's words were fine and clear, the letter was long and they did not feel necessary to read the documents through. This shows that if the invitation is sent without face to face instructions, it is likely that many people will not read it and will simply ignore the intervention. More detailed impressions per study groups after reading the invitation were the following:

- Group One: positive and pleasant feelings, feeling that someone cares for you, feeling respected and valued.
- Group Two: the same, but none of the participants recalled anything particular about the statistics in the invitation. They were not much impressed or interested with the numbers and percentages. It is revealed that the statistics on peer behavior was either ignored or not well remembered by the participants, either because they didn't understand it well or because they were not interested in numbers. It did not make any significant difference in overall impression from the invitation letter.
- Group Three: the same positive feelings; surprise for having a gift, some mistrust that the card will not work. Specifying that the voucher with the money was given to encourage going for screening did not change overall positive perception of the intervention. Although, there were several interviewees who mention that they would visit the facility regardless of the voucher if they could have find spare time. Voucher was perceived as a nice gift, very useful and easy to accumulate.
- Group Four: the same as for Group Three. More distrust was reported, there was a “fear” that the card will not be delivered after the tests. According to the service providers, some of the participants requested the doctors to provide the card immediacy or call the officers and personally let them know that they were tested.

“I felt that there are some people, who care about other people to get screened and become aware...It was clearly written what is what, what is why, how to use the card, and how long you can use it...You would think, why among all, you would be the one to receive a voucher.” Group 3, screened, female, 46 years old

“People feel that they are also taken into consideration. That fact made me happy. I told my sisters that I received such an invitation and I was so happy. They were happy as well that you are remembered, that you are selected, do you understand me?... Everything was fine, the voucher, the letter. It's not like I was astonished or something like that. It was understandable. It comes from people's ability to understand... If I need it, I can buy the medicine I want, regardless of the voucher. I would also go for screenings with only the letter.” Group 3, screened, female, 60 years old

“The girl was very kind – young – came in, and presented [the intervention information] well enough.[The staff] explained well enough, the documents were all clear, perhaps there's nothing to change/improve.” Group 4, screened male, 48 years old

“She expressed her thoughts the way that I immediately trusted that everything was alright, and that it is a fine, interesting program; they have thought about the people and the nation, about our health.” Group 4, screened, male 65 years old

“I was in the shop when your officer called me and explained everything. While waiting for the officer I asked the sellers whether they received such an invitation. They said no. I wonder why I was selected, maybe I am special or someone's joking. Then the officer came and gave me the invitation and I realized that it was real...The only difference is the voucher and people should not be motivated only by it. If I was given only the invitation, I would definitely go for screenings anyway” Group 4, screened, male, 35 years old

“No, people were not well-informed. They did not get what it was all about. Actually, I myself did not get it the idea at the beginning; although the director has explained to us, only after starting the work, we understood the difference between the groups of participants. As far as I understood, the information was not clear to many people.” Service provider, female, rank of facility 'Large'

“People from the other groups were coming to the medical facility just to know how they appeared in the list of participants, why were they selected and not their neighbors, etc. We were answering to their questions... No one complained. They accepted the responses, understood and left the facility.” Service provider, female, rank of facility 'Small'

“People's attitude and trust increased a lot due to the intervention, because they had received the documents, and it was something new for them, a different format, a better one. I don't know, probably people were feeling more appreciated, as someone cared about them and they got an invitation.” Service providers, female, rank of facility 'Large'

“I have not noticed any enthusiasm in the eyes of those, who received only the invitation. They did not come and say “You know, I got an invitation? And I am here”. It felt like they were obligated to visit and asked others or family members “Won't you come with me? Haven't you got an invitation?” in order to know the purpose they got the invitation” Service provider, female, rank of facility 'Medium'

Voucher System: Several respondents who received conditional and unconditional vouchers mention that they did not believe that the card was real and suspected some kind of fraud or cheating, until they managed easily to use the vouchers at the pharmacy. Overall, participants were satisfied with the voucher system and Pharmacy Chains. Only two minor problems were reported by several participants:

- relatively high prices at the pharmacies included into the chain, mentioning that there are smaller pharmacies with lower prices in their communities;
- difficulty to find the location of the pharmacy in regional cities.

