

Models of Social Payments through Inua Jamii

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Abstract

Kenya moved towards electronic payments of social benefits in 2013. In 2018 the payments system for its premier social protection program, Inua Jamii, was restructured to offer most, but not all, beneficiaries a choice between several payment service providers (PSPs), all commercial banks. This study surveys the payment system from the perspective of recipients, including their views on convenience and the benefits from competition. It also considers whether these digital G2P payments programs have increased financial inclusion more generally—recognizing that this was already high in Kenya due to the market penetration of M-Pesa digital wallets. It finds strong support for making payments through financial accounts. The overwhelming majority of respondents consider this to be a good system, with some favoring the commercial bank channel and others expressing a preference for direct payments through wallets. There is strong support for offering choice where this is feasible, but we find that the single payer G2P model can also be effective depending on local conditions. While social transfers may have enabled poor people to afford cell phones and mobile money accounts, the system can be developed further to enhance financial services access.

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Center for Global Development

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1. Introduction

Despite being a lower-middle-income country, Kenya has for many years been recognized as a pioneer in the area of digital financial inclusion (World Bank Group, 2019). In 2013 it moved towards the electronic payment of social benefits through assigned financial institutions. In 2018 the payments system for its premier social protection program, Inua Jamii, was restructured to offer most beneficiaries a choice over their payments provider, with a view towards harnessing competition to improve service. This paper examines Inua Jamii's payment system from the perspective of recipients, including their views on its efficiency and convenience, following the introduction of competition. It also considers the impact of the program on financial inclusion, a complex question because of already-widespread ownership of mobile money accounts (also referred to as mobile wallets). Kenya's choice-based system still relies on a limited set of contracted payment service providers (PSPs) to give the government greater control over the distribution of social benefits. Its experience could be useful to other countries considering how to introduce competitive payments into their social protection systems.

Section 2 reviews the evolution of Inua Jamii, distinguishing between the choice model, which is used by three social protection programs serving pensioners, vulnerable children and the severely disabled, and the assigned PSP model still used for the Hunger Safety Net Program (HSNP) serving very poor people in remote areas. It also notes that an important objective of the new Inua Jamii payments system was to provide recipients with full-service bank accounts, and that this goal appears to have not been accomplished by the time of the study.

Section 3 outlines a survey of recipients carried out in late 2021 and summarizes some features of the respondent sample. This consisted of both beneficiaries and caregivers authorized to receive the benefits on their behalf. While the surveys for HSNP recipients were conducted in person, surveys for the other three Inua Jamii programs had to be administered telephonically due to difficulties created by the COVID-19 pandemic. The recipients of the latter three programs vary across a number of attributes, such as education and housing conditions, but the differences between them and the generally poorer HSNP recipients are far greater.

Section 4 summarizes survey findings for the choice model, where recipients can choose among several banks, and the assigned HSNP model with a single PSP. It demonstrates strong support for the option to switch PSPs, which most respondents view as leading to better service and greater respect as a customer. But both the choice and assigned models of delivering benefits through banks are well-regarded by their respective recipients, suggesting that different delivery models may be appropriate for programs serving beneficiaries under distinct circumstances. Some beneficiaries would prefer to be paid directly into mobile wallets but many expressed a preference for the bank-based model.

Section 5 explores the impact on financial inclusion. While the study offers some evidence of a positive effect, this outcome does not seem to be a direct result of the payments services offered by most Inua Jamii accounts. The study proceeded from the assumption that beneficiaries were issued full-service accounts, as had been intended when setting up the program, but found later that this was often not the case. Indeed, the limitations on service appear to result in a segmented financial experience for many recipients, with limited interoperability between accounts used to receive benefits and others that they may hold. The survey also reveals a tension in the screening process for HSNP candidates, which relies on absence of a mobile phone as an indicator of severe need. The survey results suggest that even very poor people place a high value on mobile communications and that many beneficiaries purchase mobiles with the funds they receive under the program. In this situation it is difficult to derive full benefit from mobile communications, for example to inform beneficiaries of when their payments are available to be picked up.

Section 6 briefly reports on the differences in responses among women and men and between beneficiaries and caregivers. While some gender disparities are present in the survey responses, Inua Jamii's payment system appears to be functioning quite equitably overall. Caregivers are shown to be distinctive from primary beneficiaries in several respects, but both seem to navigate the payment system in similar ways. This is less surprising when it is recognized that beneficiaries who are not represented by caregivers are likely to be those facing fewer impediments to receiving their own grants. For example, almost all surveyed from the program to serve the severely disabled are caregivers.

Section 7 concludes by summarizing the study's findings and their implications for policy. Overall, the results support the payment of benefits through financial accounts and provide strong support to the choice model. But they also suggest that the assigned model using mobile agents seems to be working well in areas perhaps too sparse to easily support competitive provision of such a service. They highlight the need to reconsider mobile ownership as a disqualifying condition for HSNP as it does not reflect the apparent value placed by the poor on mobile phone ownership.

Another conclusion is the need to continue to push for greater G2P account functionality, something that is less attractive to PSPs if fees and service charges are not permitted on such accounts. One approach would be to allow PSPs greater scope to levy charges for services beyond a limited number of cash-outs per month. Another could be to offer the option of using the free withdrawals either in cash or as transfers to beneficiary-selected mobile wallets. This would further expand the range of financial services available to recipients beyond those offered by their PSP.

Kenya's experience also illustrates the tradeoffs between enabling choice and requiring PSPs to perform program functions, such as biometric proof-of-life, that go beyond payments. While they may perform such functions efficiently and with better coverage than government offices, they will require a critical mass of clients to cover their fixed costs. Especially in situations where the density of beneficiaries is not very high, this will further limit the ability to offer competition between multiple PSPs.

2. Evolution of Inua Jamii

2.1 Origins

Inua Jamii, or “uplift the family” in Swahili, traces its origin to the creation of several transfer schemes in the early-to-mid 2000s. In 2004, the government launched the Cash Transfer for Orphans and Vulnerable Children (CT-OVC) to benefit children impacted by the HIV/AIDS pandemic. This was followed by the Old Persons Cash Transfer (OPCT) in 2007, the Hunger Safety Net Programme (HSNP) in 2009, and the Persons with Severe Disabilities Cash Transfer (PwSD-CT) in 2011¹ (Department of Economic and Social Affairs, 2021).

Kenya’s 2010 constitution mandated access to social protection as a right. This was followed by the consolidation of the CT-OVC, OPCT, HSNP, and PwSD-CT programs under the umbrella of the National Safety Net Programme, more commonly referred to as Inua Jamii. Consolidation was continued in 2015 and 2016 with the creation of the State Department for Social Protection and its sub office, the Social Assistance Unit (SAU), with authority over the CT-OVC, OPCT, and PwSD-CT programs. 2016 also saw the introduction of the Kenyan Single Registry, which sought to unite diffuse demographic and registration data across the different programs into one digital database (Department of Economic and Social Affairs, 2021).

