



Oxford Policy Management

KAZAKHSTAN: EXTERNAL EVALUATION OF BOTA PROGRAMMES

Conditional Cash Transfer (CCT) programme

Baseline Report of Quantitative Evaluation

Vol III: Targeting analysis

October 2012

Preface

This baseline report presents the results of the first of two rounds of a quantitative survey that aims both to identify the impact of the BOTA Foundation's Conditional Cash Transfer programme on its target beneficiaries, particularly on those households eligible to receive the cash transfer for children of pre-school age, and also to evaluate the programme's operations.

The report is divided into three volumes. Volume I presents the baseline for the impact evaluation. Volume II is a synthesis report on BOTA's operations, combining the results from the baseline for the quantitative evaluation with some key findings drawn from the qualitative research report of January 2012. Volume III presents the findings from the targeting analysis.

The fieldwork on which these quantitative findings are based was conducted in June to December 2011. A second round of fieldwork is taking place in June to December 2012 and the results of that follow-up survey, which will identify the impact of the programme on households that have been eligible for one year, will be available in mid-2013.

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Abbreviations

CCT	conditional cash transfer
CGH	Coady-Grosh-Hoddinott
CT-OVC	Cash Transfer for Orphans and Vulnerable Children
ECD	early childhood development
HBS	Household Budget Survey
MICS	Multiple Indicator Cluster Survey
OPM	Oxford Policy Management
PSU	primary sampling unit
RNN	<i>registratsionny nomer nalogoplatel'shchika</i> [taxpayer registration number]
SNAP	Supplemental Nutrition Assistance Program

PART A: BACKGROUND

1 Introduction

1.1 Overview of the Conditional Cash Transfer (CCT) programme

The BOTA Foundation CCT programme intends to improve the lives of children in households suffering from poverty in Kazakhstan by increasing their access to education and other social sector services. The programme delivers regular cash to four categories of beneficiary within poor households: children aged four and over up until they are eligible to start school (classified by BOTA as the 'Early Childhood Development' (ECD) category); pregnant women, or women with infants up to the age of six months; children with disabilities; and young people aged 16-19 who have completed school and are starting work. Beneficiaries continue to receive the cash for the permitted period of time provided that they meet specified conditions such as attendance at pre-school or at training sessions.

1.1.1 How cash transfers work

Cash transfers: a demand-side rather than a supply-side mechanism

Cash transfers are a demand-side mechanism. 'Demand-side' means that the mechanism is targeted at the service user¹. It aims to improve outcomes by increasing the demand from households for the use of existing services. It does this by removing monetary and, to a certain degree non-monetary, barriers that prevent poor households from accessing services. The assumption is that because of monetary constraints (direct and indirect costs, as well as opportunity costs) households cannot afford to use the relevant services, or else they are unfamiliar with what the service offers, or feel that it is not appropriate for their needs. The provision of small amounts of cash, conditional on certain behaviours, contributes to eliminating such barriers to access. The intended result is that services such as education and health care facilities are used more, and the human development outcomes of the beneficiaries are improved.

The demand-based approach of CCTs contrasts with a 'supply-side' strategy that is targeted at the service provider and that might, for example, aim to increase the number or quality of educational or health facilities. In most cases, for instance in Latin America, CCTs have been introduced when supply-side mechanisms have proven to be insufficient by themselves to improve take-up of essential services. Supply-side mechanisms seem to be preferable where there is already a demand for the services, i.e. households would like to use the services but they are constrained because the services do not exist or they cannot get to them. The BOTA CCT programme has carried out occasional informal supply-side activities in the form of advocacy by community mobilisation specialists to encourage the establishment of pre-schools, but these are not its focus.

¹ Note that 'demand-side' does not mean that the user has to 'demand' the transfer: it is unrelated to issues as to whether households benefit automatically—'automatic enrolment'—or have to apply ('application-based enrolment'). See below.

The targeting of cash transfers, including the CCT

Cash transfer programmes usually have finite resources: cash cannot be given to every household in the country². For this reason the programmes are *targeted* at a more restricted set of households or individuals whose participation will best help the programme to achieve its objectives. There are numerous ways of deciding whom to target. These include selecting people who live in a particular geographical area (geographical targeting), those who meet a categorical requirement such as being of a certain age group (categorical targeting) or those who are classified as the poorest by an agreed measure (poverty targeting), or else permitting communities to make their own judgment about which households are most deserving of the cash (community-based targeting).

For the BOTA CCT, in order to receive the transfer a household must meet two main criteria, in addition to possessing the correct documentation. First, it must contain a member that fits one of the categories listed above. Second, it must be classified as poor according to the results of a short computer test administered by BOTA representatives, the 'proxy means test', that analyses how the household's characteristics compare against those of households known to be poor in national surveys. This means that it is using a combination of categorical targeting and poverty targeting. Naturally the household also has to live in an area where BOTA is operating, so the CCT also has a geographical targeting component. This is discussed in section 3.

The enrolment of the target group

Households that are eligible for cash transfer programmes, according to their targeting criteria, may either be automatically enrolled (e.g. by having their name put forward for the programme by a local authority) or else may have to submit an application. In both cases households will have the opportunity to withdraw if they do not wish to participate.

BOTA's CCT is the second of these, an application-based programme. For such programmes there will always be households that do not apply because they feel that the benefits of being enrolled are not worth the cost. This is all the more true for conditional cash transfers where the household has to weigh up whether it wants or is able to meet the conditions in addition to other considerations. This means that any organisation that implements a cash transfer needs to consider not only how to maximise awareness of the programme among potential beneficiaries, but also how best to attract people to apply for the programme, and how to make it possible for them to do so. All of these stages are necessary in order to get potential beneficiaries enrolled so that the programme can achieve the objectives it has set itself.

1.1.2 Features of CCT's operations at the time of the baseline

In 2011 the CCT was operating in three oblasts: Akmola, Kyzylorda and Almaty. In the first two of these it is implemented by teams directly employed by BOTA; in Almaty oblast it is implemented by two partner non-governmental organisations (NGOs) based in Taldykorgan and Esik³. A team of specialists works from each regional office to oversee enrolment, supported at the local level by volunteers:

- In Almaty oblast the specialists are from the partner NGOs. They travel between okrugs to spend a day in each community in a public location such as the local government office or a

² Rare exceptions such as the cash distributed to every household under Mongolia's Human Development Fund, set up in 2009, are not cash transfers in the same sense of serving a social protection function. In the example of Mongolia it is a means of distributing resource wealth.

³ The programme is continuing to expand into new oblasts, with slight differences in implementation.

school, where they use computers to conduct the proxy means test with applicants to determine eligibility. A decision is reached immediately.

- The volunteers are local residents who are expected to be familiar with the community and who are able to identify potentially vulnerable households that include members who fit the CCT categories. They raise awareness of the CCT in the community, encourage households to apply for BOTA by taking the test, and act as a focal point for pre-school facilities that are attended by enrolled children.

At the time of the baseline survey BOTA had introduced the programme to the local administration (*akimat*) at oblast, rayon and okrug levels. In treatment okrugs it had also identified volunteers to support programme implementation. The volunteer had identified as many potential beneficiary households as possible, and then specialists had undertaken one round of enrolment in those areas.

For the baseline survey the evaluation team aimed to reach households in the month following BOTA's first enrolment round in each okrug. It was intended that this would give BOTA flexibility to select its enrolment dates and spread awareness of the CCT whilst minimising the time that successful households had to wait to receive their bank card (since no bank cards were issued in treatment okrugs until after completion of the baseline survey). In the event, okrugs in some rayons were enrolled unexpectedly early so the time between BOTA's first round of enrolment and the entry of the evaluation team into the okrug ranged up to a few months. It was agreed with BOTA during the evaluation design that specialists would aim to maximise the enrolment of eligible households in this first round, to enable an analysis of targeting effectiveness at baseline. Further enrolment rounds have been run in many treatment okrugs since the baseline data collection, in an effort by BOTA to reach as many eligible beneficiaries as possible.

Some further details of the CCT programme are provided in Annex C.

1.2 Overview of the evaluation

The evaluation has three main objectives. These are addressed separately in the three volumes.

1. **Impact evaluation.** This will provide independent evidence of the impact of the CCT.
2. **Operational evaluation.** This will analyse and offer recommendations on the way in which the programme is being implemented.
3. **Targeting analysis.** This is an assessment of how effectively the programme's targeting process is reaching the households it is intending to support.

1.2.1 Scope of the impact evaluation (Volume I)

Volume I presents the results of the baseline survey for the impact evaluation⁴. To identify the impact of the BOTA programme we need to identify the living conditions of two groups of households, similar in every respect except one: one group receives the BOTA CCT, and the other does not. A baseline survey conducted before the CCT is disbursed serves to check that the two groups are the same, and to estimate the size of any differences if these have appeared by

⁴ See Oxford Policy Management (2012), 'Conditional Cash Transfer (CCT) Programme. Baseline report of quantitative evaluation. Vol I: Impact'.

chance. Later a follow-up survey will see how the living conditions have changed in the two groups after the introduction of the CCT⁵.

In order to maintain the cleanliness of the baseline the survey was conducted only in Almaty oblast. This is because the programme had already been running for over a year in Akmola and Kyzylorda oblasts and so it was no longer possible to ascertain the situation of the households before the arrival of BOTA there. Moreover, in Akmola and Kyzylorda the programme had not been rolled out randomly so it would not have been possible to randomly select locations for comparison ('control' locations) in those oblasts.

The quantitative survey focuses on the living conditions of households eligible for the ECD benefit because these make up the largest proportion of CCT recipients and because it is possible to use publicly available information to obtain a statistically representative sample of this group. Where possible the survey gathered information on the other categories of interest to BOTA—pregnant and lactating women, and children with disabilities—if such people were found in the same households as the children eligible for the ECD benefit. The findings on these categories are not statistically representative of Almaty oblast but they nonetheless provide useful insights into attitudes and practices on social and health issues for these groups.

1.2.2 Scope of the operational evaluation (Volume II)

Volume II contains the operational evaluation at baseline. The quantitative component of the report covers households' experience of the enrolment process. The experience of enrolment is discussed only in relation to the treatment okrugs, where BOTA has been operating, not in relation to control okrugs where BOTA has not worked. Households' experience of the enrolment process is examined by reviewing their awareness of the BOTA programme, and the experiences of applicants in relation to taking the test during registration. This is the range of experiences that households have had with the BOTA programme up to the time of the baseline. BOTA had not issued bank cards, nor begun payments or training. As noted in Volume I this was intentional, so that a clear baseline was established. An assessment of the payment and training processes will form part of the follow-up evaluation.

The findings from the quantitative fieldwork are supplemented by some key findings drawn from the qualitative research of January 2012 to present a broader picture of the nature of BOTA's operations including in Kyzylorda and Akmola where the programme has been running for longer than in Almaty oblast.

1.2.3 Scope of the targeting analysis (Volume III)

The present volume contains the targeting analysis. This discusses the extent to which BOTA is identifying and reaching the households it is intending to support. It examines the effect of both the design of the targeting method and the implementation of the programme on the take-up of the benefit among poor households with children of an age eligible for the ECD benefit. A detailed summary of what is covered in a targeting analysis is presented in section 2.

The targeting analysis is a one-off exercise at baseline. It will not be repeated at follow-up because the household listing from which the data are derived is conducted once, at the start of the survey.

⁵ The follow-up survey is taking place during 2012 and the results will be available in mid-2013.

1.3 Structure of this volume

Part A, the background to the report, continues in section 2 with a conceptual overview of what an analysis of targeting performance can tell us and why it matters. Section 3 summarises BOTA's targeting method for the CCT. Section 4 provides a note on the selection of respondents from whom the analysis in this report is obtained.