The cards were successfully accumulated; in several cases owners of the cards simply forgot to use them or passed the cards to their family members. No complaints regarding card accumulation were found out. The amount was perceived as a good incentive, sufficient to purchase some basic medication and to cover extra costs which are always classified as secondary in comparison to other everyday expenditure. The service providers were also satisfied with the voucher system. In several interviews they suggested that the nurses also had to receive the cards, as they helped them with the project. There were three cases when the doctors mentioned that they didn't need the vouchers and that the amount was not enough to reimburse their efforts during the whole year to make people to come for screenings.

"Your officer gave me the voucher and told me that I should buy things with the whole amount as if I use half, the rest will be lost. And I did exactly like that. I bought medicine for 5000 AMD. It was fine." Group 4, screened, male, 35 years old

"The voucher was good as I needed a thermometer, medicines... you know how we live in this country, how much we earn and so on. Therefore, I had been postponing the purchase, though I needed them... Thermometer, medicine for heart, other medicine, iodine, potassium permanganate, cotton, bands, etc." Group 3, screened, female, 60 years old

"Of course, it would be good to go, AMD 5000 is not little money, I could buy lot of things, but what can I do? You can't get it if you have not attended and I did not". Group 4, not screened, female, 45 years old

"The service was of good quality, the pharmacist was someone I knew, but even if I went somewhere else, it [meaning the service] would be the same. Everything was fine" Group 4, screened, male, 48 years old

"Yes, I used it. My blood pressure was high at that time and I didn't have money as my documents and money were stolen in the public transport. I needed to buy the medicine and remembered that I have a voucher and used it. That 5000 AMD saved my life for a month." Service Provider, female, rank of facility 'Small'

"...to be honest, I didn't even want to get the voucher. But then I was told "if you don't take it, someone else will", that's why I took it...That 5000 drams is not even enough for a block of diapers." Service Provider, female, rank of facility 'Large'

"People were coming for screenings to receive the voucher. They were visiting their medical facility just to get something in return." Service provider, female, rank of facility 'Small'

Suggestions to improve the intervention: The respondents did not make many suggestions to improve the documents or intervention as a whole. As random selection was not quite familiar to them, many interviewees suggested that more people should have received the vouchers, that poor and most vulnerable population should have been contacted, that those who were not in need of 5000 AMD, should not have received it, etc. The doctors suggested giving vouchers to everyone, as they noticed that groups three and four, based on their personal observations, attended more often than others. The text of the consent letter was defined as too long, it was suggested to have a shorter version without long and difficult introduction. Overall, there was nothing about the visit that the interviewees reported having disliked.

"I think, it would be good, if they thought about the people more often, and surprise them like this [meaning to give vouchers] ...At least helping the elderly and the retired... We have jobs, and can somehow handle it, but there are people who can't." Group 3, screened, female, 46 years old

"There are people who do not have a penny to buy even a painkiller. I thought that people could use the voucher and buy medicine for them. It is more preferable for them to receive it with the invitation rather than after the screenings." Group 1 not screened female 65 years

"It is appropriate, why not? The project was a proper one, but I can't say anything regarding the improvements...For instance, there could be someone else instead of me, who is ill, who has the cause, yet is unable to or doesn't have the opportunity for it, but could make use of your offer and go [for screening]." Group 1, not-screened, male, 54 years old

"Some people asked why didn't they get a voucher, and I explained to them that this is an experimental program and it was not clear whether people would attend or not. It would be good to involve the voucher system for other people, too, because many of them have financial problems, and this helped them to purchase monthly medicine for hypertension". Service provider, female, rank of facility 'Large'

"It was good that anyone from our medical staff or their family members were not selected for the project. This ascertained people that the selection process was fair. It is true that the number of participants from our community was small, but the number of the whole population was also small. Thus, we cannot demand anything. We are satisfied and grateful." Service provider, female, rank of facility 'Small'