The payment processes utilized by Inua Jamii underwent their own evolution during this period. Payments to recipients were originally made in cash, requiring government officials to make disbursements using armed guards, a dangerous undertaking which often entailed long delays both in distribution and reconciliation. Because of its extensive location network, the Postal Corporation of Kenya was employed in 2010 to make payments, but this measure failed to resolve many of the inefficiencies in serving recipients and reconciling payments (McKay et al., 2020).

Given the inherent difficulties in directly disbursing benefits in physical cash and the success of the digital payments service offered by M-Pesa, a 2013 presidential directive was issued ordering that all government payments in Kenya be made electronically. In response, the Government of Kenya initially contracted two payment service providers, Equity Bank and Kenya Commercial Bank (KCB) to distribute benefits. Each PSP was responsible for disbursing payments to recipients of specific programs using prepaid cards and confirming their identities through national ID cards and biometric authentication. Under this new system, however, recipients often faced long journeys to withdrawal points as well as other challenges, including biometric authentication failures and incorrectly routed cards. These concerns prompted the government to design a new system for distributing Inua Jamii payments that relied on competitive choice to enhance service (McKay et al., 2020).

1 The CT-OVC supports households containing orphans or a caregiver who is unable to function due to chronic illness. The OPCT benefits Kenyans who are 70 years of age or older, are not receiving a pension, and reside in certain areas for over a year. The PwSD has similar criteria but is for those with a significant disability. All three programs administer bi-monthly transfers worth approximately \$39. The HSNP provides bi-monthly payments of approximately \$54 as relief to specific areas of the country that are prone to drought.

2.2 The choice model: CT-OVC, OPCT, and PwSD-CT

When launched in 2018, the new model for Inua Jamii payment distribution sought to empower beneficiaries by introducing competition. Rather than contracting a sole PSP to disburse the benefits for a given cash transfer program, multiple banks were employed as payment service providers for the CT-OVC, OPCT, and PwSD-CT programs. Banks could apply to be PSPs and were selected primarily on their ability to distribute funds in both urban and rural areas through branches, ATMs, or banking agents. Once selected, banks would deliver benefits into individual bank accounts in return for commissions. Recipients were given the ability to select which PSP they would receive transfers from, as well as an opportunity to switch PSPs on an annual basis. Through this competitive structure, the Government of Kenya sought to contain costs and ensure quality service, as recipients could switch away from underperforming PSPs.

The Government of Kenya also aimed to incentivize better service through the structure of commission payments. Rather than pay PSPs an upfront fee, banks would only be paid commission by the government after the recipient actually withdrew at least part of their transfer payment. Commissions were paid on a sliding scale based on the population density of the payment area.² This was to motivate banks to service more remote locations where providing payment services was more costly. The government appears to have relied on market forces to ensure service quality. While the degree of national coverage is a selection criterion for PSPs under the choice model, contracted PSPs face no monitored standards for service.

CT-OVC, OPCT, and PwSD-CT transfers are initiated by the National Treasury issuing funds to the SAU, which then distributes the appropriate allocations to each PSP. The banks then have 5 days to distribute the individual transfer amounts into beneficiary accounts. The SAU then confirms that the transfers have reached these accounts, and announces the payment publicly (McKay et al., 2020). Once a transfer has been distributed, recipients are able to access the funds at a bank branch, ATM, or mobile agent serving their selected PSP using a chip and pin secured bank card. Recipients may make two free withdrawals within a bi-monthly period, with additional withdrawals incurring a fee. For those who are children, disabled or infirm, designated caregivers are able to collect benefits on their behalf.

Beyond simply delivering funds, PSPs are responsible for ensuring that payments are made to living beneficiaries or their authorized caregivers. Initially, biometric data is collected for each individual recipient by their selected bank.³ Every six months, beneficiaries must visit a bank

2 Commission payments were classified as being made in Zone A (urban), Zone B (semi-urban), and Zone C (rural). McKay et al. reported that Banks were paid \$1.18, \$1.30, and \$1.52 respectively in commission, and that agents in turn received roughly \$0.30 per transaction. At the time of our study, commissions paid to banks ranged from \$1.50 in urban areas to \$2.00 in rural ones. Agents receive standard commissions for making disbursements, but especially in the sparse areas covered by the HSNP, may receive mobility assistance from their bank.

3 Selection and onboarding of Inua Jamii beneficiaries is conducted at the community level, aided by local bodies and chiefs.

branch with biometric readers to verify they are still alive. If they fail to do so, the account is frozen, and if an additional six months pass without proof-of-life being demonstrated through biometric authentication, the funds in the account become eligible for claw-back by the government (McKay et al., 2020).⁴

Four banks were initially selected as PSPs: Equity Bank, KCB, Cooperative Bank, and PostBank. PSPs are required to have a wide breadth of coverage, meaning that significant investments in biometric readers and bank cards are necessary to participate. This, in turn, implies that a critical mass of beneficiaries is required for any PSP to make participation an economic proposition. That dynamic leads to a more restricted pool of PSPs than might be the case if providers were not required to perform tasks beyond payment and beneficiaries had full choice of providers, including non-bank financial intermediaries.⁵

2.3 The assigned model: HSNP

Unlike the other social protection programs the Hunger Safety Net Program assigns recipients to only one PSP, Equity Bank, rather than offering a choice of financial institutions. Designed to mitigate against chronic hunger and acute famine conditions in communities that are prone to drought, HSNP operates in four northern counties of Kenya; Marsabit, Turkana, Wajir, and Mandera.⁶ These are among the most sparsely populated areas of the country, and the remoteness of HSNP's clientele makes it more difficult for multiple PSPs to achieve the scale necessary for competitive delivery.

HSNP beneficiaries are divided into two categories. Group 1, the focus of our survey, receives benefits on a regular basis. Group 2 beneficiaries (who are not covered by our survey) have been identified as being vulnerable to drought and receive payments only during a crisis. Means testing HSNP applicants in such an environment poses unique challenges. Given the prevalence of mobile penetration in Kenya, the government uses lack of cell phone ownership as one criterion to screen for inclusion in Group 1, on the assumption that truly poor households would not own a mobile device.

Beneficiaries are issued accounts and bank cards by Equity Bank and are identified through biometrics. Although recipients can withdraw money from bank branches or ATMs, Equity Bank also provides mobile agents who may split their time between operating from fixed premises

4 Although PSPs are supposed to perform such claw-backs automatically, it appears that they do not until asked to by the government. It is reported that around 3 percent of benefits are currently designated as eligible for claw-back. This would imply a sharp reduction from previously reported high levels of payment to ghosts or deceased beneficiaries.