Part B presents the targeting analysis. Section 5 looks at how well the design of the targeting mechanism leads to the selection of poor or non-poor beneficiaries into the programme. Section 6 looks at implementation issues, reviewing to what extent eligible households take up the programme, and considering reasons why many eligible households do not take up the benefit.

Part C presents some concluding observations.

Part D contains annexes with further details of items discussed in the main text, including supplementary tables.

1.4 How to read the tables and analysis: the 'N' value

On the right-hand side of each table, after the column with the total results, is a column entitled 'N'. This indicates the unweighted number of observations in the sample on which the results were based.

2 What targeting analysis can tell us

2.1 What is targeting analysis?

A targeting analysis aims to tell us whether a programme is reaching the people it intended to reach (the target population as described in section 1.1 above). It identifies what proportion of the target population is covered by the programme, and whether any people are included on the programme who were not intended to be covered. Where there are people who could have been enrolled but have been missed out (errors of exclusion), or people who are enrolled but should not have been (errors of inclusion) the analysis can indicate whether this has arisen because of the way the targeting mechanism was designed or because of how the programme has been implemented (Figure 2.1).

Figure 2.1 Inclusion and exclusion errors

	EXCLUSION ERRORS (‘Undercoverage’)	INCLUSION ERRORS (‘Leakage’)
DESIGN	Households that the CCT intends to reach are excluded from the programme owing to the way the targeting process is designed, such as because they fail the proxy means test even though they are poor.	Households that the CCT does not intend to reach are nonetheless enrolled on the programme owing to the way the targeting process is designed, such as because they pass the proxy means test even though they are not poor.
IMPLEMENTATION	Households that pass all the programme eligibility criteria are nonetheless not enrolled on the programme. This could be because they choose not to enrol, they can’t enrol although they would like to, or they do not know about the enrolment process.	Households that do not pass the eligibility criteria are nonetheless enrolled on the programme. For example, this might occur if a beneficiary reaches the upper age limit of their CCT category but they do not exit from the programme.

Source: OPM.

Note that this review of both design and implementation considerations means that an assessment of targeting performance is therefore not just about analysing a programme’s success in identifying households that might be eligible; it also measures how well the programme succeeds in getting those eligible households enrolled on the programme. Questions concerning take-up of the programme are a core part of a targeting analysis and are discussed extensively in this report.

By agreement with BOTA the characteristics of ineligible households are not measured in this report because no such households were interviewed: interviews were conducted only with households that are eligible for the CCT. This means it does not measure design errors of exclusion—the extent to which poor households are rejected by the proxy means test—nor implementation errors of inclusion—households that are ineligible by design but are nonetheless enrolled. In section 5 below the analysis examines design errors of inclusion. In section 6 it takes the design as given and goes on to examine the extent of implementation errors of exclusion.

2.2 Why does it matter?

Assessing the targeting performance of the CCT in this way serves two purposes. First it can provide BOTA with feedback on its current method of enrolling beneficiaries, making recommendations for any adjustments to the targeting and enrolment process that might be considered in the short term so that as many as possible of BOTA’s intended beneficiaries receive

the benefits for which they are eligible within the available resources. Second, it can provide guidance for other policy makers who are proposing to introduce similar benefits in Kazakhstan, giving recommendations that may not be feasible for BOTA to introduce in the short term but may be valuable to consider in future.

The analysis of the *design* of the targeting method falls particularly into the latter category.

It is likely to be neither cost-efficient nor effective for BOTA to redesign its targeting method two-thirds of the way through the implementation of the programme, given the resources it has already invested in developing the proxy means test, setting up a database and establishing local offices with trained staff. But BOTA has an explicit focus on offering a model of how cash transfers can be used as an innovative and effective social safety net in Kazakhstan, and on disseminating information to its counterparts in the government and among NGOs and international partners. Providing a well designed model for effective targeting performance is a central part of this contribution to the understanding of cash transfer programmes in the country. Moreover a proxy means test is an instrument that should be updated and adjusted over time, as has already happened once during BOTA's operations, and the analysis of design targeting errors can inform this iterative process.

The analysis of *implementation* errors provides a combination of both the short-term recommendations for BOTA and the long-term recommendations for other policy makers.

Broadly, eligible households that are excluded during implementation fall into three types:

1. Households that do not know about the CCT.
2. Households that know about the CCT but choose not to apply or think they cannot.
3. Households that know about the CCT and would like to apply but cannot.

All of these affect the take-up of the benefit by eligible individuals.

Low take-up of the benefit, for whatever reason, is important for programme implementers to address because, as Daigneault *et al.* observe, 'Logically, the participation of target groups in social programs is a necessary condition for their effectiveness' (Daigneault *et al.*, 2012, p.40). This reflects the comment by Currie (2004) that,

If take-up by eligible individuals is low, then the targeted program may fail to reach its main goal of providing a minimum bundle of goods for the target group (Currie, 2004, p.4).

In other words, if eligible households do not join the CCT programme then it is evident that BOTA cannot achieve its goal of reducing poverty and improving education outcomes by offering a cash incentive that encourages pre-school enrolment. What is more, in order to generate some further significant results, such as causing incentives on the demand side to trigger improvements on the supply side (e.g. providers noticing an increase in demand for pre-school facilities and making available additional places) a certain critical mass of beneficiaries may be needed. Also, having larger numbers of beneficiaries in communities where a programme is operating can lead to economies of scale. This means that it is as important to consider why households might not wish to apply for the programme as to tackle the obstacles that prevent some households from enrolling even though they might be willing to.

Literature over the last 30 years on targeted social welfare programmes offers four primary explanations for low take-up of benefits by households. These are a lack of information, high transaction costs, the fear of stigma, and the level and expected duration of the benefit (see e.g. Hernanz *et al.*, 2004). In addition there may be a secondary explanation for low take-up if households have applied but been rejected in error. This secondary explanation does not appear

to be a major problem in the case of the CCT: the quantitative survey did not find any instances of eligible households that had applied for the transfer and been rejected. In relation to the CCT, a lack of information accounts for households that do not know about the CCT or think they are ineligible. High transaction costs may be the main constraint for households that wish to apply but cannot. Households that do not wish to apply at all may be influenced not only by transaction costs but also by stigma or the level of the benefit. The analysis in part B assesses BOTA's performance in the light of these different potential causes of exclusion where possible.

Of course, achieving very high take-up comes at a cost. A take-up rate of 100% is a condition that is an interesting theoretical benchmark but one that is very difficult to achieve in practice. Errors of exclusion in implementation, or low take-up, are therefore measured against a position of perfect targeting which may be neither practical nor desirable in reality. The measurement of the take-up rate of a programme, and the examination of reasons for low take-up if found, can be regarded rather as a useful starting-point for operational discussions. It should lead programme implementers to consider questions such as:

- *Are there aspects of our programme that put off our target beneficiaries, and that we can adjust easily and at reasonably low cost?* For instance, the United States' food stamps programme, the Supplemental Nutrition Assistance Program (SNAP), increased its number of beneficiaries enormously from 17 million to 46 million over a 10-year period to 2011, not only because of greatly increased demand owing to the recession, but also by adjusting its design to make it more attractive to the people it intends to support (Andrews and Smallwood, 2012).
- *What kind of people are not taking up our programme, and do we wish to conduct an intensive campaign to improve their inclusion even if it is associated with high administrative costs?* For instance, a programme may decide that from an equity perspective it wishes to make a particular effort to encourage participation among certain very marginalised groups who self-select out of the programme.

3 The CCT targeting method

3.1 In fact three targeting criteria, not two

As already mentioned the CCT intends to reach people that meet two criteria—a poverty threshold and the categorical criterion that is mostly age-related—in addition to having the necessary identity documents:

To participate in the CCT programs, the household must (i) have at least 1 family member in one of the target groups (ii) meet the program's definition of 'very poor' as determined by the PMT [proxy means test] [...] (IREX and Save the Children, 2009, p.18) .

In relation to the poverty threshold, while the *de facto* target population are those households that pass the proxy means test, the intention is that this approximates to the ultimate target population which are, 'individuals living under the subsistence poverty line' (World Bank, 2008, p.44). A well specified proxy means test will minimise the incidence of design-related inclusion and exclusion errors.

BOTA does not have the resources to cover the whole of Kazakhstan so a third targeting criterion is applied, namely the use of, 'geographic targeting in those oblasts where poverty is more prevalent' (World Bank, 2008, p.60). This is a common method for maximising the operational feasibility of cash transfer programmes while reaching as many poor households as possible. Households that live outside the geographical area selected by the programme are therefore not counted as part of the exclusion error because the programme did not intend to reach them.

Geographical targeting can be a crucial part of the process of identifying poor households. It may appear to be simply an instrument for logistical convenience, to avoid having to run a programme everywhere at once. But if poor households are concentrated in particular provinces, districts or villages it can be very effective in increasing the poverty focus of the programme.

The analysis in section 5 shows the extent to which the BOTA CCT identifies poor households, and discusses the potential contribution of each of these three components to the targeting performance of the programme.

3.2 A note on the proxy means test

A proxy means test is commonly used to identify poor households in locations where it is difficult to obtain documentary evidence on household income. This can be the case if the proportion of people in formal employment is low and most people are employed casually, live off their own land or earn income through self-employment such as small trading, or if households receive a considerable proportion of their income from non-employment sources such as remittances or gifts from family or friends. The test compares the characteristics of applicant households with the characteristics of households that are known to be poor according to the national household survey, using the set of variables—'proxies'—that are found to be most closely correlated with poverty. Applicants are given a score that indicates their likely poverty level based

on their answers for these variables. Those whose score is below a given cut-off point are considered to be poor⁶.

Sometimes the use of a proxy means test can have the added value of conveying a sense of impartiality to the decision as to who is to be enrolled onto the programme. BOTA considers this to be particularly relevant in the case of its CCT where the test is conducted by computer and the result is made known to the applicant immediately on completion.

Using a proxy means test means that, by design, there are errors of exclusion and inclusion in eligibility of the programme among poor households. The test is a proxy for poverty, not an accurate measure. So there will be some households that are poor but happen to have characteristics that are unusual among poor households in Kazakhstan, and that will therefore fail the test and be excluded; and there will be some households that are not poor but whose characteristics make it look as if they are, who will be included in error. The analysis of the accuracy of the proxy means test has been conducted elsewhere by BOTA (BOTA, 2009). Reference is made to that analysis where relevant in this report.

⁶ In Kazakhstan the national household survey from which BOTA's proxy means test is derived is the Household Budget Survey (HBS). A proxy means test is not the only way of identifying poor households: for example, some cash transfer programmes use 'community-based targeting' by which the community itself discusses and selects which households should receive the cash.

4 The interview sample

The evaluation team interviewed households in 108 okrugs out of the 262 in Almaty oblast⁷. These 108 okrugs formed the 120 'primary sampling units' (PSU), the locations selected for the survey (12 locations were selected twice so a double-size sample was taken in those okrugs). All interviewed households were eligible by age for the ECD benefit. To select households for interview the team first had to identify households that were eligible for the CCT (the 'listing'), and then select a random sample of them for the full baseline interview. Some 6,899 households were interviewed at listing stage, and 1,173 of them were interviewed in depth for the baseline survey.