Perceptions of hypertension and diabetes testing after the interventions

Changes in perceptions and knowledge: The results from interviews show that mostly respondents consider themselves informed about diabetes and hypertension regardless of the intervention, therefore they did not report any particular change in their knowledge about the disease, about the free-of-charge screenings, etc. As to the change of the perception of the screenings' importance and the way the screenings were organized at the facilities, positive changes happened to those who actually went for the screenings. They were happy about the attitude of the medical staff, about lack of overcrowding, about the lengths of the testing and swift service delivery. No complaints or dissatisfaction was expressed by those who went for the screenings. On the contrary, respondents who did not attend the facility, told about no particular changes in their perception of importance of the screenings. Major driver of their behavior is the stereotype that if there is no pain or particular health issues troubling them, they should not take the time and potential expenses to go. Interviewees also explained that the intervention did not work with some people because of lack of trust towards the facility and also towards the intervention. Some of them doubted that they would receive the voucher, the others didn't like the fact that they were not assigned to groups with the cash-like incentives. Interviewees told that they have discussed the intervention with their family members, friends, close surrounding. Most of the discussions were positive, stressing that screening is significant and that some improvements are taking place in their community. Some of the people mentioned that they understood the significance to attend for tests, but had not been finding time or had experienced some other obstacles before the intervention. The intervention was a good reminder and a trigger for them to attend the doctors. Participants from groups without cash-like incentives, who attended for screenings, also mentioned some kind of a personal responsibility they felt towards the field officers, who were "young" and "nice": the participants didn't want to "hurt" those people and felt obliged to attend. Conditional voucher did motivate a lot of people, as they needed extra cash for medication. At the same time, there are participants from group four who emphasize that they did not attend for the voucher and that even the invitation would be enough to motivate them to visit a doctor. This could have been used by people like an excuse to demonstrate that their decisions are not influenced by material factors. The service providers state that the change in

behavior was obvious, as a lot of patients who had been contacted by them before and had not reacted, due to the intervention visited the facility and took the screenings. However, they don't think that any significant changes in perceptions of importance of the screening or long-term sustainable changes in behavior practices took place.

"I know that I may have a problem of female organs, because of cold, you know, this is a village, you go out, you catch a cold, you do laundry with your hands, in these cases I always say: "Maybe they will detect a tumor, maybe they will detect something else, so I have never visited hospitals. During New Year I felt bad, I could not walk, it got very critical, then I went to hospital. I was saying they [the family members] can carry me to hospital only tightened [meaning using force]", I will not go there... Yes, it motivated me, I would not have gone for screenings without your program... I buy lots of medicine, too much medicine. My children often get ill, especially my son, he has an allergic cough, which may happen at any time even due to a smell. As I was buying a very expensive medicine for him, I was happy with this AMD 5000, as I purchased iodine and other things for home. That is why I finally went... I was afraid, my God, only not diabetes, it is the illness of our century. I said to the doctor: "Don't tell me I have diabetes, even if it is, don't tell me!". The doctor said everything was ok. I already knew about hypertension, it is low or high, I did not have a headache at that moment. I was mainly afraid of diabetes...It was a serious stress...I will go next year too when I turn 36" Group 4, screened, female, 35 years old

"Yes, there are people who truly don't believe this [...] they've seen too much of a bad [experience]... That is why it doesn't work." Group 1, not-screened, male, 54 years old

"We often talk and come to the conclusion that taking screenings is the right thing. We say to each other that it is important to go. And the diseases that people have in our surroundings... We speak with friends, family, but only speak, we don't go for screening. This was a good opportunity to take a step". Group 2, not-screened, female, 49 years old

I was impressed with the voucher during the visit, it would be nice to get it. But it did not motivate me to attend the screenings, because I was very busy with my work. I don't have time to attend the facility... Besides, the screenings at the facility are not very much important" Group 4, not-screened, female, 45 years old

