

Call for Proposals 4: Nimble Evaluations

Comparing cash transfers and other demand-side incentives for health screenings in Armenia

Baseline report

The baseline survey for the impact evaluation took place between July 22, 2019 and September 2, 2019. It consisted in administering the socio-demographic survey included in annex 1 to a sample of 1600 study participants aged 35-68 who had not been screened for diabetes and hypertension in the last 12 months. Their screening status had been established by accessing the Armenian eHealth database at the medical facility at which they are registered. Together with the administration of the baseline survey, the invitations to come for screening and the vouchers (in group 3) were also distributed by the fieldworkers.

Design

This evaluation relies on a randomized control trial design with 4 interventions and one control group:

Intervention 1: Personal invitation to come to the health clinic for diabetes and hypertension screening

It is hypothesized that a personal invitation will reinforce and individualize existing mass-media messages encouraging health screening. The invitation will also include practical details (gratuity of the screenings, location, hours, etc. that should facilitate the decision by individuals to come for health screenings.

Intervention 2: Personal invitation to come to the health clinic for diabetes and hypertension screening with added mention about screening among peers.

The invitation adds information (respecting anonymity) about peers (individuals in the same area, same gender, age group) having been screened.

It is hypothesized that by telling individuals that they haven't been screened in the last 12 months but that some of their neighbors/peers have (descriptive social norm), it would stimulate a stronger response than with a simple invitation.

Intervention 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”. The message accompanying the voucher would say that it is given as an encouragement and as compensation for the cost of going for screening (transport, time opportunity). This would be similar to a labeled unconditional cash transfer and the hypothesis is that both the additional income, by removing cash constraints, together with the labeling might increase the motivation to undergo screening over and above the personal invitation.

Intervention 4: Personal invitation to come to the health clinic for diabetes and hypertension screening + pharmacy voucher incentive conditional on taking the screening test
In addition to the benefits from the personal invitation described above, the cash incentive should make the decision to undergo the health screening more financially attractive (price effect). Moreover, from a time horizon screening, the cash incentive will bring the benefits of health screenings closer to the present. Indeed, going for health screenings is a cumbersome and time-consuming process, even if it is free, and its health benefits are relatively far in the future.

The pharmacy vouchers in intervention groups 3 and 4 would have the same value and can be redeemed for purchases in the main pharmacy chains in Armenia

Control group:

No personal invitation for screening, no voucher incentive conditional or unconditional on taking the screening test. Exposure to general mass-media campaign to encourage health screenings (ongoing for several years).

Note that to avoid contamination of the control group by asking specific questions about diabetes and hypertension screening, the baseline survey was not administered to the control group between July and September 2019 but instead will be administered in January 2020, at the end of the intervention period. This short time difference in administering a survey consisting of questions linked to fairly stable socio-demographic variables was deemed preferable to the risk of changing the behavior of the control group by asking them health specific questions and in particular asking them why they had not screened in the last 12 months.

Baseline balance

In the attached annex 2, we therefore present a baseline balance table reporting the means and p-values across the four intervention groups. For the reasons explained above, we are not able to compare at this stage the intervention groups with the control group.

Overall, the sample is well balanced across the four intervention groups for the main socio-demographic variables.

Power analysis

According to the power calculations presented in the research proposal, our proposed sample size of $5 \times 400 = 2000$ individuals would allow us to detect comfortably a 20% increase in the screening rate (with a power of 0.8 for diabetes screening and a power of 0.9 for hypertension screening).

Based on the data collected at baseline, we do not see any reason to revise our power calculations. We note that our baseline data does not include new information about screening rates in our evaluation sample because by definition we only enrolled individuals who had not screened in the last 12 months. However, we expect the national screening rates used for our power calculations to remain in the same range in 2019.

Analysis plan

Further to an analysis of the overall sample, we plan to conduct sub-analyses. At this stage, we anticipate sub-analyses by gender and urban/rural location to be the most promising. Indeed, screening rates are higher among females and in urban locations. We might also conduct other sub-analyses by other geographical and socio-demographic characteristics such as region, type of health facilities the respondent are affiliated with, age, education, marital status, employment and income.