4.1 Listing

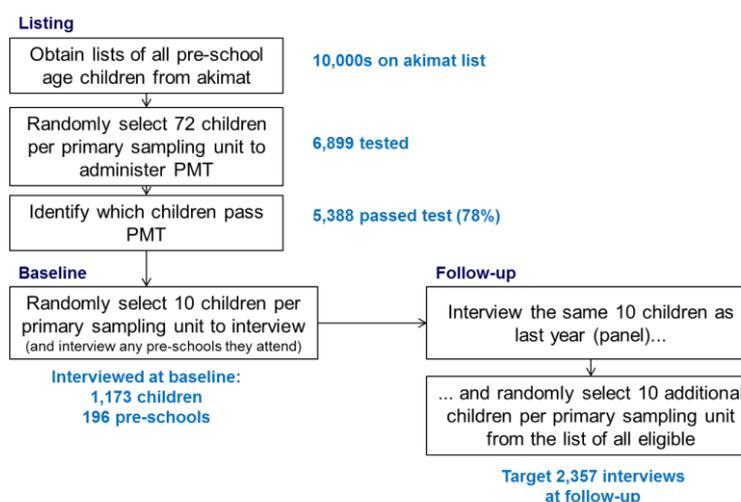
It was noted in section 1.1 above that households have to meet two criteria to be eligible: they must have a child of the right age for the ECD benefit, and they must have a score in BOTA's proxy means test that identifies them as poor. The survey team therefore had to identify the households in each okrug that met these requirements. This involved two steps:

1. **Identification of children of the right age.** This was done by obtaining from the *okrug akimat* the lists of all children in the area, with their addresses and dates of birth. The *akimat* compiles the list twice a year as part of its regular process of ensuring that children are enrolled in school. Children were considered to be the right age for the survey if they met two criteria. First, they had reached their fourth birthday—the age when they become eligible for the CCT—by the day the interview team went to the field. Second, they would remain eligible for CCT for a full 12 months, i.e. they would not yet have started Class 1 of school by the time the follow-up survey took place; otherwise there would be little possibility of detecting an impact at follow-up because the family would have stopped receiving the transfer and its consumption patterns would no longer reflect the effect of the BOTA CCT. After this stage the team had lists of tens of thousands of children.
2. **Identification of the households that pass the proxy means test.** In each primary sampling unit 72 children of eligible age were randomly selected (or fewer, if there were not 72 in the *okrug*). The survey teams went to each household and administered BOTA's proxy means test, the test of about 10-15 minutes which results in an approximation of whether the household is poor or not. Households were replaced if they could not be found or were away at the time of interview, provided that replacements were available on the list. In total the households of 6,899 children were interviewed⁸.

Any household that passed the test and was identified as poor was therefore eligible for BOTA's CCT as it had passed both the age criterion and the means-testing. Since 78% of households passed the test this resulted in a pool of 5,388 eligible children available for the full interview (Figure 4.1).

⁷ For full details of the evaluation methodology the reader is referred to Volume I of the baseline report.

⁸ The survey teams administered the proxy means test in both treatment and control areas, rather than using BOTA's own results in treatment areas. This is both because many eligible households in treatment areas had not undertaken the test, and also to ensure consistency with the way the test was applied between treatment and control areas.

Figure 4.1 Selection of respondents for interview within each PSU

Source: OPM.

4.2 Baseline survey

Ten households in each okrug were randomly selected from among all those eligible. An interview team returned to the household as soon as possible after the listing and the calculation of the score in order to administer the full household interview. A few okrugs did not have 10 households eligible for interview; but the total number of interviews eventually completed, at 1,173, was very close to the planned 1,200.

In every case where the eligible child attended a pre-school facility the team also tried to gather information on the supply side at the pre-school, by administering a facility questionnaire. This was not always possible as many of the interviews took place over the summer months when the facility was closed for repair or there were no directors or administrators present; nonetheless interviews were conducted with 196 pre-school facilities.

PART B: FINDINGS

5 Design errors of inclusion: poverty targeting and the proxy means test

5.1 The poverty headcount among eligible households

Some 57% of individuals in eligible households are below the subsistence minimum for 2011 (Table 5.1)⁹. The subsistence minimum is the level of consumption of food and basic non-food items that is considered necessary for a household to meet minimum nutritional requirements and non-food needs. The level is updated each month by the Government of Kazakhstan. It currently approximates to the bottom consumption quintile nationally: in 2009, the most recent year for which data are available, some 20.9% of households in Kazakhstan were deemed to be below the subsistence minimum level for that year (BOTA, 2009).

Table 5.1 Poverty rate among individuals in eligible households (%)

Indicator	Treatment					N	
	Beneficiary	Non-beneficiary	All treatment	Control	TOTAL	Treatment	All
Below subsistence minimum	63	55	59	55	57	3658	7219
Less than 40% of subsistence minimum	5	3	4	4	4	3658	7219

Source: Baseline survey (from volume I of baseline report).

The resources that go to the other 43% of people in eligible households, the non-poor individuals, may be counted as leakage by design. Assuming that the non-poor households will receive a proportional share of total expenditure, which is not known at baseline since no funds have been disbursed, there will be a leakage of 43% of resources to non-poor individuals.

This means that the proxy means test is about as effective as was predicted during its design. The guidelines for the proxy means test predicted that 52% of beneficiary households would be below the subsistence minimum, while there would be leakage to the other 48% (BOTA, 2009)¹⁰. The guidelines acknowledged that, 'the greatest problem this model faces is leakage' (BOTA, 2009, p.21). However, it was agreed by BOTA at the design stage that it would be better not to try and prevent leakage to non-poor households if by doing so there was also a chance that poor households would be inadvertently excluded.

BOTA determined in the design stage that, 'leakage issues can be managed through community vetting or qualitative assessment or a combination of the two' (BOTA, 2009, p.22). These 'community vetting' procedures are not made explicit in the guidelines for the proxy means test but the implication is that the programme implementers would use the implementation

⁹ See volume I of the baseline report for detailed figures of average consumption.

¹⁰ It is not clear from the guidelines whether its figures refer to households, members of beneficiary households, beneficiaries, or share of resources, so it cannot be stated for certain whether the figures in the guidelines are directly comparable with those in the survey.

process, rather than the design, to try to reduce leakage. An example of this might be focusing on spreading information about the BOTA programme in areas of the community that are known to be poorer. The data seem to indicate that this strategy may be having some effect since in treatment areas the proportion of actual beneficiaries who are below the poverty line rises to 63%, meaning that there is leakage to 37% of individuals¹¹.

Table 5.1 also shows that 4% of individuals in eligible households have a consumption level that is less than 40% of the subsistence minimum. This is the threshold for eligibility for targeted social assistance.

5.2 Quintiles of household poverty

A more detailed analysis of the well-being of households can be obtained by matching their consumption to the consumption quintiles from the national Household Budget Survey (HBS). This shows the extent to which households eligible for the ECD category of the CCT programme are not only above or below the national subsistence minimum, but where they fall if they were to be divided into the five national wealth quintiles (Table 5.2).

More than three-quarters of eligible households are in the lowest two consumption quintiles nationally, with 55% in the very poorest quintile and a further 23% in the second poorest. Just 2% of eligible households have levels of consumption that place them in the top quintile nationally. Remember that these are all households that pass the proxy means test. A household that passes the proxy means test but is in the highest quintile is not one that has somehow cheated, but rather one whose characteristics in terms of assets owned, dependency ratio etc. happen to be closely correlated with those of poor households¹².

Table 5.2 Distribution of eligible households among national quintiles (%)

Indicator	Treatment					N	
	Beneficiary	Non-beneficiary	All treatment	Control	TOTAL	Treatment	All
Lowest	60	53	57	53	55	585	1165
2 nd	25	21	23	23	23	585	1165
3 rd	8**	16	12	14	13	585	1165
4 th	7	7	7	8	7	585	1165
Highest	0*	2	1	2	2	585	1165
Total	100	100	100	100	100	585	1165

Source: Baseline survey. Note: Quintiles are calculated using HBS 2009 data, updated to take into account the inflation between the HBS and the BOTA baseline evaluation. Quintiles were derived from nominal consumption expenditure.

¹¹ However, the seemingly large disparity in the proportion of individuals in beneficiary and non-beneficiary households that are below the subsistence minimum (63% vs. 55%) is not actually statistically significant, so it may be that this is not a real difference in the poverty levels among beneficiaries compared with non-beneficiaries. This suggests that the standard errors for this statistic are large and that there is a lot of natural variability in the figure from one community to another.

¹² Since the evaluation team conducted the proxy means test in respondents' homes the chance of concealment of assets by households is thought to be at least as low as—or even lower than—when conducted by BOTA specialists at a central location.

The proxy means test was designed to reach the poorest 30% of the population, i.e. all those below the subsistence minimum level plus a small proportion of people who are just above that level (BOTA, 2009). The model was known to result in some undercoverage of people in the poorest quintile, and some leakage to non-poor households, though mostly to those in the second lowest quintile rather than to the very wealthy. BOTA's guidelines for the proxy means test predict that overall, 'Households in the upper 5 deciles [i.e. from the middle of the third quintile upwards] [...] will receive less than 12% of the benefits. Families defined as poor will receive 52% of the benefits' (BOTA, 2009, p.20). These figures are more or less in line with the data in Table 5.2 above.

Beneficiary households in treatment areas are more concentrated in the lower quintiles than the households that are eligible but are non-beneficiaries: 85% of beneficiary households are in the lowest two consumption quintiles nationally compared with 74% of non-beneficiary households. This means that where non-take-up of the BOTA CCT by eligible households occurs its overall effect is progressive: it increases concentration of resources on the poorest.

In Table 5.3 below the eligible households in the survey are divided into five equal-sized groups, providing quintiles for the households within the survey. Note that these are unrelated to national quintiles. In treatment areas there are significantly fewer beneficiary households whose consumption places them in the top 20% of eligible households (14% of beneficiary households are in the top quintile of eligible households, compared with 23% of non-beneficiary households). This suggests that, among households that are nonetheless eligible for the CCT, those that are better off are either choosing not to be in the programme or perhaps are not being informed about the programme by volunteers. Their non-inclusion in the programme is therefore arising at implementation stage rather than by design, since the design would allow them to participate. The factors contributing to exclusion at implementation are discussed in section 6 below.

Table 5.3 Distribution of households among quintiles of households in the survey (%)

Indicator	Treatment					N	
	Beneficiary	Non-beneficiary	All treatment	Control	TOTAL	Treatment	All
Lowest	23	19	21	19	20	585	1165
2 nd	21	19	20	20	20	585	1165
3 rd	21	19	20	20	20	585	1165
4 th	22	21	22	18	20	585	1165
Highest	14**	23	18	22	20	585	1165
Total	100	100	100	100	100	585	1165

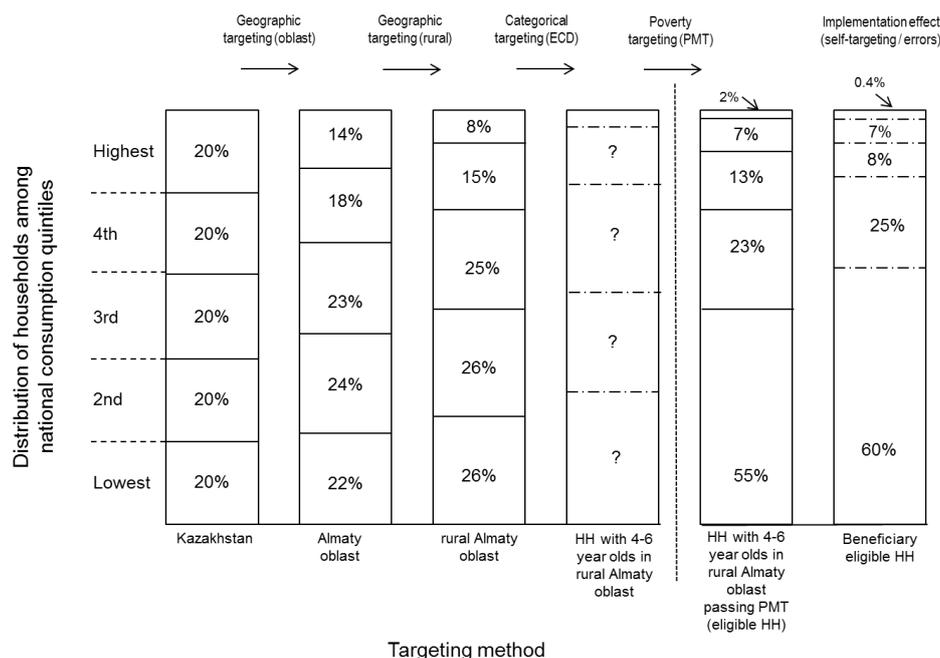
Source: Baseline survey.