"Some of the people, who attended for screenings, did not know that they had diabetes. Some of them told that they had headaches, felt weak and could not imagine all this was caused by hypertension. You know, this is a village, people are busy with agriculture, daily concerns, they often don't manage to visit a doctor. But this program encouraged them, it gave them a sense of responsibility, as they had been selected. So, they attended for screenings, passed them and were happy". Service provider, female, rank of medical facility 'Large'

"Many of them were visiting us for the first time. Once I gathered the staff and we visited people at their homes to make screenings for diabetes, as some people were too busy with their work to attend for screenings. But this time they found time and came. They had a strong belief/trust in you". Service providers, female, rank of facility 'Medium'

"It was good that people visited and requested [to get screened], otherwise they wouldn't come, although we called them and invited. This way, they had a motivation to come... One of them [the patients] said "this girl came... and asked to go for a health screening." She came for the sake of that girl, turns out." Service provider, female, rank of facility 'Medium'

Reasons for non-screening as a result of the Intervention:

As already mentioned, major reason for not taking the screening presented by the interviewees is that they don't feel bad, therefore there is no need to make use of the services. The hypertension equipment is available and most of not-screened participants mention that they can measure their blood tension whenever needed at home or at their neighbors. As to the diabetes, if they don't experience the symptoms known among their surroundings, they don't prioritize professional advice. They mention that they would only get screened if feel obviously bad. Overall, the narratives presented by these people explore that they have different types of fears, such as fear of diagnostic, fear of injections, fear of further testing, fear of expenses, etc., but when asked directly whether they were scared, they reject it. Lack of trust towards the doctors and negative past experiences at the facilities, including the long waiting lists, overcrowding, expenses, are the next widespread reason to

avoid the doctors in general. While telling about their future plans regarding the screenings, some of the not-screened participants clearly state that they will attend the screening only if problems are detected. There were also many cases, when the respondents explained that this was a good opportunity for them to go, they were willing to go, but some objective reasons stopped them, such as:

- ✚ illness,
- ✚ being too busy at work,
- ✚ remoteness of the facility
- ✚ inability to attend alone, etc.

Service providers think that people, who didn't take the screenings as a result of the intervention, represent the most skeptical segment of the population, which is hard to persuade even using strong arguments or incentives.

“No [I didn't go], well, I do feel well; if I visit the doctor, they might end up finding a hundred of illnesses.” Group 1, not-screened, male, 65 years old

“No, we don't have any fears. We just think that if we go for screenings maybe a lot of diseases will be found. That's why we don't go for screenings... I think you should have a reason for visiting a doctor. We don't go without a reason. There should be some complaints in order to go for screenings and to find out what's wrong... we will not visit a medical facility for preventive healthcare.” Group 2, not-screened, female, 49 years old

“I don't know, those queues and long waiting. It usually takes a whole day. During a whole week we were going to a neurologist with my husband.You get disappointed: one says go there, he has inflammation of rectum nerves, go to check that, go for cardiograms, another testing after that. First of all, solve the most important problem, so that a man can walk and attend all these screenings! You get disappointed of that hospital because of all these things. This is the main reason I avoid them...An ill person goes to the facility, stands there for hours, they give him a medicine... But that overcrowding and tension must be eliminated, it should become a comfortable or a calm process, while usually it is an inconvenient place where anyone will get a high blood tension because of long waiting and queues, because they tell you to go to this cabinet for a signature, then to another cabinet, then the department head should put a stamp – all these makes one very nervous. Even if you don't have a tension, you go there and start feeling bad”. Group 1, not-screened, female, 58 years old

“All people have problems today, but they don't take the risk to attend for testing. Of course, it's because of finance. They know if they go, one problem will reveal another, and they think: “Ok, this is just a wound, there is a pain somewhere, it will pass”. They don't think about consequences... My family members forced me to go to hospital when I had heart problem. I didn't want to go. I thought it will cost money and get more complicated. So, they convinced me and took me there, I went and everything was ok... This intervention did not change my perceptions. I didn't go for screenings as I did not find time and then I forgot about it. I knew about screenings before too.” Group 3, not-screened, male, 49 years old