5 It was estimated in 2018 that a PSP would need to service around 300,000 beneficiaries. Two more PSPs, National Bank of Kenya (NBK) and Kenya Women Microfinance Bank (KWFT), were later selected as additional PSPs and were expected to provide payments as part of the April 2022 cycle.

6 As part of the World Bank's Kenya Social and Economic Inclusion Project, effective in January of 2019, HSNP is being expanded into 4 additional counties: Samburu, Isiolo, Tana River, and Garissa. As of May 2022, registration of beneficiaries was in progress but no payments had been issued (Smolyar, 2022).

and traveling to areas served by HSNP to deliver benefits. These agents are advanced cash for distribution by Equity Bank and paid commission upon completion of payment. Equity Bank may also facilitate transport for the agents, who sometimes will need to travel considerable distances to reach their clients.

2.4 Account functionality

Under the reformed Inua Jamii distribution model, the government intended that beneficiaries would be issued full-service bank accounts with debit cards.⁷ Reports detailing the development and functioning of Inua Jamii usually state this,⁸ both for the choice model and for HSNP accounts.⁹ Of particular importance, given the popularity of M-Pesa, is the ability to transfer funds directly from an Inua Jamii account to a mobile wallet. Descriptions of the program indicate that the ability to make such transfers is a feature of the payment system, and a study of Machakos suggested that, in that area at least, this was both possible and quite common.¹⁰

However, our study found that the transition to full-service bank accounts is still a work in progress for the majority of PSPs, and that the Inua Jamii accounts of most sampled recipients function little differently from a pre-paid card. As described in greater detail in Section 5, the ability to link accounts to mobile wallets was not offered as standard practice, and this finding limited certain aspects of what we were able to draw from our survey.

7 According to one SAU official quoted by McKay et al. “We felt that one way of giving beneficiaries a sense of dignity was to ensure they had full bank accounts. They can use these accounts for other purposes—to save money, make payments, receive and send remittances and link to mobile money wallets.” (McKay et al., 2020 page 6)

8 For example, Doyle and Iktwa’s study of the COVID-19 response in Kenya explains in a footnote that “In 2018/19, the SAU undertook a process of opening full bank accounts for all beneficiaries of the Inua Jamii.” (Doyle and Iktwa, 2021 page 9) McKay et al. also implies that the transition to full-service bank accounts was successful, claiming that “The Kenyan government was able to transition from limited digitization in the form of prepaid cards to full bank accounts, in part, because it was open to outside input.” (McKay et al., 2020 page 5)

9 A UN report, for instance, states that after 2013 “HSNP beneficiaries were provided with a MasterCard debit card and owned a full functioning bank account.” (Department of Economic and Social Affairs, 2021 page 29). Odera et al. proffers that “In Northern Kenya—an especially inhospitable region—the Hunger safety Net Program (HSNP) is opening conventional bank accounts for all recipients, with the ability for them to receive transfers from local bank agents located in shops and other small firms.” (Odera et al., 2020 page 44)

10 McKay et al. stresses that linking to mobile wallets is a feature of the system, stating that “Safaricom and other mobile money providers did not formally bid to be part of the program, likely because they were unable or unwilling to meet program requirements. However, beneficiary accounts can be linked to M-PESA and other mobile money services for easy movement of funds into and out of mobile wallets for beneficiaries that already have mobile money.” (McKay et al., 2020 page 6). Additionally, in an examination of Inua Jamii recipients in Machakos county, Odera et al. finds that “This was indicated by 43.8% (143) of the respondents involved in the study. The respondents highlighted that they did not need to go to the banks, but rather would just transfer their funds to MPESA and then either withdraw or make payments.” (Odera et al., 2020 page 51)

3. Study design and execution

3.1 The survey

An important question for Inua Jamii's choice-based model is how well recipients perceive it to be working, both on its own terms and compared with the previous system. The intention to provide bank accounts to beneficiaries as part of the payments system also creates the possibility of secondary benefits in the realm of increased financial inclusion. We partnered with MicroSave Consulting (MSC) to conduct a survey of Inua Jamii recipients probing their socio-economic status, views on the functioning of the program, and their use of financial products. This survey was complimented by a series of 13 focus groups carried out among 96 Inua Jamii recipients representing all four programs, as well informant interviews with program managers, staff from all four active PSPs at the time of the study, local government representatives, and other market facilitators.

The survey respondents were divided into three cohorts. Cohort 1 consisted of CT-OVC, OPCT, and PwSD-CT recipients who collected Inua Jamii transfers prior to the introduction of the choice model in 2018 and could therefore make comparisons between it and the previous payments model which relied on assigned PSPs. Cohort 2 was comprised of CT-OVC, OPCT, and PwSD-CT recipients who had begun drawing payments since 2018, and so only had personal experience with the choice model. Finally, Cohort 3 consisted of HSNP recipients who qualify to collect transfers on a regular basis.

Survey samples were constructed from lists of recipients provided by the Kenyan government, which included beneficiaries or their registered caregivers, as well as a recipient phone number. Participants were drawn from the northern, western, coastal, and Mt Kenya regions, ensuring both geographical and cultural diversity. More specifically, survey respondents came from six counties: Nairobi, Kiambu, Embu, Kilifi, Bungoma, and (for HSNP) Turkana. Focus group subjects were residents of Kiambu, Bungoma, Embu, Nairobi, and Kilifi counties. Because of the logistical difficulties posed by the Covid-19 pandemic, the surveys for Cohorts 1 and 2 were conducted telephonically. Some of the numbers were not in service, requiring interviewers to skip to the following name on the list; it is not known whether this introduced bias into the sampling. Cohort 3 surveys were performed in person due to the sometimes extreme nature of poverty and lower rates of cell phone penetration within this group. While preferable in many ways to phone surveys, the process likely skewed the Cohort 3 sample toward more accessible respondents living in or near urban centers. Some who presented themselves for interviews were not on the initial sampling list (though they were on the beneficiary list for the program), creating a snowballing effect. Tables 1 through 3 of the appendix provide an overview of samples by program.

Conducting this study was significantly complicated by our misunderstanding of the functionality of Inua Jamii accounts. Our survey was designed under the assumption that all beneficiaries were issued full-service, linkable, bank accounts but interviews completed over the course of the study indicated that this was not the norm. As a result, responses to several questions on financial

inclusion were not usable, and the interpretation of some others was less certain. Copies of the questionnaires and data are available from the authors.

3.2 Sample characteristics

A total of 659 Inua Jamii payment recipients were surveyed by MSC; 335 within Cohort 1, 238 in Cohort 2, and 86 in Cohort 3 (Table 1). Within Cohorts 1 and 2, 24% were the primary beneficiaries whereas 76% were caregivers who collected transfer funds on someone else's behalf. This is not so surprising considering the nature of the beneficiaries (elderly, children or disabled). As discussed further in Section 6.2, caregivers were more likely to be women and to be younger. Across the three survey cohorts, there was a fairly even distribution of men and women, with women comprising 49% of the overall sample. The sample is reasonably representative of urban and rural Kenyan residents as well, except that relatively urban HSNP respondents are probably over-represented. Thirty-seven percent of surveyed HSNP recipients reported living in an urban area, whereas only 15% of the population of Turkana are urban residents (Mwau and Mwaniki, 2022).