5.3 Implications for the CCT targeting strategy

The fact that 55% of eligible households are in the poorest quintile nationally, and 2% are in the wealthiest quintile, demonstrates that BOTA's targeting process is effective in distinguishing very poor from very wealthy households. This is a positive finding in that it suggests that BOTA's current method of identifying potential beneficiaries is achieving its purpose of concentrating resources more on poorer rather than wealthier households.

Figure 5.1 illustrates the approximate sequence of effects of different components of the targeting process. In the left-hand bar we start with the population of Kazakhstan, evenly distributed into five income groups. In the right-hand bar we show how BOTA's beneficiaries are spread among those five groups. In between we show that each successive layer of targeting concentrates the resources a little more in the lowest (poorest) quintile, and less in the highest (wealthiest) quintile. Recall again that BOTA's targeting process has three components: (i) geographical targeting; (ii) categorical targeting; and (iii) the proxy means test. The three components all contribute to achieving the poverty focus:

Figure 5.1 Effect of each targeting stage on distribution of households by quintile



Source: OPM. Data for Kazakhstan, Almaty oblast and rural Almaty oblast are from HBS 2009. Data for proportion passing PMT are from baseline evaluation in 2011. Notes: (i) 'Rural' is shown as defined in HBS 2009; this differs slightly from the actual targeting used in the CCT which also excluded rural areas including a settlement of at least 10,000, or with a total population of at least 15,000. These additional conditions are likely to make the targeting more pro-poor. (ii) The effect of the categorical targeting on households in the HBS 2009 is not known to OPM as the team does not have the modules containing data on individual members of the household, such as age. (iii) Quintiles are calculated using HBS 2009 data, updated to take into account the inflation between the HBS and the BOTA baseline evaluation.

- **Households in Almaty oblast are already poorer, on average, than those nationally**, according to analysis carried out for BOTA at its design stage (BOTA, 2009). The diagram shows that 22% of its households are in the lowest national consumption quintile, and only 14% in the highest. Almaty oblast was one of the regions selected for the CCT because it has the fourth highest poverty rate out of the 16 regions (14 oblasts and two cities) in the country, with a poverty headcount of 27.2% of households compared with the national average of 20.9%.
- **Households in rural areas of Almaty oblast are poorer still.** Within Almaty oblast the CCT does not operate in the main towns of Taldykorgan, Kapshagai and Tekeli, nor in okrugs that are formally classified as rural but that have large settlements. With the rate of poverty in rural areas nationally being about double that of urban areas, at 28.9% in rural areas and 14.9% in urban areas, this further increases the proportion of people that are below the subsistence minimum. The proxy means test may therefore simply be confirming what is already known, i.e. that the proportion of people in rural parts of Almaty oblast who are poor is quite high. The

model for the proxy means test was found to be much better at predicting poverty in rural areas than in urban areas: the model was found to correctly predict poverty for 82% of poor people in rural areas compared with only 62% in urban areas (BOTA, 2009). The HBS data in Figure 5.1 show that by going to rural areas in Almaty oblast BOTA can already expect that there will be more than three times as many very poor households as very rich households (26% in the lowest national quintile compared with 8% in the highest quintile). Since BOTA excluded from the evaluation areas that are officially classified as rural but that have quite large settlements or populations, the actual difference in the proportion of households in the lowest rather than the highest quintile in the surveyed okrugs is likely to be much larger still.

- **Households with young children are also poorer than the national average:** while the survey team did not have figures from the HBS 2009 for those that fit BOTA's ECD category, UNICEF's Multiple Indicator Cluster Survey for Kazakhstan notes that 27% of children under five years old nationally live in households in the lowest quintile, compared with 16% in the highest quintile (UNICEF and Agency of the Republic of Kazakhstan on Statistics, 2007). For rural Almaty oblast, which we have already seen is poorer than the national average, the proportion in the lowest quintile will be higher still.
- **We see here that the proxy means test provides one additional layer of targeting at the end of a series of targeting measures that already favour poor households.** This contrasts with the design of some cash transfer programmes elsewhere where the test may be the sole instrument for targeting the transfer to poor households¹³. Figure 5.1 shows that the proxy means test does improve quite considerably the concentration of resources on the poor; what we cannot tell is what the implications are in terms of exclusion of poor households. In this context it is useful to consider to what extent the 'added value' offered by the proxy means test, in terms of improving the targeting of the CCT, justifies the costs associated with implementing it. We do not expect that it would be efficient for BOTA to change its use of the test at this stage in its operations but it may be a point of interest for others considering adopting a targeted cash transfer programme in Kazakhstan.

A striking indication of the effectiveness of the geographical and categorical criteria for the poverty targeting result comes from the fact that, with those criteria having been applied, some 78% of households passed the proxy means test when administered by the evaluators in the listing. Conventionally one might expect a proxy means test to be used when financial resources are limited in order to target the funds on, say, the poorest 10% or 20% of the population. It seems unusual to find a proxy means test that 'targets' nearly 80% of the population that is eligible to take it. Nonetheless the evaluation team recognises that the small proportion that do not pass the test must, on average, be better off than those that pass it, since Figure 5.1 shows that the concentration of resources on the poor is increased after administering the test; even though, as with all proxy means tests, there will be some poor households among the small proportion who fail the test as described in section 5.1 above (BOTA, 2009).

BOTA is explicit that its proxy means test has been designed to minimise *exclusion errors* rather than *inclusion errors* (BOTA, 2009). It would prefer to be sure that as many poor households as possible pass the test and can enrol on the programme, even if this means that more non-poor households also pass the test. While we know that enrolled households are more likely to be poor than non-poor, a survey of eligible households cannot tell us how many poor households are failing to pass the proxy means test.

¹³ The latter is closer to the situation of BOTA's Tuition Assistance Programme which has no geographical targeting component: prospective students are eligible to apply for the TAP regardless of where they live in the country, so there is a heavier reliance on the proxy means test to concentrate resources on the poorest.

It could be useful for BOTA to conduct further analysis using more recent HBS data to examine to what extent it is possible to target the poorest households by using a combination of categorical targeting and geographical targeting, without a proxy means test. This would contribute to a better understanding of targeting methods under any potential future cash transfer programme. The analysis could also be used, as BOTA has already done once since starting implementation of the CCT, to improve the association of the proxy means test with poverty in the poor rural areas in which BOTA aims to work.

Any consideration of whether or not to drop the proxy means test in future versions of a CCT programme would have to be made on the basis of weighing up the disadvantages of doing so relative to the benefits. In terms of potential risks, a transfer programme without a proxy means test might be expected, of course, to have increased expenditures on non-poor households (assuming that those non-poor households were interested to take up the benefit). Second, there might be political reasons against a universal / categorical approach. Third, it is suggested by BOTA that a programme that did not have an 'impartial' means test might be perceived less favourably by the population, in that people might suspect—rightly or wrongly—that entry onto the programme was based on personal connections with the *akimat*, the volunteer or specialists. On the other hand, removing the proxy means test might have three considerable benefits, one that would have an effect on errors of exclusion by design, and two that would affect implementation (discussed further in section 6 below). First, it would eliminate errors of exclusion of poor households that are due to the mismatch between the proxy means test and actual poverty status. Second, it would also hugely reduce the administrative costs and staff time involved in organising the enrolment process. Finally, it would mean that potential applicants might not need to wait so long for a new enrolment round before applying for their benefit.

A final point of note is that the pass rate of 78% cited above comes from a random sample of all households that meet the ECD categorical criterion in rural Almaty oblast: it does not take into account implementation effects. BOTA is encouraging its volunteers to pre-screen out wealthier households during the enrolment process by not informing them of the test; and it can be expected that some of the wealthier households will self-select themselves out of the programme because the size of the transfer does not provide enough of an incentive to enrol. The effect of these practices during implementation is seen in Table 5.3 above, which shows that non-beneficiary households tend to be at the better-off end of the scale of eligible households compared with beneficiaries. It is discussed more in section 6 next.

6 Implementation errors of exclusion

Putting aside any errors that arise from the design of the proxy means test in identifying poor or non-poor individuals, we can then turn to the second question. Given all the people that the proxy means test *does* allow onto the programme, what proportion of them are actually enrolled? And if some are not enrolled, why not? Remember from section 2.2 above that the analysis here does not mean to indicate that anything less than 100% take-up is a programme failure: full take-up is often not attainable in practice owing to a combination of financial and logistical constraints. However, it is useful to consider whether and how take-up can be improved.

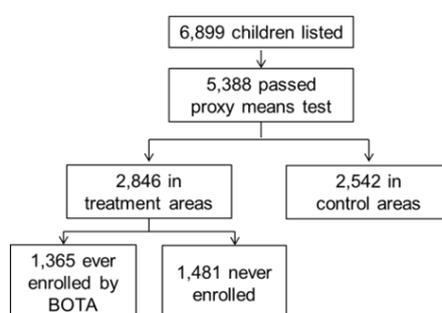
6.1 Understanding take-up: the size of the exclusion error

The evaluation team can estimate the extent to which BOTA is reaching its *de facto* target population—the households that pass the proxy means test and have a potential beneficiary of the right category—from two sources, either the listing exercise or the baseline survey:

1. **Comparison between eligible households from the listing data and BOTA's own database.** Every household in treatment areas that passes the test administered at listing stage can be considered to be part of BOTA's target population because it has a family member in one of the CCT's target groups, it meets the definition of 'very poor' as determined by the proxy means test and it lives in an area where BOTA is operating. This gives a pool of several thousand names of potential beneficiaries.
2. **Direct questioning of survey respondents at baseline.** In the household survey respondents in treatment areas are asked if they have been enrolled by BOTA. The sample size of 585 households is much smaller than for the listing. Also, the question identifies the households that were picked up by the first round of enrolment but not those that were enrolled after the baseline survey was completed. This sample has been used for the analysis in volume II about households' experiences of the CCT operations.

The listing data are used in this subsection because they give a much larger number of households for comparison than the baseline data. The names of all eligible households were compared against all the names that were in BOTA's database as of April 2012, several months after completion of the baseline survey in each okrug, to maximise the chances of capturing households that may have applied in subsequent enrolment rounds. Households were considered to have been 'ever enrolled' if they were found on BOTA's database under any category, not just the ECD category.

Figure 6.1 Enrolment of eligible households



Source: OPM. Note: This is not the total number of eligible households in the treatment okrug because only a subsample of households that met the categorical criterion were listed. There will be several thousand more households eligible in those locations.

Of the 2,846 households in treatment areas that passed the test at listing stage, 1,365 (48%) have ever been enrolled by BOTA (see Figure 6.1). This means that about half the households that were eligible for the BOTA programme on the day the interview team entered the okrug have been picked up by the CCT, and half have not¹⁴. The error of exclusion is 52% of eligible households. Differences between the beneficiary and non-beneficiary households are discussed extensively in volume I of the baseline report and also throughout the remainder of this section.

This take-up rate of 48% of eligible households is within the range that is observed in the international literature for the take-up of public benefits in Europe and the United States, albeit at the lower end of the range. Hernanz *et al.* (2004), in a brief review of the take-up of social assistance programmes in five member countries of the Organization for Economic Cooperation and Development (OECD), suggest that,

Low take-up of welfare benefits occurs both across countries and programmes. Estimates typically span a range of between 40% and 80% in the case of social assistance [...] (Hernanz *et al.*, 2004, p.4).