“Once I went to our medical facility and I was told that the level of my blood sugar is very high. I told my friend about it, and he told me to go to his house and ask his wife to give me the glucose meter. She gave me the device and my friend measured my blood sugar and told me that everything is fine. I don't have diabetes. It was 3-4 years ago. Since then I don't trust doctors...If I go for screenings, and it reveals that I have diabetes, I should have at least 15.000 AMD in order to buy medicine for it. If I don't have the money, it is useless to go...I am sure that I don't have diabetes, it will be better if my voucher is used by someone else who needs it more...I know that I don't have diabetes and thus didn't go. For example, my leg hurt recently and I could hardly walk and I visited a doctor. If there is a need, I go for screenings...” Group 4, not-screened, male, 66 years old

“Yes, after the visit I wanted to go. I thought that I should. But then my leg pain started and I can't walk. That's why I didn't go... My neighbor tells me to visit them one morning and she will test me for diabetes. She has equipment. But every time...[something happens]...I will do it someday” Group 1, not-screened, female, 65 years old

““Some people had fear that they may be ill... the fear for disease... the participants thought that they were selected because they have some disease. Some of them came, found out that they are not ill and stopped worrying ...It is pointless to persuade some of the people, they do not want to listen to what you are saying. They are absolutely indifferent to their health.” Service provider, male, rank of facility ‘Small’

COSTING INFORMATION

A template for reporting on delivery related costs per participant in each of Intervention Groups was developed and approved by the WB Impact Evaluation Tteam (ET). The template took into account all major costs related to the intervention, excluding the expert fees paid to study personnel for their services, such as sample and instrument design, training of the staff, reporting, etc. Hence, the costing information covered the following lines:

- ✚ **Printing of Study Documents/packed envelopes:** includes printing of all necessary study documents, including the consent forms, questionnaires, invitations, envelopes.
- ✚ **Voucher publication and 5000 cash transfer:** includes release of the voucher plastic cards at a specialized company and 5000 cash transfer to each of vouchers through the established Pharmacy Chain.
- ✚ **Transportation:** includes transport costs for the delivery of study documents and the vouchers (if any), and is calculated based on day/person costs for each marz.
- ✚ **Per diem:** includes per diems paid to delivery agents for delivery of study documents and vouchers (if any), and is calculated based on actual day/person per diems, including accommodation costs (if any).
- ✚ **Communication costs:** includes costs on phone calls to participants for arrangement of delivery of documents/vouchers.
- ✚ **Salary to delivery agents:** includes fees paid to agents, delivering the study documents/vouchers.

Table 9 below shows that the most costly intervention with total of 3.617.000 AMD per 400 participants is registered for Group Three with non-conditional vouchers.

Table 9 Total Costs Per Intervention Groups (in AMD)

	Total Costs per Groups			
Intervention Group	Group 1	Group 2	Group 3	Group 4
Amount in AMD	1.887.000	1.891.000	3.617.000	3.595.000
TOTAL	10.990.000			

Detailed costs per person across intervention groups and study regions are presented in Table 10 below. The average per person cost for all regions stands at AMD 1717 with minimum average per person costs registered in Armavir marz (AMD 1634 per person) and maximum average costs – in Lori marz (AMD 1878).

Table 10 Total Costs per Person Across Intervention Groups and Regions (in AMD)

Intervention Groups	Costs per Person				Sample size	Average Per Person Per Group
	Lori	Kotayk	Ararat	Armavir		
Group 1	1320	1148	1133	1118	400	1179
Group 2	1323	1150	1135	1120	400	1182
Group 3	2483	2273	2133	2155	400	2261
Group 4	2389	2241	2214	2144	400	2247
Average Per Person Per Marz	1878	1703	1653	1634	1600	1717

Cost breakdown by major expenditure lines is presented in Table 11 below. It depicts that the largest share (57.5%) of actual expenditure was used for salaries of the agents/officers delivering the study documents. And the next large share of costs is represented by voucher release and 5000 cash transfers (23.1%). Detailed costing information with incorporated formulas is presented in ANNEX 2 of this report.