TABLE 1. Summary statistics

Attribute Category	Total Sample		Cohort 1		Cohort 2		Cohort 3 (HSNP)	
	Number of Respondents	%	Number of Respondents	%	Number of Respondents	%	Number of Respondents	%
All Respondents	659	100%	335	100%	238	100%	86	100%
Men	333	51%	174	52%	122	51%	37	43%
Women	326	49%	161	48%	116	49%	49	57%
Urban	198	30%	103	31%	63	26%	32	37%
Permanent Cement House	157	24%	75	22%	82	35%	0	0%
Has access to electricity	323	49%	177	53%	146	62%	0	0%
Completed Primary School	188	29%	111	33%	70	29%	7	8%
Completed High School	151	23%	82	24%	67	28%	2	2%
Completed Beyond High School	82	12%	45	13%	37	16%	0	0%
Owens smartphone*	231	35%	136	41%	93	39%	2	2%
Owens a basic phone	415	63%	198	59%	144	61%	73	85%
Lacks a phone	11	2%	0	0%	0	0%	11	13%

Notes: Not all attribute categories encompass the full sample due to "refused" and "don't know" responses. Percentages calculated by attribute. *36 respondents reported owning both a smartphone and a basic phone. They are counted as owning a smartphone.

The main fault lines in socio-economic conditions are between Cohorts 1 and 2 on the one hand and Cohort 3 on the other. HSNP respondents are far less educated, less likely to live in a permanent cement structure or have access to electricity. Surprisingly, 87% of surveyed HSNP recipients claimed to have a mobile phone despite the criterion for selection. While some may have concealed prior possession of a cell phone, most mobile ownership appears to have been made possible by HSNP transfers, without which phones would probably have been unaffordable. Almost none of the sampled HSNP recipients owned a smartphone, compared with 40% of recipients of the other programs.

The differences in phone ownership are suggestive of other divides in digital capabilities as well. Ninety seven percent of Cohorts 1 and 2 reported being able to make and receive phone calls, 92% to both read and write SMS text messages, and 97% to be able to make and receive phone-based payments. Digital capacity was lower in Cohort 3.

Within Cohorts 1 and 2, distinctions were present between owners of smartphones and basic phones. As shown in Table 2, men were more likely to own smartphones than women, as were caregivers, people living in urban areas, in cement houses, and with primary school educations. The gaps in smartphone ownership have implications for internet connectivity across these demographic groups. Smartphone owners were far more likely to report being able to access the internet via their phone than basic phone owners (87% vs. 11% respectively),¹¹ and groups that disproportionately reported owning smartphones were in turn more likely to do so as well. Some divisions were also evident among the recipients of the different programs encompassed by Cohorts 1 and 2. While uniform in smartphone ownership and ruralness, OPCT recipients were more likely than their CT-OVC and PwSD-CT counterparts to be men (57% vs. 38%), to have at least a primary school education (75% vs. 65%), and to live in a cement house (31% vs. 17%).

TABLE 2. Connectivity in Cohorts 1 & 2

Attribute Category	Percentage of Basic Phone Owners	Percentage of Smartphone Owners
Men*	47%	58%
Women*	53%	42%
Urban*	23%	38%
Rural*	77%	62%
Caregivers*	73%	80%
Primary Beneficiaries*	27%	20%
At least Primary School Education	63%	85%
Hasn't graduated primary school*	37%	15%
Permanent Cement House*	20%	38%
Not Permanent House*	80%	62%

Note: *Denotes statistically significant differences, 95% confidence interval.

11 Throughout this paper, response rates between two groups are sometimes presented in parenthesis. Unless otherwise stated, the difference between such rates was found to be statistically significant within a 95% confidence interval.

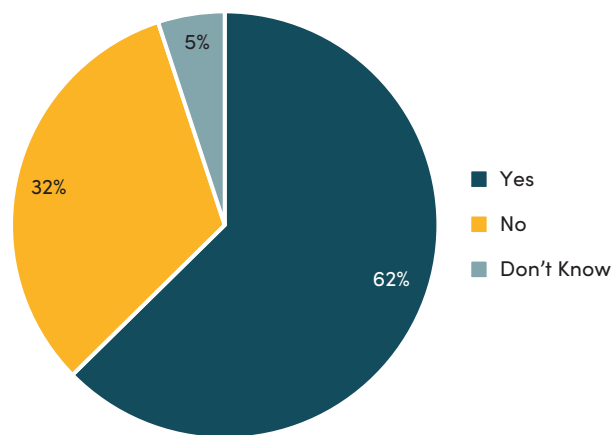
4. Findings: efficiency and choice

4.1 The choice model

Survey responses from recipients of the CT-OVC, OPCT, and PwSD-CT programs demonstrate not only strong support for choice in PSPs, but also that the system is seen as effective in distributing transfers. From these perspectives, the reforms to Inua Jamii instituted in 2018 appear to have been a success.

Members of Cohorts 1 and 2 were broadly cognizant of having a choice in PSPs, with a majority reporting being aware that they could change which bank they received their benefits from (see Figure 1). The survey responses show that awareness of choice was fairly uniform across economic and educational divides as well.¹² However, men were more likely than women to claim that they knew of being able to switch PSPs (70% vs. 61% respectively).

FIGURE 1. Do you know that you can now change banks to receive payments through another bank if you want to?



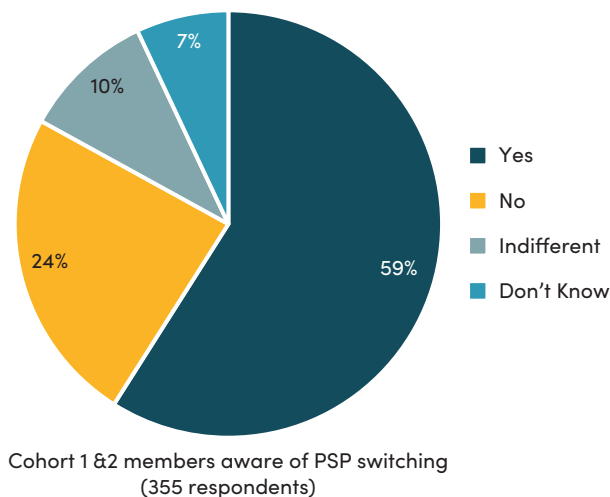
Cohort 1 & 2 members (573 respondents)

Of those who were aware that they could change PSPs, more than twice as many believed that they received better service because of this ability than those who did not (see Figure 2). This preference was consistent between men and women, as well as across socio-economic indicators. Recipients who felt there had been an improvement frequently cited getting generally better service (95%), followed by getting respect as a customer (92%), and being able to choose a cash-out

¹² No statistically significant differences (with a 95% confidence interval) are present regarding choice awareness between smartphone owners, urbanites, primary school graduates, and cement house owners and their counterparts.

location or agent close to them (66%).¹³ Only 51% said that they were given better service because they received information from banks through SMS, a notable result given the high literacy rate among these respondents.