Similar rates are found in Matsaganis *et al.* (2008) in a literature review of analyses of take-up rates of social assistance benefits in several European countries since 2000.

It might be considered impressive that volunteers and BOTA enrolment specialists, often working in consultation with teachers or health professionals, have been able to identify and enrol even almost half of the eligible households in their communities. However, BOTA could explore the feasibility of implementing some measures that appear reasonably straightforward as a means of greatly increasing coverage of eligible households.

The analysis in the remainder of this subsection examines the low take-up for each of the three types of non-participant identified in section 2.2 above. To recall, these are:

1. Households that do not know about the CCT.
2. Households that know about the CCT but choose not to apply or think they cannot.
3. Households that know about the CCT and would like to apply but cannot.

For each group we can ask: does it matter that these potential beneficiaries are not participating in the programme, whatever the reason? Currie (2004) remarks that,

Observations about [...] non-financial barriers to participation raise two questions: 1) Are the non-financial barriers screening out the 'right' people? That is, are the various administrative requirements attached to these transfer programs targeting benefits to the neediest eligibles? And 2) To the extent that needy individuals are not being served, what can be done to increase their take up rates? (Currie, 2004, p.14).

¹⁴ The proportion of respondents that reported that they had applied for the programme by the date of the survey was 31%. Others were picked up by BOTA between the date of the survey (between June and December 2011) and April 2012, when OPM's list of eligible households was compared with BOTA's list of beneficiaries.

For example, which are the eligible households that do not know about the CCT? Are they the better-off households that are included into the programme because of the design error, and that are not really the intended focus of the CCT? Or are they the most marginalised households in society, who have limited social networks in their community, have difficulty leaving their home, or do not speak the language?

6.2 Households that do not know about the CCT

The analysis of operational effectiveness in volume II shows that 26% of all eligible households were still unaware of the CCT by the time the first enrolment round had finished and the evaluation team had entered the okrug. Households that are eligible for the CCT but do not know about it therefore form quite a considerable percentage of those that are excluded. For these people the primary constraint, out of the typology of four reasons for low take-up cited in Hernanz *et al* (2004), is the lack of information. This suggests that the three channels used by the CCT for informing the population—mass media such as local television and newspaper articles, personal communication via the volunteers, and printed materials—had not reached all potential beneficiaries by the time of the survey.

Three factors that may contribute to this lack of information among potential beneficiaries are:

1. The limitations in the practice of identifying households that contain members of the relevant category.
2. Decisions by volunteers not to inform certain households of the population about the benefit.
3. The rapid nature of the programme's expansion.

6.2.1 Limitations in identifying households with members of the relevant category

The CCT relies on its local volunteers to identify households in their community that include members of the relevant category, such as children aged four to six who have not yet started school, and to encourage them to attend the enrolment session. Volunteers are expected to be particularly aware of which households in the community are the poorest or most vulnerable, since these are most likely to pass the test and become eligible for the benefit. This reliance on personal contacts may result in volunteers accidentally overlooking some households if they are not in contact with them.

A more systematic way of identifying potentially eligible households could take advantage of the fact that Kazakhstan, in common with many of the former Soviet republics, has a well developed bureaucracy and a culture of registration for, and use of, public services. This is one of the most striking advantages of the operating environment of the BOTA CCT compared with that of many other cash transfer programmes worldwide—including not only Africa but also nearer neighbours such as Mongolia—where a major challenge in implementing an age-targeted benefit is that of obtaining evidence of the age of applicants.

- It was noted in volume I of this report that birth registration among eligible children is extremely high, at 98%, which is comparable with national studies such as the Multiple Indicator Cluster Survey (MICS) 2006 which shows a rate of 99%. Virtually all children are therefore known to the local authorities.
- Attendance at antenatal care by pregnant women is 99.9%, as recorded in the MICS and corroborated by the evidence in this survey from pregnant women or those who had recently given birth. Health facilities therefore have excellent knowledge of the pregnant women in their community.

- A list of every child in an okrug is collected at least once a year—and it seems usually twice, in September and January—by the schools in that okrug. Each school is given a number of streets, a *mikrouchastok*, in which the teachers must knock on the door of every household and list the children living there. The list includes the name of the child and the parent, the year (and sometimes month and day) of birth, the address, and a note of which school the child is attending, or whether the child is attending pre-school. Often these lists are collated by the rayon education department; in some instances they remain at the level of the school.

This child census certainly seems to be available in every okrug since the evaluation team used it as the sample frame for the baseline survey: the team simply requested the *akimat* to provide them with the name and address and date of birth of all children of ECD age in the okrug. The lists were not always found to be up to date but they could be used in conjunction with the volunteer's own knowledge of households that have newly arrived in the area to greatly increase the number of households that are informed about the BOTA CCT.

The evaluation team recognises that BOTA was intentionally set up to work independently of the local authorities, and was obliged to remain independent as part of its founding policy. It also chose to demonstrate this throughout its operations on the grounds that it considered poor households in Kazakhstan to have a less than optimal rate of take-up of public services owing to hesitations about quality, a fear of prejudice, and the potentially high transaction cost of applying for public services¹⁵. By remaining independent it hoped to encourage potential beneficiaries to have confidence in the CCT. This may have driven the use of volunteers, rather than of ready-made lists, for the identification of beneficiaries, and may not make it feasible for BOTA to alter its own method of identifying beneficiaries at this stage.

But as BOTA considers discussions with the public authorities on the long-term future of the CCT it may be worth assessing whether it would be more efficient or effective for future programmes to make use of the existing lists, especially if the benefits are to more closely integrated into the government's national benefits programme. It is recognised in the literature that individuals that apply for one benefit or public service are more likely to apply for others. One contributing factor in this is the greater sharing of knowledge, so that if a household is on a list to receive one public service they can be invited to be put on a list for other services that are relevant.

This does not mean that households on the government's lists would automatically be enrolled. Nor would they be obliged to take the test; the lists could rather be used for the purposes of sending out information to potentially eligible households to invite them to consider applying. There is no contradiction between using available lists to inform households about the existence of the programme, and encouraging an 'on-demand' application-based system whereby households apply only if they decide that it is in their interests to do so.

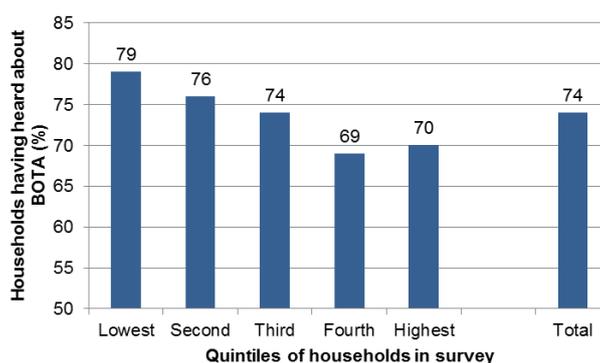
6.2.2 Decisions by volunteers not to inform certain households about the benefit

It was noted above that during the design of the CCT BOTA proposed to deal with leakage of cash to non-poor households at implementation by an unspecified 'community vetting' procedure, if the proxy means test itself were unable to eliminate these households. The data suggest that something of this nature is occurring.

¹⁵ The evidence reported above in relation to birth registration, antenatal services and school enrolment does not point strongly to low take-up. However, the reader is directed to studies elsewhere, such as the MICS, for further exploration of this point.

Among all eligible households, those with a consumption level that ranks them among the poorest 20% of eligible individuals are more likely to have heard of BOTA than those in the least poor 20% (Figure 6.2): 79% of those in the poorest quintile have heard of BOTA, compared with 70% of those in the least poor quintile. All of these households are eligible for the programme. Volunteers explained during the qualitative research that to some extent they are choosing whom to inform about the CCT on the basis of perceived need. BOTA confirms that this is intentional, to speed up enrolment by reducing the time spent on processing applications from households that have a greater likelihood of being rejected. This seems to be reflected in the findings.

Figure 6.2 Proportion of each survey quintile having heard about BOTA in treatment okrugs (%)



Source: Baseline survey. Note: These are quintiles of the households in the survey, not national quintiles.

6.2.3 Rapid programme expansion

The CCT's imperative to expand rapidly means that the first enrolment takes place within a few weeks after the arrival of BOTA in the community and the recruitment of the local volunteer. Allowing more time between the recruitment of the volunteer and the first enrolment round might increase the opportunity for potential applicants to hear about the programme but it would worsen the problems caused by delays in enrolment that are outlined further in the report on BOTA operations. Another solution which will become possible once the evaluation is complete is to conduct more information campaigns at a rayon-wide or oblast-wide level. This is not possible in Almaty oblast during the evaluation as it risks contaminating the results of the study by introducing awareness of the CCT to control areas.

6.2.4 A note on the time taken to raise awareness

It can be expected that, over time, the number of households who do not know about the CCT will be reduced. Households may hear about it from informal sources such as friends and neighbours, or from community leaders such as the *akim*, even without BOTA doing any formal awareness-raising; they may also hear about it through BOTA's own efforts to disseminate information. The first round of qualitative research for the CCT, conducted by OPM in 2011, noted that awareness of the CCT appeared more widespread in Akmola and Kyzylorda, where the programme had operated since 2009, than in Almaty oblast where the programme is newer. So the fact that 26% of respondents had not heard about BOTA at the time of the survey does not mean that BOTA will always be failing to reach that proportion of eligible households through lack of information.

However, it does mean that there was a very substantial proportion of eligible households at the time of the baseline who did not have the chance to enrol in the CCT, because they did not know there was a programme they could consider participating in. For these households that are immediately eligible when BOTA launches its programme in a community it is imperative that information is spread as widely as possible; otherwise, by the time they become aware of the programme the length of time in which they can participate will have diminished greatly or may even have expired.

The speedy dissemination of information is especially crucial for a cash transfer programme such as BOTA's that chooses to use application-based enrolment rather than automatic enrolment of eligible households:

'Program application methods are often used [...] but require strong outreach efforts' (Adato and Bassett, 2008, p.6.

If enrolment is automatic then it does not matter whether households have heard about it in advance, because they will be contacted to be informed that they have been selected for participation. In contrast, if enrolment is application-based it is imperative that households have heard about it because otherwise they cannot enrol. This does not mean that application-based enrolment should not be conducted since it may be preferred for many reasons such as to encourage careful decision-making among potential applicants as to whether they wish to comply with conditionality. Rather, it means that a programme that uses application-based enrolment risks exposing itself to greater errors of exclusion if households are not aware that it exists.

6.3 Households that know about the CCT but choose not to enrol or think they cannot

Households that have heard about the BOTA CCT, but that choose not to enrol, might not consider themselves to have been excluded. Take-up may be difficult to increase in this group if exclusion is a result of an informed and deliberate decision by eligible households, who may not be interested in the programme because of its cost-benefit structure or its nature. However it is important for BOTA to consider why households might choose not to enrol. This might reveal ways in which BOTA could invest to further increase take-up in the future. It might point to systemic failures in the enrolment process, such as in the quality and type of information shared with potential applicants. It might also indicate the existence of particular marginalised groups in need of support but for whom the current programme design or enrolment process is not appropriate. Conditions are likely to be different for those that are aware they are eligible and those that are not aware they are eligible¹⁶.

For those households that have heard of BOTA but are not aware that they are eligible the cause may be related to the lack of information described above. For example, the volunteer may have indicated that the household would be unlikely to pass the proxy means test.

For those households that are aware they might be eligible but choose not to enrol the other factors in the typology of reasons for low take-up come into play. These are high transaction costs, the fear of stigma and the level and duration of the benefit (see section 2.2 above). Unfortunately it is not possible to disentangle these cases from the information available in

¹⁶ The baseline survey cannot make the distinction between households that choose not to enrol and those that would like to but cannot, because the allocation of beneficiary / non-beneficiary status to households is done using the listing data and not from questions asked during the household interview.

the quantitative survey, but the reasons are being explored in the second round of the qualitative survey which is being conducted in late 2012.