Table 11 Costs Breakdown (in AMD and in % of total)

Cost Breakdown	Total Amount	% of total
Printing of Study Documents/packed envelopes	284000	2.58%
Voucher publication and 5000 cash transfer	2540000	23.11%
Transportation	973000	8.85%
Per diem	665000	6.05%
Communication costs	208000	1.89%
Salary to delivery agents	6320000	57.51%
TOTAL	10990000	100%

ANNEX 1 Additional Tables

Table 1 Reasons for not being screened during 12 months before the intervention.

Reasons	Responses		Percent of Cases
	N	Percent	
There is no need, as I have no problems with health	1548	76.7%	78.1%
The facility is far from my house	6	.3%	.3%
The screening is expensive	96	4.8%	4.8%
The screening takes a lot of time: I'm busy	170	8.4%	8.6%
I can't leave my house due to illness/disability	11	.5%	.6%
The services at the facility are of poor quality	30	1.5%	1.5%
The doctors and other staff at the facility are not good	18	.9%	.9%
I'm afraid of doctors and screenings	30	1.5%	1.5%
I have moved to another permanent place of residence	4	.2%	.2%
I was abroad	24	1.2%	1.2%
I simply don't want	12	.6%	.6%
I neglect health	15	.7%	.8%
I screen myself at home	19	.9%	1.0%
Other	36	1.8%	1.8%
Total	2019	100.0%	101.9%

Table 2 Reasons for not being screened during 12 months before the intervention by age groups

Reasons		Grouped age			Total
		35-45	46-55	56-68	
There is no need, as I have no problems with health	Count	502	503	543	1548
	%	79.6%	77.9%	77.1%	
The facility is far from my house	Count	0	1	5	6
	%	.0%	.2%	.7%	
The screening is expensive	Count	26	30	40	96
	%	4.1%	4.6%	5.7%	
The screening takes a lot of time: I'm busy	Count	50	66	54	170
	%	7.9%	10.2%	7.7%	
I can't leave my house due to illness/disability	Count	1	1	9	11
	%	.2%	.2%	1.3%	
The services at the facility are of poor quality	Count	10	9	11	30
	%	1.6%	1.4%	1.6%	
The doctors and other staff at the facility are not good	Count	7	6	5	18
	%	1.1%	.9%	.7%	
I'm afraid of doctors and screenings	Count	11	9	10	30
	%	1.7%	1.4%	1.4%	
I have moved to another permanent place of residence	Count	1	1	2	4
	%	.2%	.2%	.3%	
I was abroad	Count	8	11	5	24
	%	1.3%	1.7%	.7%	
I just don't want	Count	5	0	7	12
	%	.8%	.0%	1.0%	
I neglect health	Count	4	8	3	15
	%	.6%	1.2%	.4%	
I screen myself at home	Count	3	5	11	19
	%	.5%	.8%	3.7%	

	%	.5%	.8%	1.6%	
Other	Count	11	11	14	36
	%	1.7%	1.7%	2.0%	
Total	Count	631	646	704	1981

Percentages and totals are based on respondents.

Table 3 Reasons for not being screened during 12 months before the intervention by gender.

		Gender after final verification		Total
		Female	Male	
There is no need, as I have no problems with health	Count	742	806	1548
	%	75.1%	81.2%	
The facility is far from my house	Count	3	3	6
	%	.3%	.3%	
The screening is expensive	Count	56	40	96
	%	5.7%	4.0%	
The screening takes a lot of time: I'm busy	Count	85	85	170
	%	8.6%	8.6%	
I can't leave my house due to illness/disability	Count	8	3	11
	%	.8%	.3%	
The services at the facility are of poor quality	Count	16	14	30
	%	1.6%	1.4%	
The doctors and other staff at the facility are not good	Count	9	9	18
	%	.9%	.9%	
I'm afraid of doctors and screenings	Count	19	11	30
	%	1.9%	1.1%	
I have moved to another permanent place of residence	Count	3	1	4
	%	.3%	.1%	
I was abroad	Count	9	15	24
	%	.9%	1.5%	
I just don't want	Count	7	5	12
	%	.7%	.5%	
I neglect health	Count	12	3	15
	%	1.2%	.3%	
I screen myself at home	Count	16	3	19
	%	1.6%	.3%	
Other	Count	25	11	36
	%	2.5%	1.1%	
Total	Count	988	993	1981

Percentages and totals are based on respondents.