FIGURE 2. Do you think that the bank offers you a better service because you can change to another bank?



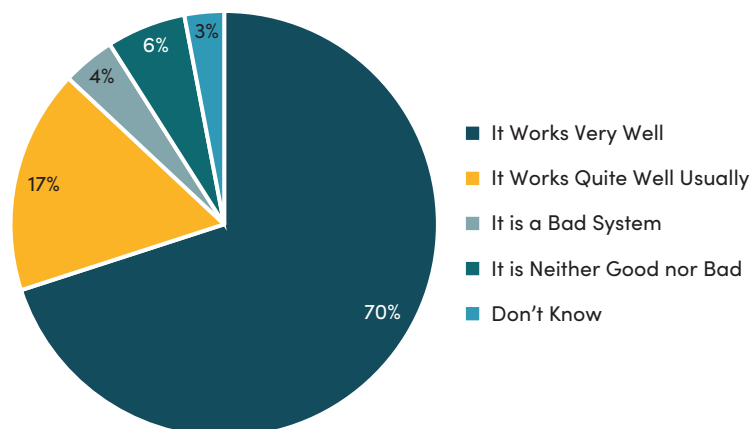
For those who felt they did not get better service, the reasons were diffuse. Twenty percent cited biometric authentication being difficult, and only 2% claimed to not know how to change banks if needed. These are small numbers however. Focus group discussions suggest that more recipients would welcome receiving information on payment dates through SMS (including beneficiaries of the HSNP), as well as more regularity in payment cycles. This would also help PSPs plan better for liquidity management, an important concern for agents.

Not only were respondents both generally aware of and enthusiastic about having a choice in PSPs, they also described the system as working well in its intended purpose of disbursing transfers. An overwhelming majority described the system as working “very well” or “quite well usually” (see Figure 3). Only 4% thought it was a bad system. This sentiment was observed across subgroups within the survey sample.¹⁴

13 For Cohorts 1 and 2, 41% reported living 3 km or less and 35% reported living 5 km or more from their pay-point. Proximity had only a modest relationship with perceptions of the overall quality of service. Respondents less than 3 kms away from a cash-out point were more likely than those 5 or more kms away to mention cash-out point distance as a positive factor (74% vs. 59%).

14 People who lived in urban areas were more likely to report the system being bad than in rural ones (8% vs. 3%), as did those traveling more than 5 kms to a cash-out point compared to 3 or less (7% vs. 2%). However, the small percentage of those considering the system as bad means that these were very small numbers. No statistically significant differences in perceptions of overall quality of service were observed on the basis of gender, education, house type, or smartphone ownership.

FIGURE 3. Overall, do you think the Inua Jamii system of paying into your bank account is a good way to pay?



Cohort 1 & 2 members (573 respondents)

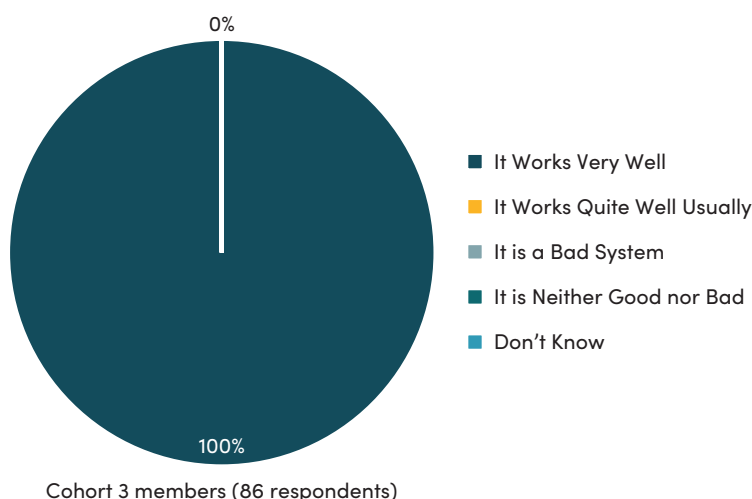
Consistent with these results, those who received Inua Jamii benefits prior to 2018 through the single-payer model generally preferred the choice-based distribution system to the previous model. Eighty one percent of Cohort 1 respondents thought it was better to receive payments under the current system than the previous one; only 9% thought that the new system was worse. These results, too, were stable across different demographic groups. For those who found the new system superior, 91% thought that it was convenient, and allowed for them to withdraw their transfers at a time best for them. Among respondents who did not favor the new system, many claimed that their cash-out point was still far away (47%), that multiple visits were required due to lack of agent or other cash-out point availability (40%), or that withdrawal was difficult due to network or server issues (37%). Given the low rate of dissatisfied respondents, however, these problems appear to be largely idiosyncratic. The least frequently cited complaint by those who disliked the new system was agents charging extra money (10%), lending further credence to the concept that empowering beneficiaries through choice supports good service.

Respondents who enrolled in Inua Jamii during or after 2018 had largely similar impressions as those who had experience with prior payment models. Just 4% of Cohort 2 recipients claimed that the choice-based model was a bad system, the same rate as Cohort 1. Sixty seven percent found the system to work very well, and 19% usually so. Convenience was widely seen as a strength of the system, with 80% of Cohort 2 seeing it as a positive attribute. The most frequently cited problems by Cohort 2 were largely aligned with those of Cohort 1; distance to a cash-out point (14%), network or server issues (13%), and lack of agent or cash-out point availability (12%). Agents charging extra money was again the least raised problem (4%).

4.2 The assigned model

Inua Jamii recipients who were enrolled in the HSNP and therefore not offered choice of PSPs were still largely satisfied with the service they received. All 86 of Cohort 3 respondents reported that they thought the current system works very well (see Figure 4). This consensus was driven largely by factors of ease of use and proximity. Every member of Cohort 3 claimed that convenience was a benefit of the system and 95% reported being within 1 kilometer of a bank branch or agent point. This may partly reflect the oversampling of urban recipients (and, within rural recipients, those closer to urban centers), and distance to cash-out point came up more frequently as an issue in focus group discussions. However, it does suggest that the method of using of roaming agents to bring payments closer to recipients is functioning relatively well.

FIGURE 4. Overall, do you think the Inua Jamii system of paying into your bank account is a good way to pay?