The findings presented in volume I of the baseline report also give some indication as to possible reasons for non-enrolment in the CCT. We know that non-beneficiary households—whether or not they have consciously decided not to apply for the CCT—have, on average, more adults and fewer children than beneficiary households. They are very significantly more likely to include at least one person of pension age. Non-beneficiary households have a greater tendency than beneficiary households to cite formal salaried employment as one of their top three sources of income, and are less likely to show a dependence on casual labour or seasonal work. Their levels of consumption, while still low enough that they pass the proxy means test, are relatively higher, and it is rarer that they experience months when they are unable to eat adequately. Amongst non-beneficiaries, if a child has dropped out of pre-school it is much more likely that this is because he or she does not want to go, rather than for other reasons including cost.

These findings indicate two overarching potential causes of voluntary non-participation in the CCT: one related to material well-being and one related to the conditionality. First, if these households are on average better off and have a steadier income, including from monthly state pensions and salaried employment, it may be that for some of them the size of the CCT payment may not be a sufficient incentive to incur the transaction costs of undergoing the enrolment process or to overcome the potential embarrassment of applying for a 'handout'. Second, if the household has already tried sending the child to pre-school but the child has dropped out because of a reluctance to go, the conditionality of pre-school attendance that is attached to the payment may be putting the household off applying. The level and duration of the benefit may not make it worth overcoming this. Hernanz *et al.* (2004) observe that,

Standard cost-benefit reasoning suggests that agents will participate in a programme if the potential gains of claiming the benefits are high enough to offset the costs. [...] The positive correlation between the potential amount of welfare benefits (and its duration) and take-up is probably the single most robust result in the literature. (Hernanz *et al.*, 2004, p.18).

The relative size of the costs compared with the benefits will vary from one household to another. In particular, a household that has two or more potential beneficiaries can get considerably more benefit compared with the cost of applying than a household that has only one potential beneficiary. In relation to a study of take-up of a means-tested social welfare programme in the United States in 2000 Currie (2004) notes,

[The] finding that enrollments [...] increase with family size strongly suggest that it is benefits relative to transactions costs (or stigma) that matter. Those with more children benefit more while facing a similar cost of enrollment.' (Currie, 2004, p.11)

The fact that beneficiary households have a significantly greater number of children of pre-school age than non-beneficiary households suggests that this may be true for BOTA. However, if the household has potential beneficiaries of several different categories the effect may be weakened because the cost of participating is not fixed: the household may incur the cost of meeting several different conditionalities, such as training for pregnant women and for home-based care, so these economies of scale will be less strong.

6.4 Households that know about the CCT and would like to enrol but cannot

Households that would like to enrol but that cannot do so are a source of potential disillusionment with BOTA. This is illustrated in the qualitative report for the baseline evaluation where, for example, one non-applicant observed that,

I would like to take part in the programme because we really need help. But the first time there was an enrolment process I couldn't go. And then when the commission was supposed to come back again, and I had collected all the necessary documents, they didn't come. The enrolment takes place very rarely, the last time was in summer last year...I hope to enrol next time they come, if the child isn't yet older than six months (MacAuslan and Rogers, 2012, p.34).

It is important for BOTA to consider whether it is able to remove any of the possible barriers to accessing the CCT. Two major barriers are, first, households' ability to reach the enrolment session on the appointed day; and, second, households not having an enrolment session to go to at all.

6.4.1 Difficulties in reaching the enrolment session

For many households the procedure for reaching the enrolment session is found to be quite straightforward (see volume II of the baseline report, on BOTA operations). It seems that BOTA has been successful in delivering an enrolment process that takes place quite close to people's homes, without requiring applicants to incur high transport costs and often without taking a long time. Nonetheless there will always be households whose particular circumstances make it difficult for them to reach a central location on an appointed day.

One possible symptom of this is found in volume I of the baseline report which noted that non-beneficiary households have a much greater incidence of pre-school age children having a disability or a long-term or short-term illness than beneficiary households. This is at odds with the other findings listed above that show that non-beneficiary households are mostly better off in terms of material well-being. The finding could be an indication that this is a different group of non-beneficiaries compared with those that share the other characteristics. Families whose children are ill may find it hard to reach the enrolment location, or may be otherwise marginalised. The literature on low take-up of benefits recognises that,

costs associated with the take-up of social programs [...] may be sufficient to deter some individuals from using them. Moreover, these costs may be highest for precisely those individuals in greatest need (Currie, 2004, p.6).

This may be applicable to the group of non-beneficiaries that have a greater likelihood of disability or illness.

6.4.2 Infrequent opportunities for enrolment

Additional households become newly eligible for the CCT on a daily basis. Every time that a child in a poor household reaches his fourth birthday, or a woman registers a pregnancy at a health facility, there is a new potential beneficiary for the CCT. But these newly eligible households cannot enrol straightaway. They wait until the next enrolment round when BOTA's specialists

attend the community to conduct the proxy means test on several people at once, rather than individually. Volunteers gather names of all interested households and, once they consider they have enough to make it worthwhile for the specialists to attend, they arrange an enrolment session:

Volunteers have the primary responsibility for presenting recommendations to their CCT colleagues about the presence of needy households in their local community, while the oblast office staff take responsibility for determining the time and date of the visit when they can administer the test (BOTA, 2011, p.16 [transl.])

The intention is that as many people as possible are enrolled in the first session, and that others can be enrolled in these subsequent sessions if necessary.

The implementation of the proxy means test exclusively by personal attendance at an enrolment session, throughout the baseline survey and in the implementation of the BOTA CCT up until that point, created many exclusion errors as a result of households having to wait months to take the test. It raised the question of whether it was worth the logistical effort and financial cost of BOTA sending teams of people for three weeks a month around the oblast to administer the proxy means test, when four out of every five randomly selected households—and almost 100% of those who actually apply during BOTA's enrolment process—passed the test anyway.

The use of occasional enrolment sessions several months apart means that the errors of exclusion from the programme begin to mount up from the day after the first enrolment session, and continue up until the next enrolment date. This is a potential source of disappointment both to those that were already eligible at the moment of the first enrolment but did not know about, or could not get to, the session, and also to those that were not eligible on the day of the first enrolment but became so shortly afterwards. The anecdotal story of the lady who, having heard belatedly about the enrolment, rushed into the *akimat* at 6pm when the specialists had just finished packing up and was in tears upon finding that she had missed the opportunity of applying for the transfer by a matter of minutes, is just one vivid example of this scenario.

6.4.3 Why might opportunities for enrolment be so infrequent?

The division of responsibility for enrolment between two actors—the volunteer to request it, and the specialists to conduct it—points to two potential areas where infrequent enrolment might be addressed.

Regarding the volunteers, one reason why they may mistakenly delay further enrolment is if they consider that they have identified all the households in their community that are likely to be eligible. Communities vary in the proportion of households that are eligible for the programme. However, it is not necessary for the specific number of people in each community that meet the categorical requirement to be estimated because it can be found out almost exactly in every community using administrative records; these households could then be invited to apply if they wished to. Again, the evaluation team notes that the use of government records has not been feasible for BOTA itself until now (see also e.g. section 6.2.1 above). But any future variant of the programme may find these records a convenient way of assisting in planning for the likely number of households eligible under each CCT category. As we have seen in section 5.3 in relation to rural Almaty oblast, a very high proportion of these will then pass the proxy means test and can be enrolled.

For the specialists the difficulty may be a logistical one. Each NGO team has to cover half of Almaty oblast. The oblast has 262 okrugs that include a total of 772 separate settlements. Even spending three working weeks every month carrying out enrolment (say, 180 days per year) and

visiting two settlements per day it would take an entire year for two enrolment teams to visit every settlement just once. By disregarding urban settlements the teams are able to slightly increase the frequency of enrolment in rural areas, but still not sufficiently to be able to go to each village as often as they might wish¹⁷. One theoretical option could be the employment of more enrolment specialists but the administrative cost of doing so is extremely high and would be difficult to justify for a programme that has a target for its ratio of administrative to transfer costs. A better solution would be to find a way of reducing the reliance on waiting for specialist enrolment teams to arrive in the settlement.

6.4.4 Implications and solutions

The thorough administrative records maintained by the local government again offer a potential solution to limit errors caused by the sporadic nature of the enrolment sessions. BOTA, or any subsequent organisation implementing a similar programme, can find out in advance which families have children that are about to turn four years old using the local census carried out by the schools: this could inform planning about when there would be enough potentially eligible households to make it worth organising a new enrolment session. Information is also available on all the women who have registered their pregnancy with the local health facility. BOTA's volunteers are already in regular contact with the health facilities to obtain information about the compliance of beneficiaries with the conditionality regarding attendance at antenatal check-ups, so this could be extended to liaising with them to ensure that every woman whose pregnancy is registered is automatically given information about the BOTA programme. As discussed above, the systematic identification of households who could usefully be informed about the programme is unrelated to the question of whether households should be enrolled automatically or via an application: it is possible to maintain an application-based programme while ensuring that the provision of information is automatic.

At the time of the baseline survey, if a household became eligible for one of the CCT categories shortly after an enrolment round had taken place and they had to wait, say, three months for the next round, they would not receive backdated payments to cover the months while they were waiting for the next enrolment round. This is because, while the enrolment team can be sure of the exact date on which the household first met the categorical targeting criterion, the same is not true for either the poverty criterion or the meeting of conditionality.

On the question of assessing the poverty level, the question to consider is whether households' poverty status changes sufficiently often for it to matter on which date they take the test. At the moment the enrolment team does not make assumptions as to whether the household might already also have met the poverty criterion for several months, nor does it predict whether a household will meet the poverty requirement in the future (for example, it is theoretically possible that a household with a child aged 3 years 10 months could also be tested, with payments set to start from the child's fourth birthday; but this is not done). But if households are found generally to be persistently poor then it might be possible for households with children who are soon to become eligible for the ECD benefit to take the test anyway, with the benefit starting up automatically when the child is four: this would reduce some of the disappointment of having just missed an enrolment round, and also reduce some of the exclusion errors.

¹⁷ The qualitative report suggested that BOTA might need to consider conducting enrolment at least every three to four months in order for households to feel that they will have an opportunity for enrolment, particularly for those whose eligibility for the programme is very short such as for pregnant and lactating women (MacAuslan and Rogers, 2012).

On the question of assessing compliance with conditions, if the household is not enrolled then there is no monitoring of their compliance with conditions, so they cannot receive backdated payments. For this reason it is all the more important that enrolment takes place often enough to allow households the chance of meeting conditions. Households are only enrolled if there is a possibility for them to meet the conditions at least twice before they exit the programme (e.g. before they start school, if it is for a pre-school-age child). A long delay between enrolment rounds risks resulting in the exclusion of some households that would have been eligible if they had been enrolled sooner.

BOTA reports that since the baseline survey fieldwork was completed it has introduced an alternative to conducting enrolment periodically on set dates. In 2012 it has begun to permit telephone applications, whereby applicants go to the volunteer's house and the volunteer conducts the proxy means test with the applicant over the telephone to the oblast office. The enrolment specialist in the oblast office then processes the results of the test in the usual way. The applicant must still wait for the specialist to attend the community in order to fulfil other parts of the application process such as the submission of documents and the signing of the agreement between the participant and BOTA. However, the time consumed by the application process on the date of these enrolment sessions is considerably reduced; and the recorded date of the beneficiary's entry into the programme is sooner. The baseline survey does not capture information on this new format of enrolment since it did not exist at the time. The survey team expects to find out more about this aspect of BOTA's operations during the second round of qualitative fieldwork.