Table 4 Screening Status by gender

		Gender after final verification		Total
		Female	Male	
Impact status	Not screened	704	786	1490
		47.2%	52.8%	100.0%
	Screened for diabetes	20	12	32
		62.5%	37.5%	100.0%
	Screened for hypertension	74	36	110
		67.3%	32.7%	100.0%
	Screened for both	201	167	368
		54.6%	45.4%	100.0%
Total		999	1001	2000
		50.0%	50.1%	100.0%

Table 5 Screening Status by Age groups

	Impact status	Grouped age			Total
		35-45	46-55	56-68	
	Not screened	483	486	521	1490
		32.4%	32.6%	35.0%	100.0%
	Screened for diabetes	11	9	12	32
		34.4%	28.1%	37.5%	100.0%
	Screened for hypertension	27	39	44	110
		24.5%	35.5%	40.0%	100.0%
	Screened for both	114	119	135	368
		31.0%	32.3%	36.7%	100.0%
Total		635	653	712	2000
		31.8%	32.7%	35.6%	100.0%

Table 6 Screening Status by Type of Medical Facility

		Medical Facility Rank			Total
		Small	Medium	Large	
Impact status	Not screened	151	229	1110	1490
		10.1%	15.4%	74.5%	100.0%
	Screened for diabetes	0	9	23	32
		.0%	28.1%	71.9%	100.0%
	Screened for hypertension	20	14	76	110
		18.2%	12.7%	69.1%	100.0%
	Screened for both	29	69	270	368
		7.9%	18.8%	73.4%	100.0%
Total		200	321	1479	2000
		10.0%	16.1%	74.0%	100.0%

Table 7 Screening Status by Marital Status of Participants

		Your marital status:				Total
		Never married/Single	Married/live together	Divorced/separated	Widowed	
Impact status	Not screened	125	1272	45	48	1490
		8.4%	85.4%	3.0%	3.2%	100.0%
	Screened for diabetes	2	29	0	1	32
		6.3%	90.6%	.0%	3.1%	100.0%
	Screened for hypertension	10	94	2	4	110
9.1%		85.5%	1.8%	3.6%	100.0%	
Screened for both	21	320	12	15	368	
	5.7%	87.0%	3.3%	4.1%	100.0%	
Total		158	1715	59	68	2000
		7.9%	85.8%	3.0%	3.4%	100.0%

Table 8 Screening Status by Education

		Your last completed education level				Total
		Non-educated	Primary/secondary general	Technical vocational (college, tvet, other)	Higher/post-graduate (diploma, ph.d., other)	
Impact status	Not screened	9	840	406	235	1490
		.6%	56.4%	27.2%	15.8%	100.0%
	Screened for diabetes	0	19	8	5	32
		.0%	59.4%	25.0%	15.6%	100.0%
	Screened for hypertension	1	55	37	17	110
.9%		50.0%	33.6%	15.5%	100.0%	
Screened for both	4	223	87	54	368	
	1.1%	60.6%	23.6%	14.7%	100.0%	
Total		14	1137	538	311	2000
		.7%	56.9%	26.9%	15.6%	100.0%

Table 9 Screening Status by Employment

		During last month did you have any paid job for which you received a monetary payment?		Total
		No	Yes	
Impact status	Not screened	794	696	1490
		53.3%	46.7%	100.0%
	Screened for diabetes	18	14	32
		56.3%	43.8%	100.0%
	Screened for hypertension	68	42	110
61.8%		38.2%	100.0%	
Screened for both	216	152	368	
	58.7%	41.3%	100.0%	
Total		1096	904	2000
		54.8%	45.2%	100.0%