The high levels of reported satisfaction with differing payment models underscores the importance of context. The low population density in areas served by HSNP would make contracting multiple PSPs more difficult especially given the fixed investments in biometric equipment and bank cards necessary for providers and the relatively low potential for commission revenue. Choice in PSPs can enhance recipients' experience in the presence of sufficiently dense financial and digital ecosystems, but it is not necessarily fundamental to a well-functioning G2P program.

5. Financial inclusion

Kenya is unique among sub-Saharan African countries because of its high rate of financial inclusion. According to the 2021 Findex dataset, 79% of Kenyan adults have some form of financial account, as compared to 55% for the region. Kenya's status as a leader in account ownership is due largely to the popularity of mobile money services, especially M-Pesa. The 2021 Findex found that 69% of Kenyan adults report having a mobile money account, versus 33% for Sub-Saharan Africa overall. Not only

are these accounts widespread within Kenya, but they are also consistently utilized. Fifty one percent of Kenyan adults report using their account two or more times a month (Demirgüç-Kunt et al., 2022).

In this context, there is less scope than in other developing countries for a successful G2P program to catalyze financial inclusion by accelerating account ownership. M-Pesa reports 30 million active subscribers in Kenya (Muiruri, 2022), and offers services such as cash-in, cash-out, retail and bill payment, and credit and savings products that together replicate the core functions of a traditional bank account (Vodafone).

That being said, our survey does suggest that Inua Jamii might have had some positive effects on account diffusion. Among Cohort 1 and 2 respondents, 98% reported having a mobile wallet, far higher than the latest Findex estimate for Kenya. Seventy nine percent of Cohorts 1 and 2 reported already using a wallet prior to receiving Inua Jamii transfers, a figure much closer to the World Bank estimate, with 16% stating they opened a wallet only after starting to receive transfers (see Table 3). Furthermore, those who lacked mobile wallets prior to Inua Jamii were more likely than those with mobile wallets already to also not have a bank account (65% vs. 38%). Of particular significance are Cohort 2 respondents who lacked both accounts, as they only received benefits under the choice model and were therefore issued their first bank account specifically because of Inua Jamii. Twelve percent reported not having had either a bank account or a mobile wallet until enrolling. Not only were these recipients issued their first financial account through the payment scheme, 93% (11% of Cohort 2 overall) subsequently opened a mobile wallet as well.

TABLE 3. Mobile wallet acquisition & Inua Jamii

Mobile Wallet Ownership	Cohort 1	Cohort 2	Cohort 3
Had Wallet Pre-Inua Jamii Benefits	79%	79%	0%
Has Wallet Currently	96%	97%	70%

HSNP recipients also appear to have benefitted indirectly from Inua Jamii in both financial and digital inclusion. As discussed previously, beneficiaries of HSNP regular support could not own a phone to be eligible for the program, a form of means testing candidates. It is of course possible that some did own mobiles prior to joining the program, but interviews suggest that many recipients used HSNP funds to buy a mobile phone after enrollment. Eighty seven percent of our Cohort 3 survey respondents indicated owning a mobile phone, suggesting that the practice of buying one after joining the program is common. Seventy percent of the cohort reported now owning an M-Pesa wallet, none of whom claimed to have owned one prior to joining HSNP.

It is difficult, however, to attribute these outcomes directly to the services offered by Inua Jamii accounts. The inclusion of Cohort 1 and 2 recipients into the social safety net may have encouraged their opening of mobile money accounts by improving the financial position of the household. However, as shown in Table 4, the PSPs serving most of the sampled beneficiaries, in particular KCB, provide restricted accounts. Beneficiaries of HSNP were able to integrate into the digital financial

ecosystem by purchasing phones, but only by violating the terms of the program. The evident priority placed on mobile ownership by very poor people calls into question the appropriateness of rejecting applicants who possess phones

TABLE 4. Payment service provider networks and account features

Market Share	Kenya Commercial Bank (KCB)	Equity Bank	Cooperative Bank	Post Bank
Number of Bank Branches	263	179	154	98
Number of Agents	16,000	40,000	12,000	724
Cohort 1 & 2 Beneficiaries	398	72	65	38
Account Features				
No fixed cost to Beneficiary	Yes	Yes	Yes	Yes
Withdraw for Free at Branch/ Agent/ATM Twice per Period	Yes	Yes	Yes	Yes
Check Balance for Free Twice per Period	Yes	Yes	Yes	Yes
Link to Mobile Wallet	No	Upon Upgrade	No	Yes

At the time of our study, Cooperative Bank and KCB accounts only offered the ability to withdraw funds and check balances without charge twice in a two-month period, and to save funds that were not withdrawn immediately or in their entirety. Equity Bank allowed beneficiaries the option of applying for a fuller range of fee-eligible services but it is unclear how frequently the option was taken up. Only Post Bank, which has the smallest distribution network and serviced only 7% of Cohort 1 and 2 survey participants, offered a full-service bank account with a debit card and the ability to link directly to a mobile wallet as a standard feature.

There is only limited use of the features provided by these accounts. Eighty-three percent of respondents reported cashing out their entire benefit upon its arrival, and the nearly 18% that did leave at least some funds could better be described as “storing” rather than “saving” money for future use. Recipients should theoretically be able to make payments with the bank card issued to them, but the sparse POS network in Kenya renders this feature of little use to most card holders.¹⁵

The reason for limited account functionality appears to be the requirement that accounts be provided to beneficiaries at no cost, potentially creating an unintended tradeoff between account affordability and utility. A typical banking customer in Kenya pays close to \$40 per year to maintain their account (Gwer et al., 2019), equivalent to about two months of support from a social program. As part of the new Inua Jamii payments model, the Government of Kenya stipulated that recipient accounts could not incur charges. Prohibiting fees, however, makes providing additional services

15 Statistics published by the Central Bank of Kenya, combined with World Bank population data, suggest that in 2020 Kenya had roughly 0.9 POS machines per 1,000 people. By comparison, Bank for International Settlements and World Bank population statistics indicate that India had 3.3 POS machines per 1,000 people in 2020, and South Africa had 7.2 (Bank for International Settlements Data, 2022; Central Bank of Kenya Data, 2022; World Bank Group Data, 2022).

unattractive for banks. The tradeoff would be largely resolved if all recipients could withdraw either in cash or through linking to a mobile money account, as was apparently intended.¹⁶ Given the functionality of mobile wallets like M-Pesa, those transferring funds into such accounts would be able to access an array of financial services provided at roughly a third of the cost of a traditional bank (Gwer et al., 2019).

Survey responses indicate that some recipients are transferring funds to their mobile money accounts indirectly by withdrawing their benefits in cash and then redepositing them into a wallet.¹⁷ Fifteen percent of Cohort 1 and 2 respondents reported completing such transactions, suggesting that a sizeable portion of recipients would take advantage of a free, friction-less, electronic transfer option. This would require the government to treat commissions on electronic transfers and cash withdrawals similarly.¹⁸ It would also fit within broader market trends as Kenyan banks are transitioning much of their transaction volume to electronic formats (Gwer et al., 2019). It is possible, however, that facilitating greater use of electronic transfers and digital payments might adversely impact the network of cash-out facilities by eroding customer volume and thereby reducing agent commission revenue. Such an outcome could have negative implications for those who remain cash dependent.