7 An international index of targeting effectiveness

The Coady-Grosh-Hoddinott (CGH) index is a measure of the effectiveness with which programmes are targeted. It is defined as the ratio of the value of transfers going to the poor to the (relative) size of the poor in the population (see Coady *et al.*, 2004). For example, if the poorest 20% of the population receive 20% of the transfers by value, the ratio is 1. Assuming as in section 5.1 above, and using the data from Table 5.1, that poor and non-poor households will each receive a proportional share of total expenditure we can estimate that by design the CCT has an index as follows:

CGH index by design (estimated benefits accruing to *eligible* poor)

$$57 \text{ [estimated share of transfers to eligible poor]} \div 20.9 \text{ [estimated poverty rate]} = \mathbf{2.73}$$

This should be interpreted as showing that individuals in poor households are 173% more likely to have been *eligible* for the programme under CCT targeting than they would have been under random or universal targeting of the whole population of Kazakhstan.

Note that the data show that there is a greater share of poor individuals in actual beneficiary households than across eligible households as a whole: households that are eligible but are not poor are less likely to enrol on the programme. Taking this implementation into account (see also the right-hand bar of Figure 5.1, and section 6 for more discussion of how programme implementation affects the targeting), and still assuming that a proportional share of resources accrues to poor households, the combined effect of design and implementation factors gives the CCT an index of:

CGH index at implementation (estimated benefits accruing to *beneficiary* poor)

$$63 \text{ [estimated share of transfers to beneficiary poor]} \div 20.9 \text{ [estimated poverty rate]} = \mathbf{3.01}$$

This means that individuals in poor households are 201% more likely to become *beneficiaries* of the programme under CCT targeting than they would have been under random or universal targeting of the population.

Note, however, that the higher the benchmark poverty rate, the lower the maximum possible value of the CGH index: using a 50% poverty rate, even if all transfers were given exclusively to the poor the index would be $100/50$, which is 2. For Kazakhstan, with a poverty rate of 20.9%, the maximum value of the index is $100/20.9 = 4.8$. Since the ease with which a programme can obtain a high CGH index may be determined in part by the size of the poor population that it is aiming to reach, a way of facilitating international comparisons is for programmes to identify the proportion of the benefit that accrues to the poorest 40% of the population. By this measure, using the figures in Table 5.2, the CGH indices for the BOTA CCT programme at design and implementation stage are:

CGH index by design (estimated benefits accruing to poorest 40%)

$$78 \div 40 = \mathbf{1.95}$$

CGH index at implementation (estimated benefits accruing to poorest 40%)

$$85 \div 40 = 2.13$$

The actual value of the CGH index will be higher if poor households have more members, more beneficiaries, a greater number of people living in ECD households that are also eligible for the higher rate transfers (for pregnant and lactating women, and children with disabilities), or if they are more compliant with the conditionality than non-poor households, since all of these factors will have an effect on the share of transfers reaching the poor.

7.1.1 International comparisons of the CGH index

To understand how BOTA's estimated CGH index compares to the targeting effectiveness of other cash transfer programmes around the world, we draw on a study by Handa *et al.* (2012) and findings from recent cash transfer evaluations carried out by OPM (Table 7.1).

Table 7.1 International comparison of targeting effectiveness¹

Cash transfer programme	Country	CGH index
BOTA CCT ²	Kazakhstan	2.13
UNICEF Cash Transfer Programme for Orphans and Vulnerable Children (CT-OVC)	Kenya	2.13
Child Grant Programme	Lesotho	1.59
Programa Subsidio de Alimentos	Mozambique	1.53
Social Cash Transfer	Malawi	1.14
Hunger Safety Nets Programme	Kenya	1.14

Source: Handa *et al.* (2012) for the CT-OVC, Mozambique and Malawi programmes; OPM for the Hunger Safety Nets Programme and the Lesotho programme. Cited in Pellerano *et al.* (2012). Notes: (1) The table uses the common basis of the share of benefits going to the poorest 40% of the population, except the Hunger Safety Nets Programme which is calculated with respect to a poverty rate of 51%. (2) As discussed above the index for the BOTA CCT is not directly comparable since it is the ratio of the share of individuals in beneficiary households that are among the poorest 40%, rather than the ratio of the share of transfers, since values that will accrue to households are not known at baseline.

If the poorest 40% of individuals in Kazakhstan receive the same share of CCT benefits as their share in the total number of people living in ECD beneficiary households, then the CGH index of 2.13 means that the targeting effectiveness of BOTA's programme is on a par with that of the CT-OVC programme in Kenya, and somewhat more effective than that of programmes in Lesotho, Mozambique and Malawi, as well as the Hunger Safety Nets Programme in Kenya. In other words, the targeting effectiveness of the CCT compares well with other current and recent international examples.

Among the cash transfer programmes (non-contributory pensions and child benefits as well as social assistance payments) included in Coady *et al.*'s original 2004 study, drawn from interventions operating over a time period ranging from 1985 to 2002, the median and mean score is 1.80, meaning that on average they transfer 80% more resources to poor individuals than a universal programme. For the full set of 122 anti-poverty programmes in 48 countries analysed in the study, which also covered food transfers, food and non-food subsidies, public works programmes and social funds for communities, the median programme has a CGH index of 1.25 which suggests that cash transfer programmes at the time were, on average, better targeted at poor households than other types of anti-poverty programme.

PART C: CONCLUDING OBSERVATIONS

8 Conclusions and recommendations

Two of the key questions for BOTA regarding its targeting performance are the degree of leakage of resources to non-poor households, as defined in the Results Monitoring Framework that governs its operations, and the extent to which eligible households are excluded from the programme. The analysis here has shown the following:

8.1 Overall conclusions

1. **Leakage by design.** Some 43% of individuals in eligible households are non-poor, in that their consumption is above the subsistence minimum. If they receive a proportionate share of resources it can be expected, then, that 43% of CCT transfers will go to the non-poor. This rate is approximately in line with that predicted by BOTA during its design of the proxy means test.
2. Despite some leakage, households that pass BOTA's eligibility criteria are very much concentrated in the poorest segment of the population. This is a positive finding: 55% of eligible households in rural Almaty oblast are in the lowest consumption quintile nationally, while only 2% are in the top quintile.
3. This effect is derived from the imposition of geographical targeting and categorical targeting as well as the poverty targeting of the proxy means test. BOTA's choices of geographical and categorical criteria are both successful in greatly increasing the share of eligible households that are poor compared with the national average. The proxy means test, by design, provides one additional filter through which poor households are identified; though nearly four out of five households that meet the CCT's other criteria pass the test.
4. **Take-up rates.** In terms of take-up of eligible beneficiaries, by April 2012 BOTA's CCT programme had reached and enrolled about half (48%) of the households that pass both the categorical and the poverty criteria for receiving the ECD benefit, and that would have been eligible to continue receiving transfers for at least 12 months on the day that the evaluation team entered the okrug. A comparison of studies of other cash benefit programmes internationally suggests that take-up rates of national government benefit programmes in Europe and the United States are commonly in the range of 40–80%, i.e. the error of exclusion ranges between 20% and 60%. Low take-up may be caused by a lack of information on the part of potential beneficiaries; high transaction costs; stigmatisation; and the level and duration of the benefit.
5. Leaving aside the anomalous group of non-beneficiaries that have poorer outcomes in terms of child illness and disability, in other respects non-beneficiary eligible households tend to be better off, on average, than beneficiary households. They have a steadier income and are much more likely to have an adult of pension age at home, which provides both a regular income for the household and a source of possible childcare for the pre-school-age child. For these families the combination of the transaction costs, the stigma and the level and duration of the benefit may not be sufficient incentive to make it worthwhile to apply.
6. **Leakage at implementation.** When taking into account which households have been enrolled by BOTA, i.e. including the effect of implementation, the leakage appears to be reduced: 37% of individuals in beneficiary households are non-poor. Amongst the eligible, poorer households have had a higher take-up than less poor households, for reasons which may be related to their interest in the programme, or BOTA's conscious efforts in 'prioritising' the most needy such as by focusing awareness-raising efforts on those households. However, the difference between beneficiary and non-beneficiary households, while seeming quite large, is not

statistically significant so it is not certain that there is a real difference. The fact that such a large disparity is not statistically significant suggests that there is quite a large natural variation in these figures between communities.

7. **Undercoverage by design.** By agreement with BOTA the quantitative survey focuses only on eligible rather than ineligible households. It can therefore identify what proportion of eligible households are poor, but cannot identify what proportion of poor households are enrolled onto the CCT in the communities where BOTA works. This report has demonstrated that the implementation of the targeting process has increased the concentration of resources on the poor (reduced inclusion errors).
8. **International comparison.** The review of the BOTA's performance compared with an international index of targeting effectiveness suggests that its concentration of resources on the poorest households is on a par with a similar programme in Kenya, the CT-OVC, and more effective than several other current cash transfer programmes. The precise comparison will be dependent on the extent to which the share of *resources* going to poor households is consistent with their share of beneficiary households.

8.2 Recommendations for BOTA

1. Consider whether BOTA does indeed wish to try to reduce take-up among eligible individuals who are towards the upper boundary of eligibility for the programme, as it is doing currently. Remember that these individuals are not necessarily in the top quintile nationally. Table 5.2 above showed that the wealthiest 20% of individuals eligible for the CCT are drawn from the third, fourth and fifth quintiles of the population nationally, since those quintiles account for 13% + 7% + 2% = 22% of eligible households.
2. If BOTA does wish to continue to try to reduce take-up among these groups it should verify that the methods being used (such as the selective dissemination of information as described by volunteers) are not inadvertently contributing to a lack of awareness or take-up of the programme among the poorest households.
3. If the informal 'community vetting' undertaken by volunteers is having the effect of reducing the resources that go to non-poor households, and if BOTA desires this process to continue, it might wish to consider whether it should formalise this arrangement by adding an explicit layer of community-based targeting, a system that is now supported by the World Bank in several countries as an accompaniment to a proxy means test. However, the evaluation team cautions that this would add a fifth layer of complexity to the targeting mechanism, on top of the two geographical criteria, the categorical criterion and the poverty testing. This may be administratively unfeasible and risks increasing criticisms about the perceived fairness of the targeting approach. The only rationale for doing so would be if the implementation of an overt vetting mechanism is deemed preferable to the informal method currently being practised.
4. On the other hand, if BOTA wishes to improve its impact on pre-school enrolment and attendance it will need to consider how to make the CCT more attractive to those households that are choosing not to apply, as well as making it easier for those households that wish to apply to do so. Improving coverage in the communities in which BOTA already operates would be a cost-efficient way of improving the outcomes of the CCT programme. It would make good use of the experience of the volunteers, the time spent by enrolment specialists in making administrative arrangements and the understanding of the akimats and pre-school facilities in the community.
5. Identification of households that meet the poverty criteria would be greatly improved by more frequent enrolment, or by designing a system that is continuous, like BOTA's Social Services Programme's 'open door' policy, and does not rely on occasional enrolment sessions. This would reduce the high transaction costs of requiring all potential beneficiaries to attend a specific location on a specific day, and to spend the time waiting to take the proxy means test.

The evaluation team notes that BOTA's introduction of a telephone enrolment process, which started after the baseline survey was completed, may contribute to resolving this bottleneck.

6. It would be useful for BOTA to investigate whether the disproportionately low take-up of CCT by households that have a child with a long- or short-term illness or disability—not necessarily the beneficiary child—is being brought about by high transaction costs for that particular group of individuals. The telephone enrolment process just described may also help these households to apply.

8.3 Considerations for the design of future programmes

The evaluation team recognises that, for BOTA, it may be too late or inappropriate at this stage to redesign aspects of its targeting process. However, since the CCT also has a function of demonstrating good practice in the delivery of cash transfers the team presents here some recommendations for points that might be considered if a similar programme is adopted by other organisations in future.