Table 10 Screening Status by Availability of Medical Insurance

		Do you currently have a medical insurance?		Total
		No	Yes	
Impact status	Not screened	1397	93	1490
		93.8%	6.2%	100.0%
	Screened for diabetes	30	2	32
		93.8%	6.3%	100.0%
	Screened for hypertension	99	11	110
		90.0%	10.0%	100.0%
	Screened for both	350	18	368
		95.1%	4.9%	100.0%
Total		1876	124	2000
		93.8%	6.2%	100.0%

Table 11 Screening Status by watching TV

		Do you watch TV programs about healthcare?		Total
		No	Yes	
Impact status	Not screened	348	1142	1490
		23.4%	76.6%	100.0%
	Screened for diabetes	0	32	32
		.0%	100.0%	100.0%
	Screened for hypertension	25	85	110
		22.7%	77.3%	100.0%
	Screened for both	63	305	368
		17.1%	82.9%	100.0%
Total		436	1564	2000
		21.8%	78.2%	100.0%

Table 12 Screening Status by Availability of Persons with Medical Education

		Do you have any close relatives, friends, neighbors with medical education, whom you communicate with at least once per week?		Total
		No	Yes	
Impact status	Not screened	688	802	1490
		46.2%	53.8%	100.0%
	Screened for diabetes	13	19	32
		40.6%	59.4%	100.0%
	Screened for hypertension	47	63	110
		42.7%	57.3%	100.0%
	Screened for both	189	179	368
		51.4%	48.6%	100.0%
Total		937	1063	2000
		46.9%	53.2%	100.0%

Table 13 Screening Status by Availability of People with Diabetes Among Friends

Impact status	Are there any people with diabetes among your relatives, friends, neighbors?		Total
	No	Yes	
Not screened	577	892	1469
	39.3%	60.7%	100.0%
Screened for diabetes	15	17	32
	46.9%	53.1%	100.0%
Screened for hypertension	37	72	109
	33.9%	66.1%	100.0%
Screened for both	141	222	363
	38.8%	61.2%	100.0%
Total	770	1203	1973
	39.0%	61.0%	100.0%

Table 14 Screening Status by Availability of People with Hypertension Among Friends

Impact status		Are there any people with hypertension among your relatives, friends, neighbors?		Total
		No	Yes	
Not screened		460	1011	1471
		31.3%	68.7%	100.0%
Screened for diabetes		5	27	32
		15.6%	84.4%	100.0%
Screened for hypertension		32	76	108
		29.6%	70.4%	100.0%
Screened for both		103	261	364
		28.3%	71.7%	100.0%
Total		600	1375	1975
		30.4%	69.6%	100.0%

Table 15 Screening Status by Perceived Economic Status

Impact status	Which of the following statements best describes your HH current well-being?					Total
	Our income is not sufficient for everyday food	Our income is sufficient for everyday food, but not for cloths and other basic needs	Our income is sufficient for family basic needs, such as food, clothing, utilities, but not enough for big purchases	Our income is sufficient to meet all family needs, make big purchases, but not enough for savings	Our income is sufficient to meet all family needs, make any kind of purchases and have some savings	
Not screened	85	503	758	116	25	1487
	5.7%	33.8%	51.0%	7.8%	1.7%	100%
Screened for diabetes	2	10	19	1	0	32
	6.3%	31.3%	59.4%	3.1%	.0%	100%
Screened for hypertension	9	34	60	7	0	110
	8.2%	30.9%	54.5%	6.4%	.0%	100%
Screened for both	16	156	162	31	3	368
	4.3%	42.4%	44.0%	8.4%	.8%	100%
Total	112	703	999	155	28	1997
	5.6%	35.2%	50.0%	7.8%	1.4%	100%

ANNEX 2 Costing Breakdown (incorporated MS Excel file)



Final Costs
Calculation_health_W