Would recipients prefer stipends to be paid, as now, into bank accounts, or directly into mobile money wallets? Focus groups suggest a mixed picture. Some recipients would prefer to be paid directly into their mobile money wallets. On the other hand, some (often older) recipients felt that they derived prestige from visiting bank branches and being treated as customers. Others expressed concern over potential fraud if stipends were to be paid through mobile money. Especially in households in which one mobile phone was shared within the family, use of mobile money was seen as possibly compromising privacy. The ability to seamlessly link Inua Jamii accounts with mobile wallets would enable both groups to satisfy their preferences.

16 There may be fees associated with transferring funds from bank accounts to mobile wallets, which in this context would need to be absorbed by the bank offering Inua Jamii payment services. These costs, however, are modest and generally negotiated between the MNO and the bank. At the start of the pandemic, banks were instructed to waive charges associated with transfers to mobile wallets for transactions under \$10 in value.

17 Five percent of Cohort 1 and 2 respondents reported that they had directly transferred funds to a mobile wallet, but the framing of the question in the survey makes the responses unreliable. Only one such respondent was using PostBank as their provider.

18 We understand that this is done when automatic transfers are allowed, as is the case for PostBank.

6. Gender and caregivers

6.1 Gender

In many respects, the survey results demonstrate a high level of gender parity. When asked directly, 90% of women in Cohorts 1 and 2 and 81% in Cohort 3 claimed that it was not more difficult for women to open or operate an account under Inua Jamii. Women also reported a high degree of personal autonomy when engaging with the distribution system. Only 8% of Cohorts 1 and 2 women reported needing permission from a male household member to open or operate their bank account and 5% said a government official required a male's approval for onboarding. When viewed through an intersectional lens, most of these responses remain consistent for women across different segments of society, with little variation across attributes such as education, housing, or ownership of a smartphone. This picture was mostly true regarding the need for a male's permission as well, although within Cohorts 1 and 2 rural women and those without bank accounts prior to Inua Jamii were more likely to require it.¹⁹ None of the women in Cohort 3 claimed needing permission in either context.

Other areas do show some gender disparities. As previously mentioned, among Cohort 1 and 2 respondents, women were less likely than men to report knowing they were able to change PSPs (61% vs. 70%). At first sight, this could reflect gender gaps in prior experience with Kenya's banking system. Men were more likely than women to report having had a bank account before enrolling in the Inua Jamii program (61 vs. 43%), and those with prior bank accounts were in turn more likely to be aware of the ability to switch PSPs (72% vs. 58%).²⁰ Women were also less likely than men to take advantage of the limited added function offered by their Inua Jamii account as only 13% of Cohort 1 and 2 women reported storing funds in their account, compared to 22% of men. Previous exposure to banking, however, is uncorrelated to reported storing.

The overall functioning of the Inua Jamii payments system appears to be quite equitable for men and women. Within Cohort 1, both men and women were equally likely to claim that the new choice-based model was superior to the previous payments arrangement. For those aware of having a choice in PSPs, there was equal agreement that being able to change banks led to better service. These results

19 12% of rural women in Cohorts 1 and 2 reported needing a male's permission to open or operate a bank account, versus 1% of urbanites. Twelve percent of those who lacked bank accounts prior to Inua Jamii also reported needing a male's permission, against 4% who had a bank account prior. This was true as well among rural women (17% vs. 5%), but not urban. Some of the women who said that they required male permission might have lived in polygamous households.

20 A statistically significant gender gap in knowledge of switching was observed among urbanites, owners of cement homes, smartphone owners, caregivers, and those without primary school educations. These gaps disappear when prior account ownership is controlled for (except for cement homeowners who previously possessed accounts). Conversely, when gender is controlled for prior account ownership remains a statistically significant factor for men living in cement homes, female smartphone owners, and male caregivers.

were true for women across all examined demographics. Perhaps most importantly, women across all three cohorts were not more likely than men to dislike the system.²¹

6.2 Caregivers

Inua Jamii serves some of the most vulnerable in Kenyan society, including minors, the elderly, and the disabled, thereby making designated caregivers a critical part of ensuring an accessible payments process. Seventy-six percent of Cohorts 1 and 2 identified themselves as caregivers who accessed transfers for someone else.²² As shown in Table 5, our survey results identified some significant differences between caregivers and beneficiaries. Caregivers were more likely to be women, to have primary school educations, and to possess a smartphone, and were less likely to live in a cement house. Caregivers were also younger; 89% were under the age of 60, whereas 77% of primary beneficiaries were 60 years of age or older. Disproportionate smartphone ownership by caregivers likely translated into greater connectivity, as caregivers were more likely than primary beneficiaries to report being able to access the internet with their phone (45% vs. 30%).

TABLE 5. Caregivers in Cohorts 1 & 2

Attribute Category	Percentage of Primary Beneficiaries	Percentage of Caregivers
Men*	63%	48%
Women*	37%	52%
Urban	34%	28%
Rural	66%	73%
At least Primary School Education*	64%	74%
Hasn't graduated primary school*	36%	26%
Permanent Cement House*	40%	23%
Not Permanent House*	60%	77%
Owns a Smartphone*	33%	42%
Owns a Basic Phone*	67%	58%
60+ Years Old*	77%	11%
0–59 years Old*	23%	89%

Note: *Denotes statistically significant difference, 95% confidence interval.

Despite the differences, caregivers and primary beneficiaries appeared to navigate the choice-based payment model equally effectively. Both groups reported knowing that it was possible to switch PSPs at roughly the same rate, as well as feeling that the service was better as a result of having a choice. For Cohort 1 respondents who had experience with another payment model, overwhelming majorities of both felt the new system was better (91% of caregivers and 88% primary beneficiaries,

21 Women who reported owning a bank account prior to receiving Inua Jamii benefits were more likely to report disliking the current payment model than their counterparts (7% vs. 2% respectively). This was the only statistically significant intersectional difference apparent in the data.

22 Our survey of HSNP recipients did not distinguish between caregivers and primary beneficiaries.

not a statistically significant difference), and caregivers and primary beneficiaries in general were just as inclined to approve of the choice-based payments model. Roughly 80% of both groups reported cashing out their entire benefit, rather than storing funds in the Inua Jamii account. Caregivers and primary beneficiaries were also about equally likely to deposit withdrawn funds into a mobile wallet. The system appears, then, to function similarly well for direct beneficiaries and their proxies alike.