8.3.1 Design issues: the proxy means test

1. A key question for any future design of the programme will be whether to continue with the use of the proxy means test, and if so, whether it should maintain its current form and content. The test has advantages as well as potential drawbacks. BOTA has already reviewed its proxy means test in light of more recent HBS data and has made some adjustments. Analysis by the evaluation team in February 2012 suggested that 96% of households that passed the previous test would also pass the revised version, so the use of the revised version will have some impact on the targeting results though the overall picture is broadly the same.
2. The principal advantage of the proxy means test is that it appears to be effective in improving the concentration of resources on poorer households. It is also considered to lend credibility to the enrolment process by signalling to potential applicants that the application process is impartial.
3. The potential drawbacks are that there is a substantial financial cost in spending three weeks a month testing applicants, and that the process of having to arrange a schedule for specialists to come for tests, which means that there can be a gap of several months between enrolment sessions in a community, gives rise to exclusion errors. The telephone enrolment may mitigate this. Evidently the removal of the test would mean that households below the subsistence minimum would form a smaller *share* of eligible households. However, if the simplified application arrangements meant that funds could be diverted from programme administration into providing transfers for extra households, or if they meant that eligible households could enrol more swiftly, the *absolute number* of poor households reached might increase.
4. Since more than three-quarters of households with children of ECD age pass the test in the survey locations, a programme implementer would need to consider whether the benefits described above outweigh these disadvantages. The programme, or its successor, might wish to consider conducting the following additional analysis before making a decision:
 - The analysis in section 5.3 on the contribution of each targeting mechanism to the overall targeting performance used the best available equivalent to the CCT's definition of 'rural' in Almaty oblasts (namely that used in the household budget survey) but it was not possible for the team to get an identical match. Equally, it was not possible to obtain from the household budget survey an exact equivalent of the age group eligible for the ECD category of the CCT. Without this the precise contribution of the proxy means test to the targeting performance cannot be specified. It is recommended that if the World Bank has access to a full survey dataset that permits such an assessment to be made it might be a useful exercise for it to conduct.

- The team has not examined the poverty levels in rural areas of oblasts other than Almaty oblast.
 - To find out what proportion of poor households are eligible and/or enrolled one could explore whether it is possible to add a question into the national household survey to identify applicant and/or beneficiary households. This could be a valuable source of information because it will help the programme to understand exclusion and inclusion of *poor* households, rather than *eligible* households.
5. An alternative might be to try to find some other simplified poverty test that can be administered more cheaply and with a greater frequency than the current test.

8.3.2 Improving take-up

1. A **lack of information** among potential beneficiaries might be addressed by improving the systematic dissemination of information to individuals that meet the categorical targeting criteria. This could be done by using the comprehensive records from the local administration that list all the people in the community who meet the relevant criteria such as pre-school-age children or pregnant women. This would be a useful complement to the current design whereby volunteers seek households with the right members: volunteers do seem able to reach quite a large proportion of the community, but not all. Additional potential options to improve the reach to households containing members of the relevant category might be to increase the amount of time between recruiting the volunteer and holding the first enrolment round, or to expand information campaigns.

PART D: ANNEXES

Annex A References

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Annex B Glossary of terms

B.1 Local words and phrases

<i>akim</i>	The head of a local administrative unit (okrug, rayon or oblast)
<i>akimat</i>	The office of the akim
<i>oblast</i>	Highest level of territorial unit. Kazakhstan is divided into non-overlapping oblasts, with the exception of cities of at least 1 million people ('towns of significance to the republic') which have an equivalent status to an oblast.
<i>okrug</i>	Subdivision of a rayon. The whole rayon is divided into non-overlapping okrugs, governed by an akim, with the exception of medium-size towns. Towns that have at least 10,000 people, of whom at least two-thirds are in households where a member is in formal sector employment and where there is some industry, infrastructure, trade and social services ('towns of significance to the rayon') have a status equivalent to an okrug. Some okrugs consist of a single settlement, while others consist of several settlements grouped together.
<i>rayon</i>	Subdivision of an oblast. The whole oblast is divided into non-overlapping rayons, governed by an akim, with the exception of very large towns. Large towns with a population of at least 50,000 that are considered to be major economic or cultural centres ('towns of significance to the oblast') have a status equivalent to a rayon.

B.2 CCT words and phrases

eligible	A person or household that would be accepted onto the CCT programme if they were to apply because they pass all the eligibility criteria—including the proxy means test and the existence of an RNN or other identification number—regardless of whether or not they have actually applied or been accepted
beneficiary	A person who lives within an eligible household, who is in the target category for the CCT programme (e.g. a child of pre-school age) and who has been accepted onto the programme because the household has been through the enrolment process
proxy means test	The test that is a predictor of poverty : it estimates whether the household is poor by collecting information on variables such as ownership of certain assets that tend to be correlated with poverty. A score is attached to each of the household's responses, and those households that have a score below the defined threshold are considered to be poor.
recipient	The bank card holder who is designated to receive the cash benefit (usually the mother in the case of a pre-school-age child)

B.3 Words and phrases used in this evaluation

eligible child /
eligible household All children sampled for this evaluation pass the eligibility criteria for the BOTA CCT programme under the ECD category, though not all are enrolled.

Throughout the report we refer to the children who are represented by the survey population, as 'eligible children'. Their households are termed 'eligible households'.

At the baseline this is a slightly younger cohort out of all possible children eligible for the BOTA CCT, because the survey interviews households with children who will remain eligible for the CCT for a full 12 months. At follow-up it will be a slightly older cohort as the survey will interview households who have been eligible for a full 12 months.

beneficiary child /
beneficiary
household The children who are not only eligible but also are or have been enrolled in the BOTA programme—about 50% of those eligible—are classified as 'beneficiary children'. Their households are termed 'beneficiary households'.

treatment okrug A treatment okrug is one where BOTA began to administer the CCT programme after the baseline survey was completed.

control okrug A control okrug is one where BOTA is not operating.

Annex C Additional information on the CCT programme

C.1 Categories of beneficiary

Table C.1 Categories of beneficiary at time of baseline, and conditions for receipt of transfer

Category	Definition	Value (KZT)		Condition for receipt
All				To be eligible for receipt of transfer a household must: - receive a score below the designated cut-off in the proxy means test (PMT) - have access to a bank account (though issuing a bank card is one of the steps in the implementation of the CCT for successful applicants) - have an official identification number - fit one of the categories described below
Pre-school children	Children aged 4 upwards, up until 31 August after their 6th birthday. The children are eligible to start Class 1 on 1 September after their 6th birthday, and cease to receive payments at this point.	2,700 (or 3,300 since 1 Jan 2011)	Monthly	No condition for the first payment. From the second month onwards the child must: - be enrolled in a pre-school facility which may be registered or unregistered but which is run by a qualified teacher - attend for 85% of days that the school is open, or have an acceptable excuse for absence if attendance is lower
Pregnant and lactating women	Women who are pregnant and have written confirmation of the pregnancy from a doctor. Women may continue to receive payments until the infant reaches 6 months old. The latest date for a woman to be eligible for enrolment on the programme is with an infant aged 3 months old.	3,900 (or 4,700 since 1 Jan 2011)	Monthly	No condition for the first payment. To receive the second payment onwards the woman must, in the previous two months, have: - made an antenatal / postnatal visit to the doctor - attended classes on good antenatal / postnatal practices given by BOTA volunteer
Children with disabilities	Children up until their 16th birthday who have a certificate of disability from a doctor and who are cared for at home rather than in a residential institution.	2,700 (or 3,300 since 1 Jan 2011)	Monthly	No condition for the first payment. To receive the second payment onwards the carer must, in the previous two months, have attended classes on home-based care given by BOTA volunteer

C.2 The role of the oblast teams

BOTA's central office staff set up teams in the oblast where they operate. For Akmola and Kyzylorda these are regional offices of BOTA itself; in Almaty the organisation subcontracts two local NGOs as its partners. The teams introduce the programme to oblast and rayon akims, and recruit and train the community volunteers (see section C.3 below). Enrolment specialists from the oblast teams spend from about the 1st to the 20th of each month actively enrolling beneficiaries in communities—including administering the proxy means test, and obtaining copies of identity documents and other information required to issue the bank card—and the remainder of their time on office-based administration including entering information into the management information system about both applicants and existing beneficiaries.

C.3 The role of the volunteer

The focal points for the CCT programme at the local level are the community volunteers. They help to disseminate information about the programme among the community, inform potential beneficiaries about the enrolment process, and alert the oblast enrolment specialists when there is a new group of applicants ready to be enrolled. They provide the training in home-based care for children with disabilities and in good practices for pregnant and lactating women, attendance at which forms part of the conditionality for receipt of the CCT benefit by households in those categories. They also support the monitoring of compliance with other conditions such as attendance at pre-school facilities by children enrolled on the ECD programme.

Volunteers tend to be women who work in the community in which they live. Although they do not earn a salary they do receive a small monthly stipend to cover their expenses. They also receive training in how to carry out their duties as well as in the modules that they subsequently teach to recipient households.

Annex D Significant differences between beneficiary and non-beneficiary eligible households in treatment areas

Table D.1 Summary of significant differences

	Beneficiary	Non-beneficiary
VOLUME I SECTION 4		
Characteristics of the household		
Average household size ¹	6.3	6.3
Children 0-17	3.3***	3.0
Adults 18 to pension age	2.6*	2.9
Pensioners	0.4**	0.5
Average number of children under 7 per household	2.1*	1.9
Proportion of HH with a pensioner	30.2**	40
Mean dependency ratio ²	1.6***	1.4
Long-term health problems of eligible children (% experiencing health problem)		
Physical impairment	1.8	3
Chronic illness	1.3**	4.8
VOLUME I SECTION 5		
There are no significant differences between beneficiary and non-beneficiary households in treatment areas for the indicators in section 5		
VOLUME I SECTION 6		
Enrolment status		
Ever enrolled	58***	38
Never enrolled	42***	63
Current enrolment status (of those ever enrolled)		
Currently enrolled	87	79
Previously enrolled (no longer)	13	22
Total school experience		
Average total time in pre-school (months)	8	9
Children having attended for 3 months or fewer (%)	43	34
Type of facility ever attended		
Nursery	0	0
Kindergarten	20.7**	31
Zero class	14	22
Mini-centre	67.1**	50
Other	3	5

	Beneficiary	Non-beneficiary
Mean scheduled time at pre-school		
Average days per week	4.5***	4.9
VOLUME I SECTION 7		
Illness in last month		
Suspected pneumonia	1.1	2.6
Diarrhoea	3.6***	10.1
Households reporting at least one month in which they did not have a full and varied diet (%)	13*	7
VOLUME I SECTION 8		
Average length of time unemployed and seeking work (in months)	13.4**	8.4
VOLUME I SECTION 9		
Household receiving specified benefit		
Benefit for birth	11.7	9.7
Benefit for care of children up to 1 year old and adopted	13.7	16.1
Benefit for children with disabilities	4.5	2.8
Benefit for children under 18 living in poor household	24.0***	15.2
Targeted social assistance	1.6	0.6
Housing assistance	1.2	0.2
Mean monthly consumption per household (KZT)		
Total consumption	93,835**	104,818
Per capita consumption	15,432**	17,068
Per adult equivalent consumption	31,756**	34,577
Per adult equivalent (using national statistical agency scale)	26,284**	29,056
VOLUME I SECTION 10		
Tenure of property		
Owned by household	81	92
Paid off	75**	83
Inherited	6	9
With mortgage (not paid off)	1	0
Owned by others	18	8
Living in house rent-free	10**	4
Rented	6	3
Free state-owned housing	1	1
Squatting / occupied	0	0
Other	1	0

Source: Baseline survey.