These results may, however, reflect the endogeneity of the selection process as between caregivers and beneficiaries. The sample of direct beneficiaries is self-selected. Those who were ill equipped or unable to navigate the payments system would be the most likely to select a capable caregiver to receive funds on their behalf. The recipients who are designated as direct beneficiaries in our sample probably have similar abilities to designated caregivers, and interact with the payment system on relatively equal footing.

7. Conclusion

In many respects, this study validates Inua Jamii's reformed distribution model, which gives recipients choice over their PSP. Most recipients of transfers for pensioners, vulnerable children and the severely disabled were aware that they were able to change PSPs and felt that they received better service as a direct result. Recipients who experienced a previous payment system preferred the new choice model for various reasons, including better proximity to pay points and more respect as customers. Only very small percentages of respondents considered the delivery system to be working badly.

Women were less likely than men to be aware of being able to change PSPs and were also less likely to use their Inua Jamii accounts to store funds. However, a convincing majority of women reported that opening and operating an account under Inua Jamii was not more difficult for them, and that they were able to do so without the permission of a male relative. When aware that they had a choice, women were just as likely as men to feel that this led to better service, and to prefer the choice-based model to older methods. The responses of caregivers also largely aligned with those of direct beneficiaries despite differences across many attributes, most notably age and gender. No group, then, appears to have been disadvantaged by the introduction of the choice-based payments model.

At the same time, the survey results also demonstrate a high degree of satisfaction with the assigned delivery model that uses a single PSP for the HSNP program. Despite the more diffuse market, responses indicate that the use of roaming agents has brought cash-out points to within a kilometer of most recipients. Even if to some extent this outcome reflects the oversampling of people in and around urban areas, it remains noteworthy.

There are ways in which Inua Jamii's service can be strengthened, however. One is to improve the regularity of scheduling and releasing payments, which would enhance both user experience and the ability of PSP agents to manage liquidity. Another is to inform all recipients when payments are available for withdrawal through SMS. A third is to reconsider the requirement for the first category of HSNP, that beneficiaries not own a mobile phone. This may have been an appropriate screening criterion in the early stages of HSNP, but survey results indicate that, even for very poor families, access to mobile communications is now a top priority, given Kenya's highly developed digital ecosystem. Most HSNP beneficiaries do, in fact, admit to owning a mobile. While we cannot discount the possibility that some did so before onboarding into the program, discussions suggest that many found it possible to acquire one after receiving regular stipends from the program. Not recognizing mobile ownership by recipients prevents them from benefiting from digitized delivery, for example, by making SMS notifications of funds.

The high penetration of mobile wallets in Kenya leaves less space for Inua Jamii to have a substantial impact on financial inclusion, measured by the ownership of a financial account. There are indications, however, that the program made a marginal contribution in this area. Collectively, and excluding HSNP, recipients reported owning a mobile wallet at a higher rate than the Kenyan national average included in the most recent Findex database, with the difference emerging after enrollment. Twelve percent of recipients who had only experienced the choice-based model reported not having any financial account before participating in Inua Jamii, whereas the vast majority of these now report having both a bank and a mobile money account.

While increased financial inclusion may have been enabled by Inua Jamii transfer payments that made mobile phones more affordable, this does not seem to have been driven by the functionality of its accounts. Most of the sampled CT-OVC, OPCT, and PwSD-CT recipients were sent payments through accounts that only offered the ability to retain funds or cash-out. Few respondent accounts provided the facility to transfer funds to mobile wallets. Instead, recipients wanting to do this generally cashed out their benefits and re-deposited them into mobile money accounts. That many did this suggests that more would take advantage of seamless zero-cost electronic transfer if this were widely available as an alternative to free cash-outs. Many HSNP recipients claim to have mobile wallets, but since they are not supposed to own mobile phones under the current terms of the program, it is unclear how these could be directly linked to Inua Jamii accounts.

One priority for the future is to follow through on the commitment to provide full-service bank accounts. This goal could be encouraged by allowing banks greater leeway to levy reasonable charges for services beyond free monthly cash-outs and balance checks. However, ensuring that a withdrawal can be made equally through free physical cash-out and a free electronic transfer to a designated mobile money account (including as a standing order) would open up access to a wider range of financial service providers, helping to ensure competition in the provision of financial services beyond the actual G2P payments. PSPs would need to be remunerated similarly following

either type of withdrawal (and possibly compensated for transfer fees on a standardized basis) were such a measure enacted.

Kenya's approach of using both the (restricted) choice model and the assigned PSP model has lessons for other countries. If PSPs are required to carry out functions beyond standard payment, such as ensuring proof-of-life, each will require a critical mass of customers to recover the fixed costs of special equipment. Providing such services may not be attractive to mobile money agents if each handles only modest numbers of beneficiary accounts. The additional functions could be assigned to other entities, such as local government agencies, but there will be a cost to provide a comparably dense set of program service facilities. Control might also be needed to prevent PSPs concentrated in urban areas from "creaming off" the easiest-to-serve beneficiaries, although tiered commissions for more remote areas, as used by Inua Jamii, appear to counteract this.

Moving from the assigned model for HSNP towards a competitive model raises similar issues, but in a context where market forces might not be sufficient to sustain competition in the provision of comparable financial services. It appears that the system of mobile agents is bringing payment points quite close to many beneficiaries (if not all), and it may not be efficient for several competing PSPs to attempt to reach scattered beneficiaries. Proposals to reform the model need to be evaluated carefully, from the viewpoint of the recipients.

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Appendix: Sample overview

TABLE A1. Sampling overview

Inua Jamii Program	Actual Beneficiaries as of January 2020	Sample Database	Sample Achieved	Percentage of Beneficiaries Sampled
Cash Transfer for Orphans and Vulnerable Children (CT-OVC)	295,307	255	128	0.043%
Older Persons Cash Transfer (OPCT)	764,644	75,806	414	0.054%
Persons with Severe Disability (PwSD)	34,094	70	31	0.091%
Hunger Safety Net Program (HSNP)	101,800	400	86	0.084%
Total	1,195,845	76,531	659	0.055%

TABLE A2. Sampling by payment service provider

Inua Jamii Program	Equity Bank	Kenya Commercial Bank (KCB)	Cooperative Bank	Post Bank
Cash Transfer for Orphans and Vulnerable Children (CT-OVC)	46	62	15	5
Older Persons Cash Transfer (OPCT)	14	324	45	31
Persons with Severe Disability (PwSD)	12	12	5	2
Hunger Safety Net Program (HSNP)	86	–	–	–
Total	158	398	65	38

TABLE A3. Sampling by recipient type

Inua Jamii Program	Primary Beneficiaries	Caregivers
Cash Transfer for Orphans and Vulnerable Children (CT-OVC)	24	104
Older Persons Cash Transfer (OPCT)	111	302
Persons with Severe Disability (PwSD)	2	29
Total*	137	435

*Note: No distinction was made within the HSNP sample between primary beneficiaries and caregivers.